



RI Office of Management and Budget

Issue Brief

Results First – Child Welfare Program Review and Benefit-Cost Analysis

January 6, 2017

This report describes Rhode Island's efforts to analyze evidence-based child welfare programs and to calculate their benefits and costs, when possible. The analysis uses a benefit-cost model developed and supported by the Pew-MacArthur Results First Initiative (Results First).¹ The goal is to identify the most cost-effective evidence-based programs to reduce cases of child abuse and neglect and to target resources for the greatest impact.

Summary & Key Findings

According to the U.S. Department of Health and Human Services, Rhode Island had the third-highest rate of child abuse and neglect in the United States in 2014. Additionally, for children who are removed from the home, Rhode Island has historically had high rates of placement in congregate care settings such as group homes, which are less preferable than family-based settings in promoting child well-being. In recent years, the Department of Children, Youth and Families (DCYF) has been working to reduce cases of child maltreatment, as well as to shift placements away from group home settings and toward foster families.

The Office of Management and Budget (OMB) worked with DCYF and the Department of Health (DOH) to develop a program inventory of child welfare programs. OMB then used the Results First Clearinghouse Database to match Rhode Island programs against lists of evaluated evidence-based programs. OMB found the following:

- DCYF and DOH administer 11 evidence-based programs that are shown to be effective or promising in improving child welfare outcomes. OMB was able to conduct benefit-cost analysis on six of those programs:
 - Two programs showed a clear positive return on investment. For the Flexible Funding (Title IV-E Waivers) and Subsidized Guardianship programs, the benefits of the program exceeded costs (Table 1).
 - The Positive Parenting Program (Triple P) is an evidence-based program but appears to show a negative return on investment in the OMB analysis. However, DCYF delivers Triple P only to the highest-need youths (Levels 4 and 5), while the model assumes population-wide delivery to all need levels (Levels 1 through 5). Although delivery only to the highest-need youths is appropriate in Rhode Island, the greater levels of service lead to higher costs, thereby negatively affecting the benefit-cost ratio in the model. Additional information about the benefits specific to the high-need populations will lead to more accurate benefit-cost estimates in the future.
 - DOH administers three programs that have positive impacts on reducing cases of abuse and neglect, as well as broader health and educational improvements (Table 2). OMB was able to quantify only the benefits of avoiding child abuse and neglect. Even with this limited scope, Nurse Family Partnership showed a positive benefit-cost ratio (\$2.31 per dollar invested). While Healthy Families America and Parents as Teachers initially show negative returns, OMB expects the benefit-cost ratio for these programs to increase as additional health and education benefits are included in later analyses.
- The state administers several other promising evidence-based programs for youths (Table 3), for which benefit-cost analysis is not available. Further, OMB analyzed programs not currently delivered in the state and found alternatives that could be cost-beneficial to Rhode Island children and families.

¹ The Pew-MacArthur Results First Initiative, a project of The Pew Charitable Trusts and the John D. and Catherine T. MacArthur Foundation, works with states and counties to implement an innovative benefit-cost analysis approach that helps them invest in policies and programs that are proven to work. Additional information about Results First, including previous RI reports describing the model's program and cost inputs, is available at <http://omb.ri.gov/performance/#section2>.

Table 1: Full Benefit-Cost Analysis for Programs with Child Abuse & Neglect / Out-of-Home Placement Outcomes

Program Name	Total Benefits	Taxpayer Benefits	Non-taxpayer Benefits	Costs	Benefits Minus Costs (Net Present Value, NPV)	Benefit to Cost Ratio	Odds of Positive NPV
Flexible funding (Title IV-E waivers)	\$1,020	\$337	\$682	\$0	\$1,020	N/A	99.7%
Triple P Positive Parenting Program (All levels)*	\$1,144*	\$377*	\$767*	(\$2,349)*	(-\$1,205)*	\$0.49	43.0%
Subsidized guardianship (Title IV-E waivers)	\$3,214	\$1,234	\$1,980	\$4,192	\$7,406	N/A	100.0%
Multisystemic Therapy (MST) for child abuse and neglect**	TBD	TBD	TBD	TBD	N/A	N/A	N/A

* The Results First model assumes delivery of Triple P to all need levels; DCYF delivers Triple P only to the highest-need populations (Levels 4 and 5). As a result, the model likely understates the benefit-cost ratio of this program.

