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**Evaluation of Maine's  
Family Treatment Drug Courts  
A Preliminary Analysis of  
Short and Long-term Outcomes**



*Prepared for*  
**The Maine Judicial Branch  
Family Division**

*Prepared by*  
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**January, 2007**

# **Evaluation of Maine's Family Treatment Drug Courts**

## **A Preliminary Analysis of Short and Long-term Outcomes**



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## Executive Summary

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The high correlation between child maltreatment and the abuse of drugs and alcohol among parents or other caregivers is well documented. Indeed, parental substance abuse is one of the major reasons why children are removed from their homes and placed into protective custody. Today, it is estimated that nearly eighty percent of all substantiated child abuse and neglect cases involve parental substance abuse.

Many parents with substance abuse problems never regain custody of their children. This is due in large part to the fact that these caregivers are significantly less likely to enter into or complete court ordered treatment services. Pervasive among this population are other issues that hamper reunification efforts including inadequate or unstable housing, mental illness, transportation issues and unemployment, to name a few.

Family drug courts were developed as a means to respond to the complex problems posed by substance abuse among parents involved in the child welfare system. Through a combination of intensive judicial oversight, case management supervision, drug testing and dedicated treatment and protective custody caseworker assignments, the family drug court represents a nexus between the court, child welfare and substance abuse treatment systems. The overarching goal of the family drug court is to protect the safety and welfare of the child while providing parents the opportunity to enter into treatment and learn the skills they need to become healthy, responsible caregivers.

Nationally, there are approximately 200 family drug courts in operation in 43 states across the country. The first family drug court program in Maine became operational in October, 2002. Today, there are three family drug courts currently in operation with locations in Belfast, Augusta and Lewiston. As of January 1, 2007, thirteen parents have successfully completed these programs and graduated, forty-one have been expelled and twenty-three are currently active participants in Maine's family drug court programs.

Preliminary findings from a recently released national study suggest several promising outcomes for family drug court programs. The current study contributes to the ongoing discussion about the effectiveness of these programs and how well they operate in Maine. Overall findings in this report are consistent with those reported elsewhere, indicating that Maine's family drug court programs are also generating important outcomes across a variety of key measures.

Key findings of this report include the following:

- Seven drug-free babies were born to mothers participating in the drug court program.
- Family drug court participants are significantly more likely than other parents with substance abuse problems in having greater child welfare system and criminal justice system involvement.

- Families in drug court are more likely to receive treatment and adjunctive services such as child care.
- Family drug court participants are significantly more likely to enter into and subsequently complete treatment.
- Children of family drug court participants have significantly fewer placement changes and spent less time in foster care.
- Once returned to the home, children of family drug court participants are less likely to experience a subsequent removal from the home.
- Significant predictors of successful parent-child reunification relate to caregiver mental health, relative foster care setting, treatment completion and days out-of-home placement.
- Among cases involving a TPR, children of family drug court participants were more likely to be adopted.
- Savings generated from the family drug court program result from differences in the types of foster care settings utilized as well as fewer days in foster care.
- The likelihood of even greater cost-savings will result in more families being enrolled in the family drug court with expanded capacity.

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## Introduction

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This report is a preliminary outcome assessment of Maine's family drug court programs<sup>1</sup>. Family treatment drug courts (FTDCs) are specialized civil court proceedings responsible for handling child protective custody cases that involve substance abuse by parents or other caregivers. The family drug court represents the coordinated efforts of judges, child protective caseworkers, treatment professionals and representatives from a variety of local, private and public sector agencies to address the complex problems associated with substance abuse among parents involved in the child welfare system. Through comprehensive supervision, drug testing, integrated substance abuse treatment services and routine court appearances before a designated program judge, the goals of the FTDC are to protect the safety and welfare of the children while providing parents the opportunity to enter into treatment and learn the skills they need to become healthy, responsible caregivers.

The overarching goal of this study is to determine whether family drug courts in Maine are more effective than traditional court settings in helping parents with substance abuse problems achieve better parent-child outcomes (e.g., days out-of-home placement, reunification). In order to address this question, the Maine State Judicial Branch, with funding assistance from the Substance Abuse and Mental Health Services Administration (SAMHSA) and the Bureau of Justice Assistance, initiated a contract with Hornby Zeller Associates, Inc. in July, 2006 to conduct the preliminary<sup>2</sup> outcome study.

## History of Family Drug Courts

The emergence of family drug courts resulted largely from the effectiveness of their adult drug court counterparts, which expanded considerably throughout the United States during the 1990s. Faced with increasing dockets involving substance abuse among parents, family and dependency court judges began to apply the drug court model to their child protective custody caseload. While the first family drug court program originated in Reno, Nevada in 1995, the real growth and expansion of family drug court programs began only a few years ago. Nationally, there are approximately 200 family drug courts in operation in 43 states across the country with an additional 188 programs in the early implementation or planning stages.

Consistent with national trends, Maine began implementing family drug court programs in 2002. Maine now has three operational family drug court programs, located in Belfast, Augusta and Lewiston. Chief District Court Judge John Nivison presides over the family drug court in Belfast and Judge Vendeen Vafiadas and Judge John Beliveau preside over the family drug courts in Augusta and Lewiston respectively. As of January 1, 2007, thirteen parents have successfully completed these programs and graduated, forty-one have been expelled and twenty-three are currently active participants in Maine's family drug court programs. Both nationally and in

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<sup>1</sup> Using a larger case base, the final report will provide for a more detailed and comprehensive study that will replicate the analyses presented here as well as introduce measurements to assess these programs against the performance measures and benchmarks outlined in the Ten Key Components. The Ten Key Components were developed to serve as framework for designing effective drug court programs and to provide a structure for conducting research and evaluation for program accountability.

