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EVIDENCE-BASED PROGRAMS TO PREVENT CHILDREN FROM ENTERING AND REMAINING IN THE CHILD WELFARE SYSTEM: INTERIM REPORT

The 2007 Washington State Legislature directed the Washington State Institute for Public Policy (Institute) to . . .

. . . study evidence-based, cost-effective programs and policies to reduce the likelihood of children entering and remaining in the child welfare system, including both prevention and intervention programs.

The “bottom line” goal of the study is to provide the legislature with reliable estimates of the costs and benefits of prevention and intervention programs that are designed to reduce involvement in the child welfare system.

The final report will be released in July 2008.¹ This document describes progress on the study to date and provides initial estimates for the programs.

Suggested citation for this report:

Stephanie Lee, Steve Aos, and Marna Miller. (2008). *Evidence-based programs to prevent children from entering and remaining in the child welfare system: Interim report*. Olympia: Washington State Institute for Public Policy, Document No. 08-05-3902.

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This is an interim report; we welcome comments on this study.

¹ SHB 1128, Chapter 522, § 202 (17), Laws of 2007. The original deadline for the final report was April 30, 2008. The legislation states that “The board of the Washington state institute for public policy may adjust the due date for this project as necessary to efficiently manage workload.” Because the 2007 Legislature also gave the Institute major assignments in K-12 education involving key staff on this study, we had to delay the completion of this project a few months.

Summary

The Washington State Institute for Public Policy was directed by the 2007 Washington Legislature to estimate whether “evidence-based” programs and policies can “reduce the likelihood of children entering and remaining in the child welfare system, including both prevention and intervention programs.” In this interim report, we study two basic questions: Is there evidence that any programs “work” to improve these outcomes and, if so, do benefits outweigh program costs?

In this report, we present our findings to date; our final report will be published in July 2008.

Methods

We conducted a systematic review of all research evidence we could locate to identify what works, if anything, to improve child welfare outcomes. We found and analyzed 74 rigorous comparison group evaluations of prevention and intervention programs, most of which were conducted in the United States. We then estimated the monetary value of the benefits by examining factors such as reduced child welfare system expenditures, reduced costs to the victims of child maltreatment, and other long-term outcomes, such as improved educational performance and lower criminal activity.

Findings

- 1. Some evidence-based programs work.** We found a number of prevention and intervention programs that have been able to demonstrate statistically significant changes in key child welfare outcomes.
- 2. The economics look attractive.** Among the successful programs, we found several that generate monetary benefits well in excess of program costs. Public policies incorporating these options can yield positive outcomes for Washington.

Next Steps

Our final July 2008 report will provide estimates of the total economic advantage to Washington if state and local governments were to implement a “portfolio” of these evidence-based programs more widely.

The Institute has previously examined some of these questions. In 2004, for example, the Institute conducted a broad review of prevention and early intervention programs.²

In this earlier study, we found that some prevention and early intervention programs produce positive returns to taxpayers, while others fail to generate more benefits than costs. The 2004 study reviewed programs that impacted a wide array of outcomes, including rates of violence and crime, teen substance abuse, teen pregnancy, teen suicide attempts, educational outcomes, and child abuse and neglect.

Our present review updates and extends our previous findings on programs that specifically focus on preventing involvement, or further involvement, of children and families in the child welfare system.

For this project, we are undertaking four tasks:

- **Task 1:** Review the research literature
- **Task 2:** Estimate costs and benefits
- **Task 3:** Estimate the benefits of a “portfolio” of evidence-based programs
- **Task 4:** Identify characteristics common to effective programs

Focus of the Interim Report

The interim report provides information on Tasks 1 and 2 above. We present “effect size” and economic estimates for each program included in our review. In the final July 2008 report, in addition to addressing Tasks 3 and 4, we will present a detailed description of the statistical and economic methods we use to compute the estimates for Tasks 1 and 2. In this interim report, we describe our methods more generally.

² S. Aos, R. Lieb, J. Mayfield, M. Miller, & A. Pennucci. (2004). *Benefits and costs of prevention and early intervention programs for youth*. Olympia: Washington State Institute for Public Policy, Document No. 04-07-3901. Available at: <<http://www.wsipp.wa.gov/pub.asp?docid=04-07-3901>>.

Criteria for Inclusion in this Study

To be included in our analysis, a program must meet two broad criteria.

Evaluation Design and Methodology

First, any program we include must have data from an evaluation that examines outcomes from a group that participates in a particular program in comparison to an equivalent group that does not participate in the program. The groups do not necessarily have to result from random assignment, but the evaluation must show that any comparison group is indeed comparable to the treatment group on pre-existing variables (such as age, gender, race, and previous child welfare involvement) that may influence outcome measures. At the very least, if a study finds pre-existing differences between groups, the study authors must control for these differences in their analysis. We do not consider studies that follow a single treatment group’s changes over time to be reliable enough to include in our analysis.

Measured Outcomes

Second, any program we include must measure objective outcomes directly relevant to child welfare. Examples of these outcomes are:

- Reported and/or substantiated child abuse or neglect
- Out-of-home placement (incidence, length of stay, or number of placements)
- Permanency (e.g., adoption, reunification, independent living)
- Stability (fewer placement moves)

These outcomes are objective measurements of children’s experiences in the child welfare system. Many studies rely on measures that are proxies for child welfare involvement, such as surveys of parental behavior (e.g., self-reported abusive or neglectful behaviors) or observed child behavior (e.g., teacher-reported anti-social or violent behavior). While these proxy measures can be meaningful, we believe they do not provide concrete information about the level of

involvement in the child welfare system, so we do not include these measures in our analysis.

Meta-Analysis of Programs

In recent years, researchers have developed a set of statistical tools to facilitate systematic reviews of the evidence. This set of procedures—called “meta-analysis”—is used in this study.³ Our meta-analytic review includes 74 studies of evidence-based programs designed to reduce involvement in the child welfare system.

On pages 6–8 of this report, we present meta-analytic estimates for the programs that meet our selection criteria (see Exhibit 1). To be included, program evaluations must measure at least one of the child welfare outcomes as described above. For evaluations that meet this first criterion, some measure additional outcomes of interest, such as contraceptive use, permanent placement, and placement stability. At the present time, however, we cannot estimate the dollar benefit associated with these outcomes; they are listed here to provide additional context for our study.

Calculating Effect Sizes

Effect sizes measure the degree to which a program has been shown to change an outcome for program participants relative to a comparison group. There are several methods used by meta-analysts to calculate effect sizes, as described in Lipsey and Wilson.⁴ In this analysis of the benefits and costs of prevention and intervention programs, we use the *standardized mean difference effect size* for continuous measures, such as test scores, or the number of illicit drugs used in the past year. To approximate the mean difference effect size for dichotomous outcome variables, such as the simple percentage difference in high school graduation rates between a treatment and control or comparison group, we use the

³ Specifically, we analyze the results of studies using meta-analytic methods as described in M.W. Lipsey & D.B. Wilson. (2001). *Practical Meta-Analysis*. Thousand Oaks: Sage Publications.

⁴ Lipsey & Wilson, 2001.