** DCYF delivers MST, which is an evidence-based program associated with positive outcomes. The current Results First model needs additional rigorous evaluations to calculate the benefits of the program; OMB will rerun the analysis when the model has been updated.

Table 2: Partial Benefit-Cost Analysis for Programs with Public Health & General Prevention Multiple Outcomes

Program Name	Total Benefits	Taxpayer Benefits	Non-taxpayer Benefits	Costs	Benefits Minus Costs (Net Present Value, NPV)	Benefit to Cost Ratio	Odds of Positive NPV	Evidence Rating (Number of Clearinghouses)
Nurse Family Partnership	\$20,571	\$5,156	\$15,415	(\$8,899)	\$11,672	\$2.31	49.0%	Highest (6)
Healthy Families America	\$4,410	\$1,206	\$3,204	(\$6,394)	(-\$1,984)	\$0.69	45.0%	Highest (1)
Parents as Teachers	\$1,690	\$414	\$1,277	(\$5,191)	(-\$3,501)	\$0.33	2.0%	Highest (1) 2nd Highest (2) No Evidence (1)

NOTE: All of these programs are evidence-based and proven to improve outcomes in numerous areas of child well-being. The Rhode Island Results First model can currently calculate only the benefits associated with avoiding child abuse and neglect. As additional impacts are included in the model, OMB expects the benefit-cost ratios for these programs to increase.

Table 3: Evidence Ratings for Other Programs Administered by DCYF

Program Name	Evaluated Outcomes	Program Population	Effectiveness Rating
Family-Centered Treatment	Juvenile Justice; Child Welfare	Child / adolescent Parents / caregivers	2nd Highest (2)
Parenting with Love and Limits	Children's Mental Health	Child / adolescent Parents / caregivers	Highest (1) 2nd Highest (2)
Project Link	Substance Abuse	Pregnant mothers	2nd Highest (2)
Team Assertive Community Treatment	Child Welfare	Parents / caregivers	2nd Highest (1)
Trauma Systems Therapy	Child Welfare	Child / adolescent	Insufficient data (1)

In the last two years, DCYF has worked with numerous partners – including the Annie E. Casey Foundation, the Casey Family Programs, and the Harvard Kennedy School’s Government Performance Lab – to restructure child welfare programming and operations to improve outcomes. The Results First approach to evidence-based policymaking can support Rhode Island’s efforts to reduce incidences of child abuse and neglect and to minimize the use of congregate care. As DCYF realigns its services to promote better child welfare outcomes, OMB recommends continued focus in the following three areas:

- Ensure that children are matched with programs appropriate to their needs;
- Invest in additional evidence-based programs delivered in home and community settings to prevent child abuse and neglect and to provide alternatives to congregate care. This programming effort should involve selecting programs with rigorous research showing their effect on child welfare outcomes; and
- Review programs regularly to ensure they are implemented according to best practices and achieve desired outcomes.

OMB will continue to work with DCYF, national partners, DOH, and the Pew-MacArthur Results Initiative to build on recent progress in Rhode Island in improving child welfare outcomes.

Background – Results First Methodology

Rhode Island became the 14th Results First partner state in May 2013. Since then, a Results First team has supported RI government in developing a state-specific benefit-cost tool that analyzes the costs and benefits of investments in public programs. For child welfare programs, the Results First model helps states determine the cost-effectiveness of programs intended to reduce child abuse and neglect, as well as out-of-home placements.