<sup>2</sup> The final study will include analyses of Maine Drug Treatment Court Management Information System (DTxC) data and additional operational measures.



Maine, participation rates among family drug courts in rural settings have remained relatively low. However, the family drug courts in Maine have recently implemented new strategies to increase enrollments including making the family drug court program a specific treatment recommendation for those parents who are court-ordered to substance abuse treatment.

## **Effectiveness of Family Drug Courts Around the Country**

While there is some empirical evidence that suggests family drug court programs are more effective than traditional court settings in bringing children to permanency sooner, the bulk of evidence compiled to date has largely been descriptive and anecdotal. Among the evaluations that have been conducted, few include analyses of child welfare recidivism, incorporate an experimental design or use multivariate models to assess program outcomes.

Indeed, the field is just beginning to learn about how well the drug court model functions in a family or dependency court setting. However, preliminary findings from a recently released national study of four established family drug court programs do suggest several promising outcomes. The study found that family drug court participants were more likely to be reunified and be reunified more quickly than similarly situated parents in a comparison group. The study also found that the sooner participants entered the program the more likely they were to successfully complete treatment, thereby reducing the length of time to permanent placement as well as the overall time to case closure<sup>3</sup>. Other outcomes reported in the study were more mixed and site specific.

Hence, the current study marks an innovative development in contributing to the research literature on the effectiveness of family drug court programs. It compares differences in parent, child and parent-child outcomes (e.g., treatment retention, days out-of-home placement, reunification) between family drug court participants and two different comparison groups:

- 1) Parent(s) with substance abuse problems involved in the child welfare system who are being served in three jurisdictions that reflect traditional dependency or family court settings – that is, jurisdictions without a family drug court; and,
- 2) Parent(s) with substance abuse problems involved in the child welfare system prior to the implementation of the family drug court.

We also present data for the group of parents that were referred to but did not enter into the drug court program<sup>4</sup>. However, when comparisons are made throughout this report, we will be limiting our discussion to the comparison groups mentioned above.

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<sup>3</sup> Report is retrievable at: <http://www.npcresearch.com/Files/Phase%20I%20Study%20Report.pdf>

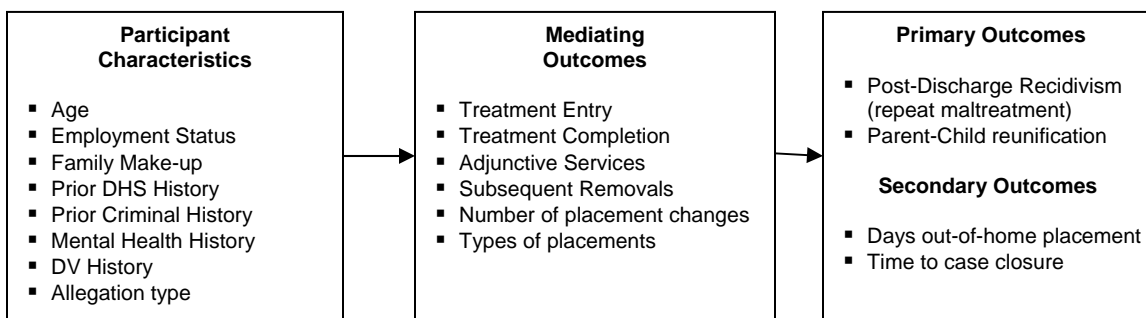
<sup>4</sup> Parents who are referred to but do not enter the family drug court generally fall into two categories – those who declined to participate and those who did not meet the eligibility requirements of the program. It must be emphasized that when subjects are selected or self-selected into such groupings, there is a likelihood that the groups will differ on characteristics such as motivation, social support, intelligence or any number of uncontrolled factors that could influence differences in outcomes.

## Research Design and Methodology

One of the unique challenges in assessing family drug court programs is that there are multiple levels of outcomes to be assessed across various domains. For example, there are parent-level outcomes (e.g., treatment completion, service-order compliance), child-level outcomes (e.g., repeat maltreatment), system-level outcomes (e.g., time to case closure, days out-of-home placement) and parent-child level outcomes (e.g., reunification). All need to be measured in order to adequately assess the effectiveness of these family drug court programs.

The conceptual framework for the analysis is presented below. It examines the relationship between and across three groups of variables: characteristics of the caregiver(s), mediating variables (e.g., treatment completion, service order compliance) and primary and secondary outcome measures such as child welfare recidivism and days out-of-home placement (See Figure 1).

**Figure 1: Conceptual Framework for the Study of Maine's Family Drug Courts**



As mentioned earlier, the study introduces a cross-site, comparative dimension analyzing data collected on parents with substance abuse problems in three court jurisdictions that do not have a family drug court program. These “comparison” courts (Ellsworth, Biddeford and West Bath) were selected because the caseload and demography of the population they serve approximate the jurisdictions of the family drug courts under investigation. The other comparison group consists of parents with substance abuse problems who were processed through the three family drug court district court locations in the two years prior to each program’s date of implementation. These parents will serve as our second and final comparison group in the study.

The study relies principally on information collected from reading protective custody case files at each court and from analyzing an administrative data file that was extracted from the Department of Health and Human Services’ Maine Automated Child Welfare Information System (MACWIS). In all, HZA staff reviewed a total of 629 protective custody case files located at each of the district courts involved in the study (refer to Table 1 on the following page). Of these 629 case files, a total of 434 cases clearly indicated that parental substance abuse was a primary presenting problem and one of the reasons for which the petition was filed before the Court. Additional information collected from the case file included: general characteristics of the family unit, important dates (e.g., date of petition, hearing dates, dismissal), type of allegation, service order compliance and case resolution.