D-cox transformation as described in Sánchez-Meca, Marín-Martínez, and Chacón-Moscoso.⁵

Once effect sizes are calculated for each program effect, the individual measures are summed to produce a weighted average effect size for a program area. The Institute calculates the inverse variance weight for each program effect, and these weights are used to compute the average.⁶

Institute Adjustments to Effect Sizes

Not all research is of equal quality and this variation, we believe, greatly influences the confidence that can be placed in the results from a study. Some studies are well designed and implemented and the results can be viewed as accurate representations of whether the program itself worked. Other studies are not designed as well and less confidence can be placed in any reported differences.

As with all of the Institute’s earlier benefit-cost work, we consistently make a number of cautious assumptions. As mentioned, we require that evaluations have a scientifically valid research design. Even for studies that pass this test, we penalize the results from those with a less-than-randomized research approach, since there is evidence that studies with weaker research designs tend to show more favorable results.⁷ We also discount findings from evaluations in highly controlled research settings, since we have found that “real-world” programs often produce reduced

⁵ In our calculations, we use Equation 18 from J. Sánchez - Meca, F. Marín-Martínez, & S. Chacón-Moscoso. (2003). Effect-size indices for dichotomized outcomes in meta-analysis. *Psychological Methods*, 8(4): 448-467.

⁶ When the effect sizes for several evaluations of a given program are relatively homogeneous (i.e., they are generally in the same direction and of similar magnitude), we calculate a fixed effects weighted average effect size. A fixed effects model assumes that the error in our estimate comes from the random differences between individuals in the population. However, if the effect sizes for several evaluations of a program are heterogeneous, or differ widely, we use a random effects model. If a number of studies of the same program differ in their findings (as evidenced by our calculated effect sizes), then there are probably random differences between studies, in addition to the random differences among the individuals sampled for those studies.

⁷ M. W. Lipsey. (2003) Those confounded moderators in meta-analysis: Good, bad, and ugly. *The Annals of the American Academy of Political and Social Science*, 587(1): 69-81.

What Do We Mean by “Effect Size?”

An effect size measures the magnitude of a program’s impact on a given outcome. For example:

- If a program produces a statistically significant “–0.2 effect size” on child abuse and neglect, then this would translate to a 3.5 percentage point reduction in that outcome (from a base rate of 13.7 percent to 10.2 percent).
- If a program produces a statistically significant “–0.4 effect size” on child abuse and neglect, then this would translate to a 6.1 percentage point reduction in that outcome (from a base rate of 13.7 percent to 7.6 percent).
- If a program produces a statistically significant “0.3 effect size” on high school graduation rates, then this would translate to a 9.3 percentage point increase in that outcome (from a base graduation rate of 70.0 percent to 79.3 percent).

levels of outcomes.⁸ We use several other conservative adjustments (these will be described in the final report), in an effort to isolate the causal relationships between a prevention or intervention program and the monetary valuation of the outcomes of interest.

As a result of these cautious assumptions, the benefit-cost ratios we report in this document will usually be smaller than the values from studies undertaken by program developers or advocates. Across all the outcomes and programs we consider, however, we have attempted to be as internally consistent as possible. That is, our bottom-line estimates have been developed so that a benefit-cost ratio for one program can be compared directly to that of another program. By striving for internal consistency, our benefit-cost findings are not only our best estimates of the economics of particular programs, they can be compared to each other on a relative basis, as well.

⁸ R. Barnoski. (2004). Outcome evaluation of Washington State’s research-based programs for juvenile offenders. Olympia: Washington State Institute for Public Policy, Document No. 04-01-1201, available at <<http://www.wsipp.wa.gov/rptfiles/04-01-1201.pdf>>

Some of the programs in our review have been grouped together (such home visiting programs and family preservation programs) because they are very similar and do not follow a “manualized” treatment. For example, rather than list every program that provides home visits to new and expectant mothers who are at high risk for maltreatment, we have summarized these programs under the heading “Home Visiting Programs for At-Risk Mothers and Children.” It is important to note that there are additional programs that would fit into these categories; however, our program groupings only include programs that have evaluated their impact on child welfare outcomes.

Exhibit 1. Table of Estimated Effect Sizes for Prevention and Intervention Programs

Exhibit 1 summarizes our main meta-analytic findings for each prevention or intervention program (or group of programs) that we reviewed. The first column in the table indicates the outcome for which we have estimated an effect size. The next column reports the number of effects included in each meta-analysis, as well as the total number of individuals in the treatment groups for these studies. Exhibit 3 lists the citations to the individual studies that we used to derive these outcomes.⁹

The next two columns of Exhibit 1 show the weighted mean effect size and its significance level for each outcome. We then report the significance of the Q-test for homogeneity for analyses with more than one study. The Q-test is the statistic that tells us whether or not the effect sizes for multiple studies of the same programs were homogeneous; when the variability among effect sizes is large, the results of a random effects weighted mean effect size and its significance level are listed in the next two columns.

The last column of Exhibit 1 shows the mean effect size after we make adjustments for the quality of the research design and other

⁹ Exhibit 3 is not an exhaustive list of all studies reviewed for this analysis. The Exhibit displays only those studies that had an effect size included in our meta-analysis.

adjustment factors discussed above. These adjusted effect sizes are the estimates we use in our benefit-cost analysis.

Important Note. Exhibit 1 reports calculated effect sizes for the programs we reviewed. Many of these programs have achieved outcomes other than those we show. Exhibit 1 only includes those outcomes for which we can quantify monetary benefits (except where noted). Some prevention programs, for example, have been able to improve outcomes such as “parent-child relationship” or “classroom conduct disorder.” These may be outcomes we would like to see change, but, at present, we are unable to monetize their benefits using our current cost-benefit methods. Future research may enable us to include some of these other outcomes in subsequent versions of this study.

Exhibit 1

Meta-Analytic Estimates of Standardized Mean Difference Effect Sizes for Child Welfare Programs

Many of these programs have evaluated other outcomes than those shown.

Except as noted, this table includes our analysis of only those outcomes directly related to our estimates of monetary benefits.