The Rhode Island Results First model relies on the best national research available on the effectiveness of child welfare programs in order to predict the fiscal outcomes of each program administered in Rhode Island. The Results First approach takes into account Rhode Island’s unique population characteristics and the cost to provide programs in the state. For each programmatic investment, the model produces separate projections for benefits that accrue to program participants, taxpayers, and society. The model then compares those benefits with the cost of programs intended to improve child welfare outcomes in order to calculate the total return on investment that Rhode Island could expect to achieve from each program. The model illustrates which programs are cost-effective – those whose benefits exceed its costs. The Results First model will produce a total state-specific bottom line for each program, allowing policymakers to determine the best investments of taxpayer dollars to reduce recidivism.

Background – Child Welfare in Rhode Island

The Rhode Island Department of Children, Youth and Families (DCYF) is authorized under state law to serve as the “single authority to establish and provide a diversified and comprehensive program of services for the social well-being and development of children and their families.”² DCYF’s functions include administration of juvenile justice, children’s behavioral health, and child welfare programs.

One of DCYF’s primary child welfare responsibilities is receiving and investigating reports of child abuse and neglect. Upon receiving such a report, a child protective investigator will examine the case and determine whether the allegation is substantiated. If so, DCYF determines the appropriate response. If the child is endangered, DCYF may remove him/her from home for placement in another setting, such as a residential placement or a foster family. As an alternative to out-of-home placement, DCYF may instead provide services to the parent and/or child to provide a more stable and supportive environment.

According to the U.S. Department of Health and Human Services, Rhode Island had the third-highest rate of child abuse and neglect in the United States in 2014 [16.0 per 1,000 children, behind Massachusetts (22.9) and Kentucky (20.6)].³ Additionally, among children who are removed from the home, Rhode Island has high rates of placement in congregate care settings. In 2013, Rhode Island had the fourth-highest rate of children in congregate care – 27 percent, compared to a national average of 15 percent.⁴ In response, DCYF has been working to reduce cases of child maltreatment, as well as to shift placements away from group home and institutional settings toward foster families.

Evaluating Evidence-Based Programming in Rhode Island’s Child Welfare System

In evaluating child welfare programs, the Results First model focuses on two key outcomes: 1) the reduction in number of substantiated cases of child abuse and neglect, and 2) the number of cases where a child is removed from a home and placed in another setting (“out-of-home placement”). Programs are evaluated on their ability to reduce cases and/or out-of-home placements.

OMB worked with DCYF and DOH to develop a list of programs they administer that are intended to improve child welfare outcomes. As part of this program inventory process, both departments listed programs’ service providers, expected outcomes, primary and secondary participants, average age of participant (for youths), delivery location, frequency/intensity of intervention, and cost per participant/family.

OMB then worked with the Results First technical assistance team to match Rhode Island programs against eight national clearinghouses of evidence-based programs to determine the evidence base and effectiveness associated

² R.I. General Laws §42-72-2 (5)

³ U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children’s Bureau. (2016). *Child maltreatment 2014*. Available from <http://www.acf.hhs.gov/programs/cb/research-data-technology/statistics-research/child-maltreatment>

⁴ U.S. Department of Health & Human Services. (2015). *A National Look at the Use of Congregate Care in Child Welfare*. Available from https://www.acf.hhs.gov/sites/default/files/cb/cbccongregatecare_brief.pdf. RI specific-date provided by DCYF in collaboration with the Harvard Kennedy School’s Government Performance Lab.

with each program.⁵ Programs evaluated by the Washington State Institute of Public Policy (WSIPP) are classified as evidence-based, research-based or promising practices. For the eight other clearinghouses, programs were rated Highest-Rated, Second-Highest Rated, No Evidence, Mixed Effects, or Negative Effects. Table 4 summarizes the evidence base of each program delivered in Rhode Island and includes the expected outcomes, target program population and effectiveness rating. Programs evaluated by WSIPP are listed with their evidence level. For other programs, OMB used the Results First Clearinghouse and listed both the evidence ratings and the number of clearinghouses that have evaluated the program.