Of the 434 protective custody cases involving substance abuse, a total of 366 cases were identified in the electronic file that was obtained from the Department of Human Services (MACWIS) database. Referring to Table 1a, these 366 cases (representing 200 families) serve as the case base for the analysis of child-level outcomes. Excluding the fifteen active family drug court participants and the two cases that were still open in the comparison group, a total of 183 families serve as the case base for the analysis of parent-level outcomes.

**Table 1: Case Base for the Study of Maine's Family Treatment Drug Courts**

	Number of Files Reviewed	Number Screened Positively for Substance Abuse	Number Matched with MACWIS
<b>Family Treatment Drug Courts</b>			
Augusta/Waterville	117	62	57
Belfast/Rockland	139	102	67
Lewiston	177	146	129
<b>Comparison Courts</b>			
West Bath	37	27	27
Ellsworth	76	43	34
Biddeford	83	54	52
<b>Total</b>	<b>629</b>	<b>434</b>	<b>366</b>

**Table 1a: Breakdown of Case Base by Variable Category**

	Family Drug Court	Not Admitted	Comparison (Jurisdiction)	Comparison (Longitudinal)	Total
<b>Sample Construction</b>					
Number of Children	117	55	76	118	366
Number of Families	64	41	39	56	200
Less Active Cases	15	-	1	1	17
<b>Final Family Case Base</b>	<b>49</b>	<b>41</b>	<b>38</b>	<b>55</b>	<b>183</b>

## Sample Characteristics

To be able to draw meaningful conclusions about the effectiveness of family drug court programs in Maine, it is important that the characteristics of participants and comparison group subjects not differ significantly from one another as these characteristics may influence differences in outcomes. Referring to Table 2 below, data gathered on the drug court and comparison groups reveal more similarities than differences across a variety of demographic characteristics including: caregiver age, employment status, prior DHS history, family composition, allegation type, mental health and domestic violence history.

Significant differences that do exist concern the criminal histories of family drug court mothers, child age and first petition filing. These differences are represented in Table 2 by a series of ratios that reflect the numeric value located at the bottom of each column heading. Participants in family drug court are represented as a “1” whereas the two comparison groups are represented as either a “3” or a “4”. For example, a ratio of “1:3” indicates a statistically significant difference between families in drug court and families in comparison court jurisdictions whereas a ratio of “1:4” indicates a significant difference between the family drug court and families in the child welfare system prior to program implementation.

Referring to Table 2 (on the following page), we find that family drug court mothers (54%) are significantly more likely to have been involved in the criminal justice system than mothers in the comparison court jurisdictions (22%). Family drug court participants were also more likely to have had a previous petition filed against them (30%) versus families involved in the child welfare system prior to the implementation of the drug court program (11%). These findings are supported by anecdotal accounts from key actors in the family drug court program who indicate that they generally target what they consider to be more “difficult” and “system-involved” caregivers.

Data also suggests that children of family drug court participants are significantly younger than children in the comparison groups. Given the age differences of the children and higher level of cross-system involvement among parents in family drug court, findings presented in this report should be interpreted carefully as these factors may be significant in contributing to differences in outcomes. For example, one outcome measure, frequency of placement changes, is highly correlated with child age. That is, younger children tend to have fewer placement changes than older children. Since, children in both comparison groups are significantly older than children in the family drug court, differences in the frequency of placement changes may likely result from differences between the two groups on child age.

**Table 2: Characteristics of Family Drug Court Participants and Comparison Group Subjects**

	<b>Family Drug Court (1)</b>	<b>Not Admitted (2)</b>	<b>Comparison (Jurisdiction) (3)</b>	<b>Comparison (Longitudinal) (4)</b>
Average age of primary caregiver	26.4	24.1	28.9	29.6
Average age of child (1:3 <sup>**</sup> ; 1:4 <sup>***</sup> )	3.0	5.4	7.3	7.5
Employed at least part-time	24%	25%	30%	29%
Number of children in home	1.9	1.2	1.7	2.0
First petition filing? %Yes (1:4 <sup>**</sup> )	70%	85%	82%	89%
Prior DHS investigation? %Yes	82%	75%	69%	78%
<b>Primary Petition Reason</b>				
Abuse	19%	33%	26%	26%
Neglect	81%	67%	74%	74%
<b>Mother</b>				
Mental Health History (2:4 <sup>**</sup> ; 3:4 <sup>*</sup> )	61%	38%	56%	67%
Criminal History (1:3 <sup>**</sup> ; 3:4 <sup>*</sup> )	54%	50%	22%	43%
Domestic Violence History	58%	63%	49%	50%
<b>Father</b>				
Mental Health History	48%	50%	39%	42%
Criminal History	83%	71%	57%	69%
Domestic Violence History	63%	71%	62%	66%
***p<.001, **p<.01, *p<.05; two-tailed tests				

## Results

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### Treatment and Adjunctive Services Outcomes

Nationally, it is estimated that six million children currently reside with a parent or caregiver who abuses alcohol or other drugs. Indeed, parental substance abuse is one of the major reasons why so many children are removed from their homes and placed into protective custody (Office of Applied Studies, 2003). It is also well documented in the literature that very few parents with substance abuse problems involved in the child welfare system either enter into or complete substance abuse treatment (SAMSHA, 2002). According to a recent study of custodial mothers with substance abuse problems, only 20 percent either completed or were enrolled in a substance abuse treatment program (Ryan, 2006).

Today, policy makers aimed at reducing parental substance abuse, thereby reducing the level of child maltreatment, are faced with many challenges. These include the lack of specialized treatment services for women with children, poor coordination among agencies and difficulties of engaging and retaining parents in treatment services, to name a few. For these reasons, substance abusing parents in the child welfare system require significantly more outreach and support to engage in and complete the treatment process.