Type of Prevention or Intervention Program (and its effect on outcomes included in our cost-benefit analysis)	Number of Effect Sizes Included in the Analysis (Number of cases in the treatment groups)	Meta-Analytic Results Before Applying Institute Adjustments					Adjusted Effect Size Used in the Benefit-Cost Analysis <small>(estimated effect after adjustments for the methodological quality of the evidence, outcome measure relevance, and researcher involvement)</small>	Notes to Table
		Fixed Effects Model			Random Effects Model			
		Weighted Mean Effect Size		Homogeneity Test	Weighted Mean Effect Size			
		ES	p-value	p-value	ES	p-value		
Abuse-Focused Cognitive Behavioral Therapy (AF-CBT), and its effect on:								
Child Abuse and Neglect	1 (25)	-0.800	.15	na	na	na	0.000	
Chicago Child Parent Centers, and its effect on:								
Crime	1 (911)	-0.303	.00	na	na	na	-0.257	
High School Graduation	1 (858)	0.260	.00	na	na	na	0.221	
Test Scores	1 (756)	0.159	.01	na	na	na	0.113	
K-12 Special Education	1 (841)	-0.401	.00	na	na	na	-0.341	
K-12 Grade Repetition	1 (841)	-0.446	.00	na	na	na	-0.379	
Child Abuse and Neglect	1 (913)	-0.394	.00	na	na	na	-0.335	(1)
Out-of-Home Placements	1 (888)	-0.403	.00	na	na	na	-0.343	
Dependency (or Family Treatment) Drug Court (California), and its effect on:								
Child Abuse and Neglect	1 (193)	0.284	.10	na	na	na	0.142	
Out-of-Home Placements	2 (1082)	-0.290	.00	0.061	na	na	-0.145	
Permanent placement	1 (197)	0.276	.01	na	na	na	0.138	(2)
Early Hospital Discharge and Intensive In-Home Follow-Up for Low Birthweight Infants (Pennsylvania), and its effect on:								
Child Abuse and Neglect	1 (39)	-0.432	.43	na	na	na	0.000	
Out-of-Home Placements	1 (39)	-0.840	.39	na	na	na	0.000	
Family Assessment Response (Minnesota), and its effect on:								
Child Abuse and Neglect	1 (2732)	-0.059	.16	na	na	na	0.000	
Out-of-Home Placements	1 (2810)	-0.108	.00	na	na	na	-0.081	
The Family Connections Study (Canada), and its effect on:								
Child Abuse and Neglect	1 (88)	-0.253	.21	na	na	na	0.000	
Family to Family (New Mexico), and its effect on:								
Out-of-Home Placements	1 (2777)	0.022	.65	na	na	na	0.000	(3)
Family Group Conferences, and its effect on:								
Child Abuse and Neglect	2 (200)	0.285	.02	0.109	na	na	0.213	(4)
Family Group Decision Making (California), and its effect on:								
Child Abuse and Neglect	1 (105)	0.110	.50	na	na	na	0.000	(5)
Placement stability	1 (105)	-0.110	.50	na	na	na	0.000	
FAMILY PRESERVATION PROGRAMS								
All Intensive Family Preservation Service Programs (Homebuilders® model), and its effect on:								
Child Abuse and Neglect	2 (180)	-0.230	.04	0.889	na	na	-0.138	(6)
Out-of-Home Placements	4 (337)	-0.588	.00	0.112	na	na	-0.346	
Intensive Family Preservation Services for Out of Home Placement Prevention (Homebuilders® model), and its effect on:								
Child Abuse and Neglect	1 (120)	-0.218	.13	na	na	na	0.000	
Out-of-Home Placements	3 (280)	-0.588	.00	0.050	na	na	-0.328	
Intensive Family Preservation Services for Increased Reunification (Homebuilders® model), and its effect on:								
Child Abuse and Neglect	1 (60)	-0.251	.18	na	na	na	0.000	
Out-of-Home Placements	1 (57)	-0.583	.02	na	na	na	-0.437	
Other* Family Preservation Services (non-Homebuilders®), and its effect on:								
Child Abuse and Neglect	6 (1860)	0.041	.46	0.083	na	na	0.000	
Out-of-Home Placements	10 (2373)	0.125	.01	0.105	na	na	0.095	
Family Therapy, and its effect on:								
Child Abuse and Neglect	1 (18)	-0.675	.25	na	na	na	0.000	

Exhibit 1

Meta-Analytic Estimates of Standardized Mean Difference Effect Sizes for Child Welfare Programs

Many of these programs have evaluated other outcomes than those shown.

Except as noted, this table includes our analysis of only those outcomes directly related to our estimates of monetary benefits.

Type of Prevention or Intervention Program (and its effect on outcomes included in our cost-benefit analysis)	Number of Effect Sizes Included in the Analysis (Number of cases in the treatment groups)	Meta-Analytic Results Before Applying Institute Adjustments					Adjusted Effect Size Used in the Benefit-Cost Analysis (estimated effect after adjustments for the methodological quality of the evidence, outcome measure relevance, and researcher involvement)	Notes to Table
		Fixed Effects Model		Random Effects Model				
		Weighted Mean Effect Size	Homogeneity Test	Weighted Mean Effect Size		ES		
		ES	p-value	p-value	ES	p-value	ES	
Flexible Funding (Title IV-E Waivers in Oregon and North Carolina), and its effect on:								
Out-of-Home Placements	2 (37885)	-0.108	.00	na	na	na	-0.054	
HOME VISITING PROGRAMS								
Healthy Families America - Mother outcomes, and its effect on:								
High School Graduation	2 (307)	-0.058	.56	0.629	na	na	0.000	
Public Assistance	1 (205)	-0.074	.54	na	na	na	0.000	
Alcohol (disordered use)	1 (326)	-0.153	.41	na	na	na	0.000	
Illicit Drugs (disordered use)	1 (205)	0.030	.76	na	na	na	0.000	
Healthy Families America - Child outcomes, and its effect on:								
Child Abuse and Neglect	8 (3353)	-0.233	.00	0.036	-0.186	.06	-0.160	
Test Scores	2 (256)	0.040	.65	0.404	na	na	0.000	
Nurse Family Partnership for Low-Income Mothers - Mother Outcomes, and its effect on:								
Crime	2 (229)	0.053	.51	0.000	-0.247	.58	0.000	(7)
High School Graduation	2 (401)	0.096	.27	0.713	na	na	0.000	
Public Assistance	3 (470)	-0.156	.01	0.030	-0.196	.12	0.000	
Illicit Drugs (disordered use)	3 (439)	-0.078	.51	0.091	na	na	0.000	(8)
Employment	2 (229)	0.040	.62	0.153	na	na	0.000	
Nurse Family Partnership for Low-Income Mothers - Child Outcomes, and its effect on:								
Crime	1 (38)	-0.436	.04	na	na	na	-0.218	
Test Scores	2 (386)	0.115	.08	0.518	na	na	0.115	
Child Abuse and Neglect	1 (38)	-0.883	.00	na	na	na	-0.441	
Substance Use	1 (167)	-0.736	.07	na	na	na	-0.736	
Parents as Teachers - Mother outcomes, and its effect on:								
High School Graduation	1 (79)	-0.093	.63	na	na	na	0.000	
Teen Births/Pregnancy (under age 18)	1 (77)	0.089	.68	na	na	na	0.000	
Parents as Teachers - Child outcomes, and its effect on:								
Test Scores	5 (587)	0.145	.02	0.240	na	na	0.066	
Child Abuse and Neglect	1 (149)	-0.377	.48	na	na	na	0.000	
Other* Home Visiting Programs for At-risk Mothers and Children - Mother outcomes, and its effect on:								
Contraceptive use	1 (62)	0.708	.01	na	na	na	0.708	
Other* Home Visiting Programs for At-risk Mothers and Children - Child outcomes, and its effect on:								
Test Scores	2 (62)	0.088	.68	0.222	na	na	0.000	(9)
K-12 Grade Repetition	1 (66)	-0.161	.56	na	na	na	0.000	
Child Abuse and Neglect	11 (667)	-0.182	.14	0.013	-0.332	.10	-0.194	
Out-of-Home Placements	5 (266)	-0.146	.35	0.121	na	na	0.000	
Intensive Case Management for Emotionally Disturbed and/or Maltreated Youth, and its effect on:								
Out-of-Home Placements	2 (129)	0.075	.66	0.656	na	na	0.000	(10)
Permanent placement	1 (54)	0.418	.06	na	na	na	0.418	
Placement stability	1 (54)	0.366	.04	na	na	na	0.366	
Iowa Family Development and Self Sufficiency Program, and its effect on:								
Public Assistance	1 (899)	0.037	.53	na	na	na	0.000	
Iowa Family Development and Self Sufficiency Program - Child outcomes, and its effect on:								
Child Abuse and Neglect	1 (899)	0.022	.90	na	na	na	0.000	
LEARN (Local Efforts to Address and Reduce Neglect), and its effect on:								
Child Abuse and Neglect	1 (479)	-0.066	.64	na	na	na	0.000	

Exhibit 1

Meta-Analytic Estimates of Standardized Mean Difference Effect Sizes for Child Welfare Programs

Many of these programs have evaluated other outcomes than those shown.