Table 4: Evidence Ratings

Program Name	Policy Areas / Outcomes Evaluated	Program Population	Effectiveness Rating (Number of Clearinghouses)
Family-Centered Treatment	Juvenile Justice; Child Welfare	Child / adolescent Parents / caregivers	2nd Highest (2)
Flexible funding (Title IV-E waivers)	Child Welfare	Parents / caregivers Children	Evidence-Based (WSIPP)
Healthy Families America	Public Health & General Prevention	Parents / caregivers Children	Highest (1)
Multisystemic Therapy (MST) for child abuse and neglect	Child Welfare	Parents / caregivers Children	Evidence-Based (WSIPP)
Nurse Family Partnership	Public Health & General Prevention	Pregnant women & new mothers; children	Highest (6)
Parenting with Love and Limits	Children's Mental Health	Child / adolescent Parents / caregivers	Highest (1) 2nd Highest (2)
Parents as Teachers	Public Health & General Prevention	Parents / caregivers	Highest (1) 2nd Highest (2) No Evidence (1)
Project Link	Substance Abuse	Pregnant mothers	2nd Highest (2)
Subsidized guardianship (Title IV-E waivers)	Child Welfare	Foster Parents / Caregivers	Evidence-Based (WSIPP)
Team Assertive Community Treatment	Child Welfare	Parents / caregivers	2nd Highest (1)
Trauma Systems Therapy	Child Welfare	Child / adolescent	Not Rated (1)
Triple P Positive Parenting Program (All levels)	Child Welfare	Parents / caregivers Children	Evidence-Based (WSIPP) Highest (3) 2nd Highest (3)

⁵ WSIPP child welfare program evaluations are available at WSIPP's website (http://www.wsipp.wa.gov/BenefitCost/Pdf/3/WSIPP_BenefitCost_Child-Welfare). The Pew-MacArthur Results First Clearinghouse Database summarizes findings of eight clearinghouses: Blueprints for Healthy Youth Development; California Evidence-Based Clearinghouse for Child Welfare; Coalition for Evidence-Based Policy; CrimeSolutions.gov; National Registry of Evidence-Based Programs and Practice; Promising Practices Network; What Works Clearinghouse; and What Works in Reentry Clearinghouse. The Results First Clearinghouse Database is available at <http://www.pewtrusts.org/en/multimedia/data-visualizations/2015/results-first-clearinghouse-database>.

DCYF and DOH administer 11 evidence-based programs that are proven effective or promising in improving outcomes for children. Eight programs received the highest evidence ranking by a clearinghouse, while three received the second highest rating. Only one program, Trauma Systems Therapy, was unable to be rated.⁶ OMB found no programs administered by DCYF or DOH that were rated as Mixed Effects or Negative Effects – an indication that the departments have established a high standard of evidence base when selecting their programs.

While many of the evaluated programs are associated with positive child welfare outcomes (i.e., reduction in child abuse and neglect and/or reduction in out-of-home placements), several programs were linked to improvement in other types of outcomes, including substance abuse, mental health, juvenile justice (e.g., reduction in recidivism), or public health and general prevention (e.g., improved health and educational attainment). However, these programs are not interchangeable; programs intended for juvenile justice populations may not have an effect on child welfare outcomes. DCYF is making efforts to ensure that programs are provided to the appropriate populations (as discussed in “Recent Improvements & Recommended Next Steps,” below).

Benefit-Cost Analysis Overview

For programs evaluated by WSIPP, OMB was able to conduct a benefit-cost analysis to show their cost-effectiveness. The Results First model calculates the benefit-cost ratio of programs intended to improve child welfare outcomes – reducing substantiated cases of child abuse or neglect and out-of-home placement of children in substantiated cases – as reviewed by WSIPP. A program is considered cost-effective if its total benefits exceed its costs. The higher a program’s benefit-cost ratio, the more cost-effective the program is. Because programs may vary in their effectiveness depending on the population and implementation, the Results First model also runs numerous simulations to capture possible variations and then calculates the likelihood that a program will have a net positive value over time.