Unlike the traditional family or dependency court system, one of the many benefits of the family drug court model is the coordination of treatment, case management and child protective services in making sure that needed services are available while at the same time holding parents accountable by ensuring compliance to service requirements.

In this section of the report, we examine differences between family drug court participants and the two comparison groups of parents with substance abuse problems involved in the child welfare system. Although not always rising to a level of statistical significance, findings indicate that family drug court participants fared better than both comparison groups across each treatment and adjunctive service outcome measure.

Referring to Table 3 below, family drug court participants were significantly more likely to enter into treatment (70.0%) than the comparison group of parents from other court jurisdictions (33.3%). Among those who entered into treatment, family drug court participants were also more likely to complete their treatment regimen (55.0% versus 29% - not shown). Overall, these outcomes are consistent with the national literature that suggests parents in family drug court are significantly more likely to enter into and complete substance abuse treatment than similarly situated parents in comparison groups.

Our final outcome measure concerns the number of adjunctive services that were received by each group of families. Although not statistically significant, we find that families in drug court were also more likely to receive a greater number of adjunctive services than comparison groups particularly with respect to child care services.



**Table 3: Treatment and Adjunctive Service Outcomes**

	Family Drug Court (1)	Not Admitted (2)	Comparison (Jurisdiction) (3)	Comparison (Longitudinal) (4)
Went to Treatment	70.0%	26.8%	33.3%	46.4%
One-way ANOVA Sig.	1:2 <sup>**</sup> ; 1:3 <sup>*</sup>			
Completed Treatment	55.0%	21.9%	23.1%	33.9%
One-way ANOVA Sig.	1:2			
Services Received	11.0	4.5	7.9	8.0
One-way ANOVA Sig.	1:2			
Child Care Services	11.6	4.5	7.7	10.6
One-way ANOVA Sig.	1:2			
Transportation Services	6.5	4.6	6.3	5.9
One-way ANOVA Sig.	1:2 <sup>*</sup>			
*** p<.001, ** p<.01, * p<.05; two-tailed tests				

## Child Welfare Outcomes

The overarching goal of the family drug court is to protect the safety and well-being of the child by providing parents with substance abuse problems the support, treatment and services they need to successfully reunite with their children. The questions we ask in this section focus on the impact of the family drug court on short-term and long-term child and parent-child level outcomes which include: frequency of placement changes, reunification rates, subsequent removals from the home and one-year, post-case closure, child maltreatment recidivism rates

### ***Placement Changes***

Results of a recent study of children in foster care indicate that more than half of all children will experience at least one placement change while in custody and that risk of placement change increases both with the child's age and type of placement (Connell, et al., 2006). Referring to Table 4 below, we find across groups that children in this sample are highly likely to experience at least one placement change (71%, not shown).

Table 4 also compares differences in the frequency of placement changes between the children of family drug court participants and the children of parents in the two comparison groups. Overall findings indicate that children of family drug court participants had *significantly fewer* placement changes (average of 2.9) than the children of parents in other court jurisdictions (average of 4.0) and slightly fewer placement changes than the children of parents who were involved with the child welfare system before the family drug court program was implemented (average of 3.1).

As noted earlier, these findings may be related to the differences in the ages of the children between family drug court participants and comparison group subjects. That is, younger children tend to have fewer placement changes.

**Table 4: Child Welfare Outcomes – Placement Changes**

	Family Drug Court (1)	Not Admitted (2)	Comparison (Jurisdiction) (3)	Comparison (Longitudinal) (4)
Average age of child	3.0	5.4	7.3	7.5
Number of Different Placement Changes	2.9	2.6	4.0	3.1
One-way ANOVA Sig.	1:3*; 2:3**			
Percent with more than one placement change	76.0%	56.4%	76.2%	73.4%
One-way ANOVA Sig.	No significant differences			
***p<.001, **p<.01, *p<.05; two-tailed tests				

Table 5 (on the following page) compares differences in the types of foster care settings between children of family drug court participants and children of parents in the both comparison groups. When interpreting the data in Table 5, it is important to note that the top value in each cell reflects the percentage of children who had ever been placed whereas the lower value reflects the last foster care setting placement<sup>5</sup>.

Overall findings indicate that children of family drug court participants were significantly more likely to have been placed in a relative foster care setting (54.7%) than children involved with the child welfare system prior to the implementation of the drug court (33.1%). In addition, children of family drug court participants were significantly more likely to have experienced placement in a traditional foster care setting (41.9%) compared to children of parents in other court jurisdictions (17.1%) as well as children of parents who were involved with the child welfare system before the family drug court program was implemented (19.5%).

With respect to the last placement setting, approximately half of family drug court participant children (51.0%) were placed in relative foster care which is on par with the comparison group of children served prior to the implementation of the drug court (54.0%). Although not statistically significant, it should be noted that nearly three-quarters of children in comparison court jurisdictions (71.4%) were placed in a relative foster care setting on their last placement.

<sup>5</sup> Due to insufficient cell counts in the last placement setting, significance tests could only be estimated for children who were placed in relative foster care settings.