Except as noted, this table includes our analysis of only those outcomes directly related to our estimates of monetary benefits.

Type of Prevention or Intervention Program (and its effect on outcomes included in our cost-benefit analysis)	Number of Effect Sizes Included in the Analysis (Number of cases in the treatment groups)	Meta-Analytic Results Before Applying Institute Adjustments					Adjusted Effect Size Used in the Benefit-Cost Analysis (estimated effect after adjustments for the methodological quality of the evidence, outcome measure relevance, and researcher involvement)	Notes to Table
		Fixed Effects Model		Random Effects Model				
		Weighted Mean Effect Size	Homogeneity Test	Weighted Mean Effect Size				
		ES	p-value	p-value	ES	p-value	ES	
Parent-Child Interaction Therapy (Oklahoma), and its effect on:								
Child Abuse and Neglect	1 (42)	-0.846	.01	na	na	na	-0.423	
Project KEEP (San Diego), and its effect on:								
Permanent placement	1 (359)	0.209	.01	na	na	na	0.156	(11)
Triple-P (South Carolina), and its effect on:								
Child Abuse and Neglect	1 (85000)	-0.138	.00	na	na	na	-0.069	
Out-of-Home Placements	1 (85000)	-0.300	.00	na	na	na	-0.150	
SAFE Homes (Connecticut), and its effect on:								
Child Abuse and Neglect	1 (342)	-0.058	.72	na	na	na	0.000	
Out-of-Home Placements	1 (342)	0.194	.04	na	na	na	0.097	
Subsidized Guardianship (Illinois), and its effect on:								
Permanent placement	1 (3181)	0.160	.00	na	na	na	0.160	
Placement stability	1 (3181)	0.026	.43	na	na	na	0.000	
Structured Decision Making (Michigan), and its effect on:								
Out-of-Home Placements	1 (841)	-0.202	.00	na	na	na	-0.101	
Permanent placement	1 (841)	0.297	.00	na	na	na	0.148	

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* "Other" programs are groups of very similar programs that are not separately listed in our analysis.

(1) In this table, we have reported effect sizes for both child abuse and neglect and out-of-home placement, where the program evaluation reported measures of both outcomes. However, in our cost-benefit analysis, only one of these effects is monetized due to the sizeable overlap between the economic benefits of the two outcomes.

(2) At this time, we are unable to "monetize" the outcomes of permanent placement, placement stability, and contraceptive use for our cost-benefit analysis. However, the meta-analytic estimates are provided here to give additional context to our study.

(3) In this evaluation, "out-of-home placements" were measured by the proportion of children who did not re-enter care after one year.

(4) Due to some new evaluations of the "Family Team Decision Making" or "Family Group Decision Making" process, we have separated these programs from the standard "Family Group Conferences" heading. Family Group Conferences are unique in that they encourage a child's family group to create an action plan in a conference that does not include a child welfare professional. Team/Group Decision Making models include a child welfare participant or facilitator to help guide the family groups in the development of their action plan.

(5) This effect size is calculated for one study. In this evaluation of family group decision making, all of the participating children were already placed out of home. This is not always the case for these programs.

(6) Earlier work by Miller (2006)^a described the qualitative differences among "Family Preservation" programs. Most importantly, Miller identified a number of evaluations of intensive family preservation programs that strictly adhered to the Homebuilders® model^b, and separated them from more vaguely defined programs of family preservation. The Institute has further reviewed these programs, and divided the Homebuilders® programs into two categories: one for programs that focus on preventing children from being removed from home, and another for programs that focus on reunifying children who had already been removed from home. In addition, we present the meta-analytic findings for all Homebuilders®-based programs together.

(7) In earlier work by the Institute, our meta-analysis indicated that the Nurse Family Partnership program significantly reduced mothers' involvement in crime. This finding was based on a single study of mothers in New York. Since our last published meta-analysis, new evaluation outcomes were reported for this program showing no program effect on mothers' crime for a sample of women in Memphis. Including this additional study in our analysis led to a new, non-significant effect size estimate for the effect of Nurse Family Partnership on mothers' crime.

(8) In these studies, disordered illicit drug use was measured by self-reported behavioral problems (e.g., traffic tickets, missed work) due to substance use.

(9) In our 2004 prevention report, we found this effect size to be statistically significant, and this finding contributed greatly to our estimate that home visiting resulted in long-term benefits that outweighed program costs. Upon exploration, we found that we had incorrectly coded the findings of one of the key studies for children's test scores. After correcting this error, the effect size for test scores is no longer statistically significant.

(10) This category includes programs sometimes referred to as "Wraparound" or "Systems of Care"; in our estimation, the common features among these programs are intensive case management and coordination of services.

(11) For this program, estimates of effects on "permanent placement" were calculated using a measure of "positive exits" from out-of-home care. As defined by the study authors, positive exits reflected adoptions, reunification with a biological parent, or placement with a relative.

^a M. Miller. (2006). *Intensive family preservation programs: Program fidelity influences effectiveness—revised*. Olympia: Washington State Institute for Public Policy, Document No. 06-02-3901, available at <<http://www.wsipp.wa.gov/rptfiles/06-02-3901.pdf>>

^b The Homebuilders® program was developed by the Institute for Family Development in Federal Way, WA. Key program elements are outlined on the Institute for Family Development website <http://www.institutefamily.org/programs_IFPS.asp>

Benefit-Cost Analysis

Our primary focus in this analysis is a program's impact on child welfare outcomes. We estimate that reductions in child abuse and neglect and in out-of-home placements lead to reductions in public spending for the child welfare system and in reduced medical and mental health costs for victims. In addition, we estimate that programs that effect change in the use of the child welfare system also impact other outcomes that result in economic benefits to society. The model we use in this analysis looks at all of the outcomes that we can monetize for each program, and calculates the total benefits and costs of those outcomes for which we are able to estimate monetary impact.

Program Costs

Our analysis estimates the benefits of each program above and beyond the cost of implementing that program. We ask: do the benefits of the program's societal impacts exceed its costs? Since all programs cost money, this economic test seeks to determine whether the amount of positive societal impact justifies the program's expenditures. A program may have demonstrated an ability to reduce involvement in child welfare, increase test scores, and lower future criminal activity, but if the program costs too much, it may not be a good investment, especially when compared with alternatives.