Rhode Island’s Results First model is tailored to state-specific conditions. OMB worked with DCYF and other stakeholders to calculate expenditures in two categories. The first category is the costs associated with addressing child abuse and neglect. Child abuse has costs to society, both through taxpayer-funded services and from losses experienced by victims. Taxpayer-funded costs include law enforcement, legal proceedings, in-home services, residential placements, foster care programs, and adoption-related costs. Victimization costs can be tangible and calculable, such as physical and mental health services, or intangible and harder to determine, such as increased rates of juvenile crime or substance abuse.⁷ Any avoided costs resulting from successful child abuse and neglect reduction programs therefore represent the benefits of those initiatives to taxpayers and society.

The second category is the cost of prevention programs – the expenditures associated with delivering programs intended to reduce cases of child abuse and neglect. As noted above, DCYF and DOH provided an inventory of all programming, which OMB evaluated with technical assistance from Pew-MacArthur’s Results First team, to

⁶ The California Evidence-Based Clearinghouse deemed Trauma Systems Therapy “Not Able to be Rated.” This category is used for practices that are “generally accepted in clinical practice” but which do not have “any published, peer reviewed study utilizing some form of control (e.g., untreated group, placebo group, matched wait list study) that has established the practice’s benefit over the placebo.” The full CEBC evaluation is available at <http://www.cebc4cw.org/program/trauma-systems-therapy-tst/detailed>

⁷ The RI Results First model does not yet include secondary benefits such as a reduction in substance abuse disorders, school dropout, mental health disorders, and teen pregnancy. Those benefits will be calculated later as OMB expands the model into other policy areas.

determine the cost and evidence-base for each program. For both categories, OMB reviewed expenditure data with departments to determine the marginal costs – the impact of adding or removing one individual from the child welfare system.⁸

Evaluating Benefits of Improved Child Welfare Outcomes

As noted above, child abuse and neglect and out-of-home placements have costs to society, both through taxpayer-funded services and from losses experienced by children and families. The taxpayer-related costs are associated with certain categories of services (summarized in Table 5): investigation and law enforcement, case management, legal costs, out-of-home placements, and adoption-related costs. Any avoided costs resulting from a reduction in child abuse and neglect represent the benefits in the Results First benefit-cost model.⁹

Investigation / Law Enforcement

When DCYF receives a report of child abuse or neglect, its Child Protective Services (CPS) Unit investigates to determine whether the case can be substantiated. In FY 2014, DCYF's CPS unit investigated 7,531 reports and substantiated 3,404 cases of child abuse or neglect. OMB and DCYF collected the total personnel and transportation costs of CPS investigators for FY 2014 (\$8.86 million) and divided by the number of investigations (7,531) to determine a per investigation cost of \$1,176. Of the 3,404 substantiated cases, 568 (16.7 percent) involved state or local law enforcement in addition to DCYF CPS staff. For these cases, OMB used the cost of law enforcement from the Adult and Juvenile Justice component of the Results First model – estimated at \$1,038.¹⁰

Table 5: Taxpayer Costs of Child Abuse / Neglect and Out-of-Home Placements (FY 2014)

Cost Component	Marginal Cost	Notes
DCYF Child Protective Services	\$1,176	7,531 investigations leading to 3,404 substantiated cases
Law Enforcement	\$1,038	Applied to 16.7 percent of the 3,404 substantiated cases
Child Welfare Case Management	\$4,684	Costs associated with 3,404 child welfare cases
Legal Costs	\$978	Average cost across 1,443 cases, including 656 straight petitions & 787 <i>ex parte</i> petitions
Out-of-Home Placements	\$9,509	Weighted average contract cost per placement for all settings – all levels of intensity, from residential treatment to foster care (FY 2012 – FY 2013)
Out-of-Home Placements, severe emotional disorder	\$28,181	Average cost per placement for children with severe emotional disorder (FY 2012 – FY 2013)
Adoption-Related Costs	\$129,791	Average total cost of 553 adoptions finalized between FY 2012 and FY 2013

⁸ NOTE: In the last two years, DCYF has worked to reform the child welfare system, with an emphasis on reducing the use of congregate care settings and improving the procurement and contracting process with providers. For that reason, OMB has used data from 2012 through 2014 to establish baseline utilization and costs to populate the model. Once DCYF has negotiated service provider rates and programs, OMB expects to update the model with revised cost and utilization data.