**Table 5: Child Welfare Outcomes – Placement Types**

	Family Drug Court (1)	Not Admitted (2)	Comparison (Jurisdiction) (3)	Comparison (Longitudinal) (4)
Group Home (% ever / % last)	6.0% -	3.6% -	7.9% -	12.7% 6.3%
One-way ANOVA Sig.	No significant differences			
Relative Foster Care (% ever / % last)	54.7% 51.0%	54.5% 46.3%	40.8% 71.4%	33.1% 54.0%
One-way ANOVA Sig.	1:4 ; 2:4 / No significant differences			
Regular Foster Care (% ever / % last)	41.9% 15.6%	50.9% 29.6%	17.1% 7.1%	19.5% 9.5%
One-way ANOVA Sig.	1:3 ; 1:4 ; 2:3 ; 2:4			
Residential Care (% ever / % last)	12.8% 6.3%	10.9% 9.3%	22.4% 9.5%	17.8% 14.3%
One-way ANOVA Sig.	No significant differences			
Therapeutic Foster Care (% ever / % last)	22.2% 14.6%	23.6% 11.1%	7.9% 2.4%	16.1% 4.8%
One-way ANOVA Sig.	No significant differences			
Other Placement (% ever / % last)	21.4% 12.5%	23.6% 3.7%	13.2% 9.6%	11.0% 11.1%
One-way ANOVA Sig.	No significant differences			
*** p<.001, ** p<.01, * p<.05; two-tailed tests				

### ***Subsequent Removals***

In this section, we examine whether or not there were any subsequent removals from the home. In this analysis, we define a subsequent removal as any point any point in time during the child protective custody case in which the child was removed after having been returned to his or her parent or other primary caregiver (including trial placements). While there may be many reasons why a child has been removed from the home (e.g., new allegations of abuse/neglect or unruly child behavior), it is nonetheless an important indicator of family functioning.

Referring to Table 6 below, family drug court participants (32.6%) had *far fewer subsequent removals* than children in other court jurisdictions (53.9%) as well as children in the comparison group served prior to the drug court's implementation (50.7%). However, these differences did not rise to the level of statistical significance.

**Table 6: Child Welfare Outcomes – Subsequent Removals from the Home**

	Family Drug Court (1)	Not Admitted (2)	Comparison (Jurisdiction) (3)	Comparison (Longitudinal) (4)
Subsequent removal if child was ever returned to the home at any point	32.6%	25.9%	56.4%	50.7%
One-way ANOVA Sig.	2:3 <sup>*</sup> ; 2:4 <sup>**</sup>			
***p<.001, **p<.01, *p<.05; two-tailed tests				

### ***Dispositional Outcomes***

Nationally there were approximately 287,000 children who exited the foster care system in 2005. Of these, approximately fifty-four percent (n=155,608) were reunified with their parent(s) or primary caregiver(s)<sup>6</sup>. In contrast, substance abusing families in the child welfare system have historically achieved very low rates of reunification ranging anywhere from eleven to twenty-two percent. For example, among substance exposed infants who entered care in 1994, only fourteen percent of those children were ultimately reunified with their parents after a seven year time-frame (Budde and Harden, 2003). As shown in Table 7 below, reunification rates across all groups in this sample are higher than reported elsewhere (24.5%, not shown).

Overall, there are few differences in dispositional outcomes between family drug court participants and comparison groups. Referring to Table 7 and Figure 2 below, families in the drug court had the lowest rate of reunification overall (20.5%) as well as the lengthiest time to reunification (522 days). The graph in Figure 2 illustrates the percent of family drug court participants and comparison group subjects not reunified on the vertical axis, while the number of days to reunification is displayed on the horizontal axis. For example, from the point of removal from the home (time zero) no one had been reunified. By the end of the first year, approximately 80% of family drug court participants were still not reunified (20% had been reunified) compared to 75% of comparison group subjects (25% had been reunified).

Families who participated in drug court fared better on termination of parental rights (TPR) and adoption outcomes. The TPR rate for the drug courts (27.3%) is lower than other court jurisdictions (29.0%) as well as the rate for families preceding the implementation of the drug court (30.5%). Even though many parents did not succeed in the drug court program, their children still achieved better outcomes than the two comparison groups in terms of adoption outcomes. Overall, children of parents who terminated their parental rights in family drug court went on to adoption (13.5%) than children of parents who terminated their parental rights in comparison court jurisdictions (2.3%) as well as the pre-drug court implementation group (1.6%).

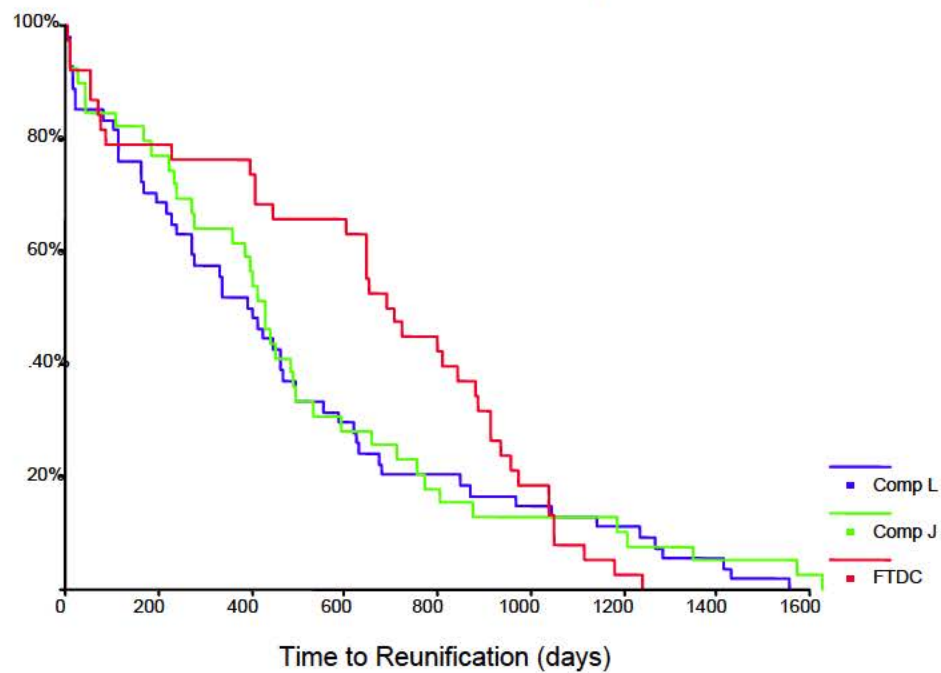
<sup>6</sup> The AFCARS Report: Preliminary FY 2005 Estimates as of September, 2006.