For some programs, the research indicates no change in the child welfare outcomes measured in this study. Some of these programs, however, may still be economically attractive options when the cost of the program is more than offset by other up-front cost savings. For example, the evaluation of Subsidized Guardianship in Illinois reported the average total cost of administering the program was nearly \$5,000 less (per family) than the cost of providing services as usual.¹⁰ Even though we found that this program did not have a significant impact on child abuse and neglect rates, it still represents a positive economic outcome; that is, its approach of providing subsidized legal guardianships instead of having

¹⁰ M.F. Testa, L. Cohen, & G. Smith. (2003). *Illinois subsidized guardianship waiver demonstration: Final evaluation report*. University of Illinois at Urbana-Champaign, School of Social Work, Children and Family Research Center. Available at: <<http://cfrcwww.social.uiuc.edu/pubs/pdf.files/sgfinalreport.pdf>>

children remain in a standard foster care placement is a cost-saving strategy.

Estimated Benefits

We use the effect size findings from our meta-analysis to calculate how much change we might expect in a measured outcome (e.g., high school graduation) as a result of implementing a program. The measure of change allows us to estimate the economic benefits that would result from a program that reduces child abuse and neglect or out-of-home placement, increases high school graduation or test scores, decreases crime or substance abuse, decreases grade repetition or use of special education services, or decreases teenage pregnancy rates.

In addition, in and of themselves, some of the outcomes we monetize have measureable impacts on other outcomes. For example, an increase in high school graduation has been found to lead to a reduction in criminal activity. Therefore, any program that we estimate to significantly increase high school graduation will also have an indirect effect on crime, leading to more savings for the state.

In our final report, we will provide technical detail on how we calculate the value of avoided child abuse, neglect, and out-of-home placement to taxpayers and crime victims.

Three Perspectives on Benefits and Costs

In this analysis, we construct our estimates of benefits and costs from three perspectives. The first division is between the benefits and costs from the perspective of those who participate in a program, compared with those who do not participate in the program. The second division concerns the non-participants: we estimate the benefits and costs to non-participants in their roles as taxpayers, and non-participants in all of their other non-taxpayer roles (e.g., as crime victims). For the non-participants, we estimate benefits and costs when there is evidence that the program generates external benefits. We make this second division because many public policy decision-makers want to know rate-of-return information from the single perspective of the taxpayer, while other decision-makers want to know the broader societal implications of their options.

For example, we estimate the long-term labor market benefits that accrue to participants in the Chicago Child Parent Centers (an early childhood education program). As we show in this analysis, there is evidence that the Chicago Child Parent Centers also produce lower crime rates; this generates benefits to non-participants by lowering the amount of money taxpayers have to spend on the criminal justice system. Lower crime also reduces the costs that victims would otherwise have to endure. Thus, we provide estimates for each of the three perspectives: program participants, non-participants as taxpayers, and non-participants in other non-taxpayer roles.

Exhibit 2. Estimated Benefits and Costs for Prevention and Intervention Programs

Exhibit 2 summarizes our estimates of the total benefits and costs of each program in our analysis. For programs that have an evidence-based ability to impact child welfare outcomes, we provide our estimates of benefits from the three perspectives described above in Table 1, columns (1), (2), and (3). Column (4) displays the total benefits from all three perspectives. Of course, a program category that does not achieve a statistically significant reduction in child welfare outcomes will not produce any benefits associated with reduced involvement in the child welfare system.

As noted in the previous section, not all of the benefits we estimate are directly attributable to reduced involvement in the child welfare system. These estimates of total benefits also include savings derived from other outcomes measured by program evaluations. For example, one evaluation of the Nurse Family Partnership measured child abuse and neglect. This evaluation (and other evaluations of that program) also measured the impact of the program on criminal involvement of the mothers and their children, elementary school test-scores of the children, high school graduation rates of the mothers, and the use of public assistance by the mothers. Improvements in these outcomes have economic benefits to society; in our totals, we include estimates of benefits for outcomes shown to be significantly impacted by participation in the Nurse Family Partnership.

In Table 2, we show our cost estimates of programs, as compared to services-as-usual. For several programs, we have not been able to secure reliable estimates of program costs; we plan to have more complete cost information in our final report.

We provide two summary measures of the economic “bottom lines” for these programs in Table 3. The first column displays the ratio of total benefits to total costs for the programs in our analysis. A ratio greater than one indicates that the benefits of a program exceed the program’s cost, whereas a value less than one indicates that the economic benefits of a program do not outweigh the costs.

In the second column of Table 3, we show these same bottom-line estimates expressed as total net benefits per program participant. These figures are the net present values of the long-run benefits minus the net costs of the program. This statistic provides our best overall measure of the economic attractiveness of the program.

In Table 4 on page 12, we also list a number of programs for which the research evidence, in our judgment, is inconclusive at this time. Some of these programs have only one or two rigorous (often small sample) evaluations that do not allow us to draw general conclusions. Other programs have more evaluations, but the program category is too diverse or too general to allow meaningful conclusions to be made at this time. Subsequent research on these types of programs is warranted.

Note to Exhibit 2. More detail about how we estimate the specific components of the total benefits will be presented in the final edition of this report, to be published in July 2008. The total benefits presented here are estimates of the economic outcomes we would expect to accrue given a program’s impact on outcomes we can monetize, namely: crime, education, substance abuse, child abuse and neglect, out-of-home placement, teen pregnancy, and public assistance. Many of these programs have achieved outcomes in addition to those for which we are currently able to estimate monetary benefits.

Exhibit 2
Evidence-Based Options for Reducing Involvement in the Child Welfare System:
What Works, and Benefits & Costs

TABLE 1: BENEFITS

Washington State Institute for Public Policy Estimates as of May 2008	Benefits (Per Participant, Net Present Value, 2007 Dollars)			
	Benefits to Participants	Benefits to Taxpayers	Benefits to Others	Total Benefits
	(1)	(2)	(3)	(4)
Note: "n/e" means not estimated at this time.				
Nurse Family Partnership for Low-Income Families	\$8,004	\$6,858	\$9,700	\$24,562
Chicago Child Parent Centers	\$11,701	\$4,028	\$3,651	\$19,379
Intensive Family Preservation Service Programs (Homebuilders® model)*	\$2,156	\$4,932	\$731	\$7,818
Parent-Child Interaction Therapy (Oklahoma)	\$3,957	\$1,004	\$228	\$5,189
Parents as Teachers	\$2,635	\$659	\$659	\$3,952
Dependency (or Family Treatment) Drug Court (California)	\$811	\$1,880	\$257	\$2,948
Home Visiting for At-Risk Mothers and Children (see description, p. 15)	\$1,951	\$490	\$96	\$2,537
Healthy Families America	\$1,643	\$410	\$78	\$2,130
Family Assessment Response (Minnesota)	\$888	\$297	\$165	\$1,350
Flexible Funding (Title IV-E Waivers in North Carolina and Oregon)	\$596	\$198	\$110	\$904
Iowa Family Development and Self Sufficiency Program	\$0	\$0	\$0	\$0
Intensive Case Management for Emotionally Disturbed Youth	\$0	\$0	\$0	\$0
Other Family Preservation Services (non-Homebuilders®)	\$0	\$0	\$0	\$0
SAFE Homes (Connecticut)	\$0	\$0	\$0	\$0
Subsidized Guardianship (Illinois)	\$0	\$0	\$0	\$0