⁹ Program costs and taxpayer benefits in this issue brief are listed on an all-funds basis, incorporating state, federal and other funding sources. OMB has worked with DCYF and DOH to determine the relative share of federal and state funds for each cost and benefit category and entered those percentages in the Results First model.

¹⁰ Rhode Island Office of Management & Budget. "Results First – Adult & Juvenile Justice Cost Evaluation." September 2015. Available at <http://omb.ri.gov/documents/performance/results-first/Results%20First%20Program%20Inventory%20September%2020152.pdf>

Case Management

In substantiated cases of child abuse and neglect, DCYF assigns a caseworker to the child and family. Casework duties include visiting the child at home or other placement, referring the child and/or family to services, and reviewing programming to ensure it is appropriate to the child's needs. OMB and DCYF reviewed personnel and transportation costs for caseworkers in the Child Welfare Services unit in FY 2014 to determine a per-case cost of \$4,684 for casework services.

Legal Costs

In certain cases of abuse or neglect, DCYF may petition the Family Court to remove a child from his/her home and assume custody. In cases where there is no imminent risk to the child, DCYF files a "straight" Dependent/Neglected petition. When a child who has suffered abuse or neglect is in immediate danger of further physical or emotional harm, DCYF files an *Ex Parte* Order of Detention. In FY 2014, DCYF and the Executive Office of Health and Human Services (EOHHS) spent \$1.4 million in legal costs for 1,443 petitions – 656 straight petitions and 787 *ex parte* petitions – for a per case cost of \$978.¹¹

Out-of-Home Placements

If DCYF successfully petitions to remove a child from the home, the child may be placed in one of various settings. In accordance with child welfare best practices, DCYF aims to place children in foster homes, whether family (kinship) or others (non-kinship). If children need specialized services, they may be placed in specialized residential facilities. Table 6 illustrates the categories of out-of-home placements, ordered by most restrictive to least restrictive. As previously noted, Rhode Island has historically had high levels of placement in congregate care, which DCYF aims to address through changes to placement decision-making and by providing more home- and community-based programs when re-procuring services.

Table 6: DCYF Child Placements, FY 2012 - FY 2013 baseline

	Total Child Count	Average Placement Days	Average Payment Per Youth	Average Payment Per Day
<i>More Restrictive Settings</i>				
Residential Treatment Center	117	175	\$51,428	\$ 293
Emergency Shelter	295	39	\$10,343	\$ 263
Group Homes	498	123	\$31,551	\$ 257
Private Agency/Specialized Foster Care	1,099	158	\$16,255	\$ 103
Non-Kinship Foster Care	1,791	145	\$2,763	\$ 19
Kinship Foster Care	2,001	162	\$2,749	\$ 17
Semi-Independent Living	85	133	\$32,148	\$ 242
Independent Living	15	167	\$19,103	\$ 115
<i>Less Restrictive Settings</i>				
	Weighted Average	146.5	\$ 9,509	\$ 65

¹¹ OMB uses legal costs borne only by DCYF and EOHHS in this analysis. As noted in OMB's September 2015 Adult & Juvenile Justice cost brief, high caseloads in the judiciary suggest that a reduction in cases may improve efficiency but not lead to cost savings. For that reason, OMB does not include Family Court costs in the marginal cost calculations for child welfare.