**Table 7: Child Welfare Outcomes – Case Resolution**

	Family Drug Court (1)	Not Admitted (2)	Comparison (Jurisdiction) (3)	Comparison (Longitudinal) (4)
Percent at least one child reunified with parent	20.5%	23.6%	27.6%	25.4%
One-way ANOVA Sig.	No Significant Differences			
Length of Time to Reunification (days)	522	444	469	486
One-way ANOVA Sig.	No Significant Differences			
Percent with a Termination of Parental Rights	27.3%	14.6%	29.0%	30.5%
One-way ANOVA Sig.	No Significant Differences			
Adopted	13.5%	0%	2.3%	1.6%
One-way ANOVA Sig.	Too few cases to estimate			
***p<.001, **p<.01, *p<.05; two-tailed tests				

**Figure 2: Child Welfare Outcomes – Survival Analysis on Time to Reunification**



### ***Factors Predicting Reunification Outcomes***

Research consistently indicates that treatment completion is one of the most significant predictors of successful family reunification among parents with substance abuse problems involved in the child welfare system (Smith, 2003; Maluccio and Ainsworth, 2005). For this population, the literature also identifies many common predictors that typically inhibit or delay reunification efforts including: the age of the child, mental illness, frequency of placements, type of placement and length of time in placement.

In an effort to identify the predictors of parent-child reunification among the sample of families in this study, HZA conducted a logistic regression<sup>7</sup> analysis on the dependent variable (reunification yes/no) introducing, where data were available, many of the common predictor variables cited in the literature. Variables introduced into the equation include the following<sup>8</sup>:

<b>Variable</b>	<b>Variable Type<sup>9</sup></b>	<b>Variable</b>	<b>Variable Type</b>
Gender of child	Dichotomous	Placement types	Each dichotomized
Age of child	Continuous	Services received	Continuous
Age of mother	Continuous	Days in foster care	Continuous
Caregiver mental illness	Dichotomous	Treatment completion	Dichotomous
Caregiver criminal history	Dichotomous	Drug Court participation	Dichotomous
Caregiver DV history	Dichotomous	Placement frequency	Continuous
Prior DHS involvement	Dichotomous	Length of first placement	Continuous

Table 8 (on the following page) presents results of the logistic regression model for the odds of successful parent-child reunification. Of the eighteen variables introduced in the model, results of the analysis indicate four significant predictors of successful parent-child reunification outcomes. The first variable pertains to the caregiver's mental health history. Here we find that caregivers with a mental illness are nearly three times less likely to reunify (inverse of .366) than caregivers who do not have a mental illness. Relative foster care is also positively correlated with reunification outcomes. Children who were placed in a relative foster care setting were nearly three times more likely to reunify than children who did not have a relative placement. Consistent with the national literature, parents who completed their substance abuse treatment regimen were five times more likely to reunify than parents who did not complete treatment. The last variable of significance pertains to the number of days in out-of-home placement. As expected, the more days spent in out-of-home care, the less likely that reunification will occur.

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<sup>7</sup> This technique allows the research to test for the combined effects of variations in participant characteristics and mediating outcomes (e.g., number of services received) on the overall odds of parent-child reunification.

<sup>8</sup> Variables not introduced (e.g., first petition filing yes/no) were excluded due to insufficient cell counts.

<sup>9</sup> "1" = yes and "0" = no for all dichotomous variables except gender and that was dummy coded with males = "1" and females = "0".

**Table 8: Child Welfare Outcomes – Odds Ratios on the Logistic Regression Analysis Predicting Reunification Outcomes**

Variables	B	S.E.	Wald	Sig.	Exp(B)
Child gender	-.016	.459	.001	.973	.985
Child age	.014	.088	.025	.875	1.014
Mother's age	.049	.050	.993	.319	1.051
Caregiver criminal history	-1.241	1.116	1.236	.266	.289
<b>Caregiver mental health history</b>	<b>-1.004</b>	<b>.399</b>	<b>6.352</b>	<b>.012</b>	<b>.366</b>
Caregiver domestic violence history	-.117	.536	.048	.827	.890
Prior DHS Involvement	-.494	.504	.959	.327	.610
<b>Relative Foster Care</b>	<b>1.031</b>	<b>.394</b>	<b>6.851</b>	<b>.009</b>	<b>2.803</b>
Traditional foster care	-.381	.642	.351	.553	.683
Residential Foster Care	.403	.707	.325	.568	1.497
Therapeutic Foster Care	.484	.531	.830	.362	1.622
Other Foster Care	-.225	.576	.153	.696	.798
Number of Placement Changes	-.177	.128	1.899	.168	.838
<b>Completed Treatment</b>	<b>1.290</b>	<b>.490</b>	<b>6.933</b>	<b>.008</b>	<b>3.634</b>
Number of Service Received	.016	.021	.569	.451	1.016
<b>Days out-of-home placement</b>	<b>-.002</b>	<b>.000</b>	<b>18.179</b>	<b>.000</b>	<b>.998</b>
Drug Court Participant	.432	.930	.216	.642	1.540
Constant	-.015	1.435	.000	.992	.986

Cox & Snell  $R^2 = .204$

### ***Post-Discharge Child Welfare Recidivism***

While there is a growing body of literature examining maltreatment recurrence during investigation or following case opening, we know little about maltreatment recurrence following final case closure. In the analysis that follows, we define child welfare recidivism as the occurrence of any new DHS case opening within one-year following the date of final case closure. Referring to Table 9 (next page), overall findings indicate few differences between the family drug court and comparison groups in child welfare recidivism outcomes. In fact, the recidivism rate for all groups was so low that significance testing between the groups was not possible. However, child welfare recidivism among family drug court participants in this study (6.8%) is significantly lower than for family drug court programs nationally (14% to 23%)<sup>10</sup>.