TABLE 2: PROGRAM COSTS

Washington State Institute for Public Policy Estimates as of May 2008	Program Costs Compared to Services-as-Usual (marginal program cost, per participant, net present value, 2007 dollars, compared to the cost of alternative)
Note: "n/e" means not estimated at this time.	
Nurse Family Partnership for Low-Income Families	\$10,151
SAFE Homes (Connecticut)	\$5,721
Chicago Child Parent Centers	\$5,456
Home Visiting for At-Risk Mothers and Children (see description, p. 15)	\$5,368
Healthy Families America	\$4,267
Parents as Teachers	\$3,841
Dependency (or Family Treatment) Drug Court (California)	\$3,772
Other Family Preservation Services (non-Homebuilders®)	\$2,814
Intensive Family Preservation Service Programs (Homebuilders® model)*	\$2,814
Intensive Case Management for Emotionally Disturbed Youth	\$2,120
Parent-Child Interaction Therapy (Oklahoma)	\$1,441
<i>The following programs have zero or negative values because they cost less up front than services as usual:</i>	
Flexible Funding (Title IV-E Waivers in North Carolina and Oregon)	\$0
Iowa Family Development and Self Sufficiency Program	-\$448
Family Assessment Response (Minnesota)	-\$1,326
Subsidized Guardianship (Illinois)	-\$4,954

TABLE 3: BENEFITS AND COSTS

Washington State Institute for Public Policy Estimates as of May 2008	Total Benefit-to-Cost Ratio (per participant)	Total Benefits Minus Costs (per participant)
Note: "n/e" means not estimated at this time.		
Nurse Family Partnership for Low-Income Families	\$2.42	\$14,411
Chicago Child Parent Centers	\$3.55	\$13,923
Intensive Family Preservation Service Programs (Homebuilders® model)*	\$2.78	\$5,003
Subsidized Guardianship (Illinois)	n/e	\$4,954
Parent-Child Interaction Therapy (Oklahoma)	\$3.60	\$3,749
Family Assessment Response (Minnesota)	n/e	\$2,676
Flexible Funding (Title IV-E Waivers in North Carolina and Oregon)	n/e	\$904
Iowa Family Development and Self Sufficiency Program	n/e	\$448
Parents as Teachers	\$1.03	\$111
Dependency (or Family Treatment) Drug Court (California)	\$0.78	-\$824
Intensive Case Management for Emotionally Disturbed Youth	n/e	-\$2,120
Healthy Families America	\$0.50	-\$2,137
Other Family Preservation Services (non-Homebuilders®)	n/e	-\$2,814
Home Visiting for At-Risk Mothers and Children (see description, p. 15)	\$0.47	-\$2,831
SAFE Homes (Connecticut)	n/e	-\$5,721

Exhibit 2 (continued)
Evidence-Based Options for Reducing Involvement in the Child Welfare System:
Programs in need of additional research and development before we can conclude they do or do not
impact child welfare outcomes

TABLE 4: OTHER PROGRAMS

Program	Comment
Abuse-Focused Cognitive Behavioral Therapy (AF-CBT)	This program has only one rigorous evaluation and was based on a very small treatment group (n=25).
Circle of Security	To date, this program has not undergone a rigorous evaluation.
Early Hospital Discharge and Intensive In-Home Follow-Up for Low Birthweight Infants (Pennsylvania)	This program has only one rigorous evaluation and was based on a very small treatment group (n=39). The authors found no significant effects that we could monetize, although the program itself saves money over standard treatment.
Early Intervention Foster Care (MTFC-P)	No rigorous evaluations of this program have been published to date, although a randomized trial is currently underway.
Family Connections (Maryland)	No rigorous evaluations of this program have been published to date, although a randomized trial is currently underway.
The Family Connections Study (Canada)	This program has only one rigorous evaluation, and we are unable to estimate the cost of its implementation at this time.
Family to Family (New Mexico)	We were able to code outcomes for only one evaluation of this program, and we were unable to estimate the cost of that implementation. However, a randomized trial is currently underway.
Family Group Conferences	This program was evaluated in two very different settings, and we are unable to estimate its cost at this time.
Family Group Decision Making (California)	This program has only one rigorous evaluation, and we were unable to estimate the cost of its implementation.
Family Therapy	This program has only one rigorous evaluation, and was based on a very small treatment group (n=18).
LEARN (Local Efforts to Address and Reduce Neglect)	This program has only one rigorous evaluation, and we were unable to estimate the cost of its implementation.
Mockingbird Family Model (Constellations)	To date, this program has not undergone a rigorous evaluation.
Multidimensional Treatment Foster Care (MTFC)	Although several evaluations have measured the impact of MTFC on future crime, no evaluations have been published on the program's impact on objective child welfare outcomes.
Multisystemic Therapy (MST)	Although MST has been evaluated with respect to its effects on crime, child welfare outcomes have not been measured. However, a randomized controlled trial with physically abused adolescents and their families is currently underway.
Project KEEP	This program has only one rigorous evaluation, and we were unable to estimate the cost of its implementation.
Project SafeCare/Project 12 Ways	No rigorous evaluations of this program have been published to date, although a randomized trial is currently underway.
Promoting First Relationships	No rigorous evaluations of this program have been published to date, although a randomized trial is currently underway.
Structured Decision Making (Michigan)	This program has only one rigorous evaluation, and we are unable to estimate the cost of its implementation at this time.
Triple-P Positive Parenting Partnership (South Carolina)	This program has only one rigorous evaluation, and we are unable to estimate the cost of its implementation at this time.

*We have presented a single benefit-cost analysis for Homebuilders®-style Intensive Family Preservation Service Programs here. In our meta-analytic table, we presented effect size estimates in three ways: (1) for IFPS programs that focused on reunification of children already placed out of home, (2) for programs focused on preventing children from being removed from home, and (3) for all IFPS programs. The benefit-cost estimates were nearly identical for the reunification and prevention programs, so we have summarized them here.

Next Steps

Task 3: Estimate the Benefits of a “Portfolio” of Evidence-Based Programs

In order to provide a comprehensive estimate of the benefits of investing in prevention and intervention programs, we will estimate the economic advantage to Washington if state and local governments implement evidence-based programs more widely. Our meta-analytic findings and cost-benefit analyses from Tasks 1 and 2 above will provide the basis for calculating the long-term returns to Washington given a broad investment strategy in a “portfolio” of programs such as those described in this report.¹¹ We will calculate the economic benefits, per dollar of investment in prevention and intervention programs, that will accrue to the people of Washington State.

Task 4: Identify Characteristics Common to Effective Programs

The research base in this area is continually evolving. Unlike other areas (e.g., crime prevention), there are very few child welfare programs that have been rigorously evaluated multiple times. To provide additional guidance to practitioners and policymakers, we are exploring what is known about the elements of programs that are effective. To the extent possible, we will summarize characteristics common to effective programs, then analyze these elements in terms of their power to predict child welfare outcomes.

Our final report will present the results of these last two tasks, along with detailed, technical information about our methodology.

¹¹ See S. Aos, J. Mayfield, M. Miller, & W. Yen. (2006). *Evidence-based treatment of alcohol, drug, and mental health disorders: Potential benefits, costs, and fiscal impacts for Washington State*. Olympia: Washington State Institute for Public Policy, Document No. 06-06-3901. Available at: <<http://www.wsipp.wa.gov/rptfiles/06-06-3901.pdf>>

Brief Description of the Programs in Our Review

PROGRAMS WITH BENEFIT-COST ESTIMATES. The programs identified on Exhibit 1 are described below. We measure effectiveness of these programs in terms of costs and benefits. Note, however that some programs produce additional benefits for which we are currently unable to estimate a dollar value.