<sup>10</sup> It is unclear from the national literature what time frames were used in measuring recidivism. If recidivism was defined as any maltreatment occurring after case closure, or if a lengthier time frame was used to allow parents the ability to recidivate, then this would explain differences in rates of recidivism.

**Table 9: Child Welfare Outcomes – Post-Discharge Recidivism**

	Family Drug Court (1)	Not Admitted (2)	Comparison (Jurisdiction) (3)	Comparison (Longitudinal) (4)
Recidivism after Case Closure	6.8%	3.6%	6.6%	8.5%
One-way ANOVA Sig.	Too few cases to estimate			
*** p<.001, ** p<.01, * p<.05; two-tailed tests				

## Court and Child Welfare System Outcomes

One of the many goals of the family drug court program is to reduce the amount of time parents spend in the court and the amount of time children spend in the foster care system. In this section of the report, we examine differences between family drug court participants and the two comparison groups across four domains related to system involvement: frequency of judicial hearings, time to case closure; time spent in out-of-home placement and foster care expenditures associated resulting from differences in placement settings.

Referring to Table 9, with respect to court system outcomes, family drug court participants fared no better than comparison groups on either the frequency of judicial status hearings or the amount of time to case closure. There was, however, a slight reduction in the amount of time to case closure between family drug court participants and the comparison group of parents who were involved with the child welfare system prior to the implementation of the drug court.

Overall, family drug court participants fare better on child welfare system outcomes. Children of family drug court participants spent less time in foster care (589 days) than children in comparison court jurisdictions (688 days) and children involved with the child welfare system prior to the drug courts implementation (647 days).

The last child welfare system outcome measure pertains to foster care expenditures resulting from differences in placement settings<sup>11</sup>. It will be recalled from the previous section that children of parents in the family drug court were more likely to be placed in relative foster care than children in the two comparison groups, whereas, children in both comparison groups were more likely to have been placed in a residential foster care setting, a far more expensive placement. Given that children of family drug court participants also spend less time in foster care, these findings, when combined, should result in lower foster care costs for the family drug court and higher foster care costs for the two comparison groups. Referring to Table 10 (next page), we find this to be true. The average cost of foster care for the children of drug court participants (\$9,071) is significantly lower than the cost of foster care for the children in comparison court jurisdictions (\$19,025) and children in foster care prior to the drug courts

<sup>11</sup> Cost estimates were derived from the State of Maine, Department of Human Services. "Rules for Levels of Care for Foster Homes." 10-148. Chapter 14.



implementation (\$14,187). Indeed, these figures will play an important role as we move to the last section of the report which is dedicated to a cost-savings analysis of the family drug court program.

**Table 10: Court and Child Welfare System Outcomes**

	Family Drug Court (1)	Not Admitted (2)	Comparison (Jurisdiction) (3)	Comparison (Longitudinal) (4)
Number of Judicial Hearings (pc track)	9.9	8.4	8.7	9.2
One-way ANOVA Sig.	No significant differences			
Time to Case Closure Court (days)	700	478	594	725
One-way ANOVA Sig.	2:4 *			
Number of Days in Foster Care	589	449	688	647
One-way ANOVA Sig.	No significant differences			
Average Foster Care Costs	\$9,071	\$8,175	\$19,025	\$14,187
One-way ANOVA Sig.	1:3 *** ; 2:3 *** ; 2:4 ***			
***p<.001, **p<.01, *p<.05; two-tailed tests				

## Analysis of System Costs and Savings

According to the National Center on Addiction and Substance Abuse, more than twenty percent of the \$24 billion dollars states spend annually on prevention and treatment will ultimately go to child welfare costs related to substance abuse. Such costs occur because children of substance abusing parents typically have lengthier stays in foster care than children of non-substance abusing parents due, in part, to the low rate of reunification among parents with substance abuse problems. By providing more supervision, drug testing and integrated substance abuse treatment services, family drug court programs were designed to help families reunite by providing parents with substance abuse problems the added support, treatment and services they need to become healthy, responsible caregivers.

However, to operate a family drug court ultimately requires more time and money. It is estimated that it will cost \$250,000 each year to continue to operate the three family drug court programs in Maine. With limited state resources, policy makers are interested in whether or not family drug courts can reduce costs and researchers have been pressed to identify those outcomes. Are Maine's family drug courts cost-effective?

This section of the report is dedicated to providing a conservative cost and cost-savings estimate of Maine's family drug court programs. In order to evaluate the cost effectiveness of family



drug court programs in Maine, we will compare judicial time required to resolve PC cases and child welfare system costs (days out-of-home placement) between the comparison court jurisdictions and, because they are greater in number, an equal number of randomly-selected cases from the family drug court group. This approach will be conservative and focus on the costs and benefits that accrue to funders, policymakers and the general public, exclusive of benefits to participants or their children.

What do we mean by a conservative estimate? Consider the following as an example. In Maine's family drug court program seven mothers gave birth to seven children, all of whom were born drug free. Some researchers estimate that over the course of a lifetime it costs taxpayers more than \$5 million for every person who is born drug-addicted. Theoretically, we could estimate that for every drug court participant who delivers a drug-free child, it saves the taxpayer \$5 million dollars per infant. Multiply that seven times for each of these drug-free infants and it represents a total of \$35 million dollars in taxpayer savings. However, we also know that there were mothers in the comparison groups who entered into and successfully completed their treatment regimen. We do not know how many of these comparison group mothers, if any, may have also given birth to a drug-free baby, which would also represent a savings to the taxpayer. Any estimate that includes savings from drug-free babies born in the family drug court (\$35 million) but excludes possible savings from the comparison group would be unfairly skew the benefits of the family drug court program.

The cost estimates for this study are based on differences in use of resources between the children of participants in the family drug court program and the children of parents adjudicated through traditional case processing<sup>12</sup>. Foster care costs were derived from MACWIS and reflect the total annualized cost of foster care for the 152 children in the sample. The analysis also includes actual costs accrued to the public as a result of child abuse and neglect. These include indirect costs (e.g., increased crime, loss in productivity) as well as direct costs (e.g., foster care, special education services). Table 11 provides cost estimates for incidences of child abuse and neglect across seven domains. These estimates were derived from a number of sources including: Hammerle (1992), chronic health, hospitalizations and special education services; Miller, Cohen and Wierseman (1996), law enforcement; The Dallas Commission on Children and Youth (1988), court action; and, Daro (1988), mental health care.

**Table 11: Societal Costs Associated with Maltreatment Incidents**

Category	Cost Estimate (per Incident)	Category	Cost Estimate (per Incident)
Chronic Health Problems	\$8,681	Special Education Needs	\$887
Mental Health Care	\$3,262	Foster Care	\$7,890
Law Enforcement	\$30	Court Action	\$2,227
Hospitalizations	\$8,870		

<sup>12</sup> Given the availability of information for calculating program and system related costs and the lack of data available for measuring many social and familial related benefits, it should be noted that the cost-savings analysis presented here is conservatively estimated.



Table 12 provides the annualized cost comparisons between 76 children of parents in the family drug court against the comparison group of 76 children of parents with substance abuse problems in the child welfare system who were served in jurisdictions that do not have a family drug court program. Findings indicate that the program produced a net savings of \$21,705 for the entire 152 children in the sample. These overall savings are largely a function of the differences in the types of foster care settings used between the two groups as well as fewer days spent in foster care among children of parents in the family drug court program.

**Table 12: Cost-Savings Estimate for Maine's Family Drug Court Program**

Item	Family Drug Court	Conventional Case Processing	Difference
Drug Court Operational Costs	\$250,000	-	(\$250,000)
Total Foster Care Expenditures (annualized)	\$294,277	\$534,135	\$239,858
Repeat Maltreatment	\$159,235	\$191,082	\$31,847
Overall	\$703,512	\$725,217	<b>\$21,705</b>

## Summary and Discussion

The overall goal of this study is to determine whether family drug courts in Maine are more effective than traditional court settings in helping parents with substance abuse problems achieve better parent-child outcomes. Overall findings indicate that Maine's family drug court programs are generating positive outcomes particularly in relation to areas surrounding treatment and adjunctive services. Outcomes on child welfare and court process measures were somewhat more mixed, with improvements in some areas and not in others – a consistent finding among family drug court programs nationally. In light of the fact that family drug court participants in this sample had significantly more child welfare and more criminal justice system involvement, however, the family drug court programs may have been at a greater disadvantage in trying to yield more positive outcomes. Yet in the final analysis, as it relates to the best interest of the child, the family drug court program will always yield more positive outcomes than traditional court settings simply by having the ability to make better decisions through increased drug testing, case management supervision and judicial monitoring regardless of the final outcome of the case.

Information presented below as well as in Table 13 reflects a summary of key findings detailed throughout this report:

- Seven drug-free babies were born to mothers participating in the drug court program.
- Family drug court participants are significantly more likely than other parents with substance abuse problems in having greater child welfare system and criminal justice system involvement.
- Families in drug court are more likely to receive treatment and adjunctive services such as child care.

- Family drug court participants are significantly more likely to enter into and subsequently complete treatment.
- Children of family drug court participants have significantly fewer placement changes and spent less time in foster care.
- Once returned to the home, children of family drug court participants are less likely to experience a subsequent removal from the home.
- Significant predictors of successful parent-child reunification relate to caregiver mental health, relative foster care setting, treatment completion and days out-of-home placement.
- Among cases involving a TPR, children of family drug court participants were more likely to be adopted.
- Savings generated from the family drug court program result from differences in the types of foster care settings utilized as well as fewer days in foster care.
- The likelihood of even greater cost-savings will result in more families being enrolled in the family drug court with expanded capacity.

**Table 13: Summary of Maine's Family Drug Court Outcome Measures**

<b>Are Maine's family drug courts more effective than traditional courts across:</b>	<b>Answer</b>	<b>Statistically Significant?</b>	<b>Nationally?</b>
<b>Treatment and Adjunctive Service Measures</b>			
Enter treatment	Yes	Yes	Yes
Complete treatment	Yes	No	Yes
Receive services	Yes	No	Unknown
<b>Child Welfare Measures</b>			
Time in foster care	Yes	No	Yes
Time to permanency	No	No	Mixed Results
Frequency of placement changes	Yes	Yes	Unknown
Frequency of removals	Yes	No	Yes
Frequency of reunifications	No	No	Yes
Frequency of TPRs	Yes	No	Yes
Recidivism (new petitions of abuse/neglect)	Mixed Results	No	Mixed Results
<b>System-Level Measures</b>			
Time to case closure – Court	Mixed Results	No	Mixed Results
Frequency of Judicial Hearings (CPS track)	No	No	Unknown
Foster care expenditures	Yes	Yes	Unknown

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