Chicago Child Parent Centers. These school-based Centers provide educational and family support services for families living in high poverty neighborhoods. The Centers aim to provide a stable learning environment from preschool through the early elementary school years and provide support to parents so that they can be involved in their children's education.

Dependency (or Family Treatment) Drug Court (California). Dependency Drug Courts provide frequent court hearings for substance abusing parents involved in the child welfare system. The Courts offer intensive monitoring, substance abuse treatment, and a system of rewards and sanctions for treatment compliance. The goal is to bridge the gap between child welfare and criminal justice for families with substance abuse problems, and increase the probability of family stability.

Family Assessment Response (Minnesota) is an alternative response system for families referred to child welfare who do not warrant an immediate investigation. This strategy provides support and services to families without an incident-focused investigation of harm.

Healthy Families America¹² is a network of programs that grew out of the Hawaii Healthy Start program. At-risk mothers are identified and enrolled either during pregnancy or shortly after the birth of a child. The intervention involves home visits by trained paraprofessionals who provide information on parenting and child development, parenting classes, and case management.

Intensive Case Management for Emotionally Disturbed and/or Maltreated Youth.¹³ Programs under this heading include some that have been referred to as "Wraparound" or "Systems of Care." These programs emphasize providing individualized coordinated services among a variety of agencies and organizations and allow the child to remain in the community. This approach is considered more flexible, culturally competent, neighborhood-based, and tailored to individual circumstances than usual services. For this analysis, emphasis was placed on programs directed toward children with serious emotional disturbances who are in foster care or referred by the child welfare system.

Intensive Family Preservation Services Programs¹⁴ are short-term, home-based crisis intervention services that emphasize placement prevention. The original program, Homebuilders®, was developed in 1974 in Federal Way, Washington. The program emphasizes contact with the family within 24 hours of the crisis, staff accessibility round the clock, small caseload sizes, service duration of four to six weeks, and provision of intensive, concrete services and counseling. The goal of these programs is to prevent the removal of a child from his or her biological home (or to promote his or her return to that home) by improving family functioning. For the purposes of this analysis, we have presented the effects of all such programs together. We have also broken out these programs into two types: (1) those that serve families with children at imminent risk at being removed from home, and (2) those that serve families with a child already placed out of home.

"Other" Family Preservation Services Programs are those with the same goals as the "intensive" family preservation services programs described above, but without the rigorous criteria for implementation as defined by the Homebuilders® model.

Iowa Family Development and Self Sufficiency Program (FaDSS). This program is targeted to women at risk of long-term welfare dependence. Families who volunteered for FaDSS were then randomly assigned to treatment or regular welfare-to-work programs. The intervention involves home-visits, assessment, goal-setting, support services and service referral, advocacy, funds for special needs, and group activities.

¹² <<http://www.healthyfamiliesamerica.org>>

¹³ <<http://cecp.air.org/promisingpractices>>

¹⁴ <<http://www.institutefamily.org/>>

Nurse Family Partnership for Low Income Women¹⁵ provides intensive visitation by nurses during a woman's pregnancy and the first two years after birth; the program was developed by Dr. David Olds. The goal is to promote the child's development and provide support and instructive parenting skills to the parents. The program is designed to serve low-income, at-risk pregnant women bearing their first child.

"Other" Home Visiting Programs for At-risk Mothers and Children focus on mothers considered to be at risk for parenting problems, based on factors such as maternal age, marital status and education, low household income, lack of social supports, or in some programs, mothers testing positive for drugs at the child's birth. Depending on the program, the content of the home visits consists of instruction in child development and health, referrals for service, or social and emotional support. Some programs provide additional services, such as preschool.

Note to reader: In our 2004 prevention report, we found this group of programs to produce a net benefit of \$6,077 per participant. The sources of the benefits were from reductions in child abuse and neglect and increases in test scores. In the current report, we still found positive benefits from the child abuse outcomes; however, the increases we previously observed in test scores were no longer statistically significant. On further exploration, we found that we had incorrectly coded the findings of one of the five key studies for children's test scores. All of these studies had small sample sizes, so after correcting this error, the effect size for test scores is no longer statistically significant.

Parent-Child Interaction Therapy¹⁶ aims to restructure the parent-child relationship and provide the child with a secure attachment to the parent. Parents are treated with their children, skills are behaviorally defined, and all skills are directly coached and practiced in parent-child sessions. Therapists observe parent-child interactions through a one-way mirror and coach the parent using a radio earphone. Live coaching and monitoring of skill acquisition are cornerstones of the program.

Parents as Teachers¹⁷ is a home visiting program for parents and children with a main goal of having children ready to learn by the time they go to school. Parents are visited monthly by parent educators with a minimum of some college education. Visits typically begin during the mother's pregnancy and may continue until the child enters kindergarten.

SAFE Homes (Connecticut) are group foster homes designed to serve as a short-term placement while appropriate, longer term foster placements are found. SAFE Homes aims to keep siblings together and maintain children in their home communities when they are first removed from home.

Subsidized Guardianship (Illinois) is a strategy for increasing placement permanency by offering legal, subsidized guardianships for kin or foster care providers. These guardianships differ from formal adoption in that they do not require the legal severance of the relationship between the child and his or her biological family.

PROGRAMS WITHOUT BENEFIT-COST ESTIMATES. As mentioned in the section on study limitations, some studies did not have sufficient information on costs, or used measures that could not be monetized, but the available research offered sufficient information on outcomes for some measurements of effect (see Exhibit 1).

Abuse-Focused Cognitive Behavioral Therapy (AF-CBT) is an intervention for abused children and their parents. Children receive individual therapy, learning social skills, how to cope with difficult emotions resulting from abuse, and techniques for avoiding aggressive behavior. In parent therapy, parents learn how to manage anger and stress, deal with difficult child behavior, and skills for communicating and problem solving.

Early Hospital Discharge and Intensive In-Home Follow-Up for Low Birthweight Infants (Pennsylvania). Low birth weight infants are at risk for developmental delays. This program was based in a hospital, and allowed low-birthweight infants and their mothers to leave the hospital more quickly than usual after birth. Families were frequently visited in their homes after hospital discharge to help parents learn parenting skills and ways to encourage development of their infants. Due to the very small sample size in the single evaluation of this program, we are unable to estimate the costs and benefits at this time.

¹⁵ <<http://www.nccfc.org/nurseFamilyPartnership.cfm>>. The results reported here are for the program as delivered by nurses; an evaluation of the program delivered by paraprofessionals produced smaller effects that rarely achieved statistical significance.

¹⁶ <<http://www.pcit.org>>

¹⁷ <<http://www.parentsasteachers.org>>

The Family Connections Project (Canada) provided a home visiting program with public health nurses (similar to the Nurse Family Partnership service model [see description on page 15]) in a sample of families who had a history of child abuse or neglect.

Family to Family (New Mexico) is a grant-to-states foster care reform program funded by the Annie E. Casey Foundation. The program aims to establish a neighborhood resource for reducing unnecessary placement, returning children from group care to their neighborhoods, and involving foster families in reunification. States have considerable leeway in implementing changes; although the evaluation of Family to Family involved five states, only the project in New Mexico met our criteria for inclusion.

Family Group Conferences, Family Group (or Team) Decision Making¹⁸ are interventions emphasizing the use of meetings among family members and professionals where family members develop their own plan to overcome identified problems and respond to concerns of child protection professionals. The meetings are commonly used as a decision-making apparatus when a child has been placed out of the home. We have divided this group of programs in our analysis; the standard “Group Conference” approach allows the family to develop their plan without input from child welfare professionals (although the plan must be approved by a professional after the conference), whereas the “Team Decision Making” approach incorporates professionals as an integral part of the planning meeting.

Family Therapy (FT) provides therapy for the whole family, teaching the family to communicate better and solve problems together. The therapist first assesses each family member’s role and interaction style, then works with the family to reframe situations and increase cooperation. Families practice new skills at home and build alternative routines to solve conflict.

Flexible Funding (Title IV-E Waivers in Oregon and North Carolina). The Title IV-E waivers allowed states flexibility in spending federal dollars previously earmarked for foster care maintenance. States were encouraged to expand existing services or implement new services with the aim of improving outcomes for children in the child welfare system. The new services were required to be “cost-neutral.”

Local Efforts to Address and Reduce Neglect (LEARN) (California) is an in-home assistance program specifically targeted toward reducing physical neglect. The program aims to improve family functioning, increase parenting skills, and reduce poverty by providing in-home and school assistance, support groups for parents, and counseling for families and/or parents.

Multi-Systemic Therapy (MST)¹⁹ is an intervention for youth that focuses on improving the family’s capacity to overcome the known causes of delinquency. Its goals are to promote parents’ ability to monitor and discipline their children and replace deviant peer relationships with pro-social friendships. Trained MST therapists, working in teams consisting of one Ph.D. clinician and three or four clinicians with masters’ degrees, have a caseload of four to six families. The intervention typically lasts between three and six months. MST, Inc., in Charleston, South Carolina, trains and clinically supervises all MST therapists. Although MST has been evaluated with respect to its effects on crime, child welfare outcomes have not been measured.

Project KEEP (San Diego) is a training program for foster parents. The program seeks to increase stability for children in foster care by training foster parents to track child behavior and implement a contingency system for compliance. Better management of difficult behavior is expected to lead to fewer placement changes for the children.

Structured Decision Making (Michigan) is a systematic approach to assessing the needs of families in the child welfare system. After a referral has been accepted, social workers use structured assessment tools in the decision-making process. Structured Decision Making is designed to remove some subjectivity from the child welfare process.

Triple-P Positive Parenting Program²⁰ **(South Carolina)** is a universal prevention program that aims to increase the skills and confidence of parents in order to prevent the development of serious behavioral and emotional problems in their children. Triple-P has five levels of intensity; the base level is a media campaign that aims to increase awareness of parenting resources and inform parents about solutions to common behavioral problems. Levels two and three are primary health care interventions for children with mild behavioral difficulties, whereas levels four and five are more intensive individual- or class-based parenting programs for families of children with more challenging behavior problems. The evaluation in this study was a population-based trial that provided all levels of the program.

¹⁸ <http://www.pppncjfcj.org/html/technical_assistance_ref-famlygrp_decis.html>,
<http://www.americanhumane.org/site/PageServer?pagename=pc_fgdm_research_psu>

¹⁹ <<http://www.mstservices.com>>

²⁰ <<http://www.triplep-america.com/>>

Exhibit 3
Citations to the Studies Used in the Meta-Analyses
(Some studies contributed independent effect sizes from more than one location)

Abuse-Focused Cognitive Behavioral Therapy (AF-CBT)

Kolko, D.J. (1996). "Individual cognitive behavioral treatment and family therapy for physically abused children and their offending parents: A comparison of clinical outcomes." *Child Maltreatment* 1(4), 322-342.

Chicago Child Parent Centers

Reynolds, A. J., & Robertson, D. L. (2003). School-based early intervention and later child maltreatment in the Chicago Longitudinal Study. *Child Development*, 74(1), 3-26.

Reynolds, A. J., Temple, J. A., Ou, S., Robertson, D. L., Mersky, J. P., Topitzes, J. W., et al. (2007). Effects of a school-based, early childhood intervention on adult health and well-being: A 19-year follow-up of low-income families. *Archives of Pediatric and Adolescent Medicine* 161(8), 730-739.

Reynolds, A. J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2002). Age 21 cost-benefit analysis of the Title I Chicago child-parent centers. *Educational Evaluation and Policy Analysis*, 24(4), 267-303.

Dependency (or Family Treatment) Drug Court (California)

Boles, S. M., Young, N. K., Moore, T., DiPirro-Beard, S. (2007). The Sacramento Dependency Drug Court: Development and outcomes. *Child Maltreatment*, 12(2), 161-171.

Green, B. L., Furrer, C., Worcel, S., Burrus, S., & Finigan, M. W. (2007). How effective are family treatment drug courts? Outcomes from a four-site national study. *Child Maltreatment*, 12(1), 43-59.

Early Hospital Discharge and Intensive In-Home Follow-Up for Low Birthweight Infants (Pennsylvania)

Brooten, D., Kumar, S., Brown, L. P., Butts, P., Finkler, S. A., Bakewell-Sachs, S., et al. (1986). A randomized clinical trial of early hospital discharge and home follow-up of very-low-birth-weight infants. *New England Journal of Medicine*, 315(15), 934-939.

Family Assessment Response (Minnesota)

Institute of Applied Research. (2006). Extended follow-up study of Minnesota's family assessment response: Final report. St. Louis, MO: Author.

Family Group Conferences

Berzin, S.C. (2006). Using sibling data to understand the impact of family group decision-making on child welfare outcomes. *Children and Youth Services Review*, 28, 1449-1458.

Sundell, K., & Vinnerljung, B. (2004). Outcomes of family group conferencing in Sweden: A 3-year follow-up. *Child Abuse & Neglect*, 28, 267-287.

Family Group Decision Making (California)

Berzin, S.C. (2006). Using sibling data to understand the impact of family group decision-making on child welfare outcomes. *Children and Youth Services Review*, 28, 1449-1458.

Family Therapy

Kolko, D.J. (1996) "Individual cognitive behavioral treatment and family therapy for physically abused children and their offending parents: A comparison of clinical outcomes." *Child Maltreatment* 1(4), 322-342.

Family to Family (New Mexico)

Usher, L. (1998). Evaluation of Family to Family. Baltimore, MD: The Annie E. Casey Foundation.

Flexible Funding (Title IV-E Waivers in Oregon and North Carolina)

Lehman, C., Liang, S., & O'Dell, K. (2005). Impact of flexible funds on placement and permanency outcomes for children in child welfare. *Research on Social Work Practice*, 15(5), 381-388.

Usher, C. L., Wildfire, J. B., Duncan, D. F., Meier, A., Brown, E. L., Salmon, M. A. (2002). Evaluation of North Carolina's Title IV-E Waiver Demonstration. Chapel Hill: University of North Carolina, School of Social Work, Jordan Institute for Families.

Healthy Families America

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Citations to the Studies Used in the Meta-Analyses
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