OMB and DCYF analyzed contracted provider payments and foster family stipend data to determine the average number of placement days in each setting in FY 2012 and FY 2013, as well as the average payment per youth and daily rate.¹² Because children may move among various settings, the data shown in Table 6 do not represent the average amount of time that a child spends in out-of-home settings, but rather the average and daily expenditures associated with each placement category. The average cost is weighted by the child count per placement setting. (For additional placement data, please see Appendix B.)

Across all categories of settings, the average out-of-home placement cost was \$9,509. Highest expenditures occurred in residential treatment centers, group homes, and semi-independent living, driven largely by the costs of services provided at those settings. Kinship and non-kinship foster care had the highest number of youth placements and also the lowest average payments. With the exception of independent and semi-independent living, which represent relatively few placements, costs decline as settings become less restrictive. DCYF's efforts to reduce the use of congregate care are not only better for child welfare outcomes, but will also reduce service-related expenditures in the longer term.

Placement Costs – Children Severe Emotional Disorders

Children with developmental or behavioral needs may benefit from programs specifically tailored to their needs. The Rhode Island Results First model includes evaluations of programs targeted to children with severe emotional disorders (SED).¹³ Because this population also has higher out-of-home placement costs due to additional service and treatment needs, OMB and DCYF reviewed placement data for SED youths and found higher proportions living at residential treatment placement centers and congregate care than the general child welfare population. Since those placements are also more expensive, the SED-specific placement cost of \$28,181 is higher than that of the broader population.

Adoption-Related Costs

When a child is removed from home, DCYF aims to reunify him/her with the family or to support a permanent placement setting through adoption. To promote adoption, DCYF provides adoption subsidies to families until the child turns 18 (or 21 in some cases). DCYF also provides guardianship subsidies and adoption-related services from third-party providers. Total spending on adoption-related services, including subsidies, was \$45.8 million in FY 2012 – FY 2013; during that period, DCYF finalized 353 adoptions, for a per-adoption service cost of \$129,791. This sum represents the total cost of an adoption, from pre-adoption services through adoption finalization and later subsidies. Though adoption-related expenditures for some children and families do not result in successful adoptions, the average cost per adoption demonstrates the overall level of state investment in adoption efforts.

Non-Taxpayer Costs

Positive child welfare outcomes have benefits to individuals, families, and society in general – including higher educational attainment and employment rates, improved physical and mental health, lower substance abuse

¹² As previously noted, DCYF began a service review and realignment in FY 2014, which has led a reduction in congregate care placements. DCYF is also rebidding all service contracts for child welfare programs. OMB and DCYF used the FY 2012 – FY 2013 period as a baseline to allow measurement and assessment of subsequent changes to placements and service expenditures.

¹³ The severe emotional disorder category includes those youths identified by DCYF as Emotionally Disturbed, Mental Retardation/Developmental Disability, or Learning Disability.

rates, and lower crime rates and recidivism. Since Rhode Island has completed the adult justice component of the model, the Results First benefit-cost analysis of child welfare programs captures some criminal justice-related savings to society, namely avoided victimization costs.¹⁴ As Rhode Island expands the model to additional policy areas, OMB expects to quantify additional benefits of child welfare programs.

Costs of Evidence-Based Child Welfare Programming

As part of the program inventory process, OMB collected information about programs administered by DCYF and DOH that are intended to improve child welfare or other related outcomes. Table 7 below illustrates the lead department, number of participants served, and per-participant cost for all evidence-based programs.

Table 7: Evidence-Based Programs – Participation and Cost Information

Program Name	Lead Department	Participants Served	Cost per Participant	Notes
Family-Centered Treatment	DCYF	35 families	\$5,373	Program began in July 2014; FY 2015 dollars
Flexible funding (Title IV-E waivers)	DCYF	N/A (prospective)	\$0	Title IV-E waivers allow states to reallocate dollars normally used for foster care to other types of child welfare services, such as prevention or treatment
Healthy Families America	DOH	408 families	\$5,150	FY 2015 dollars
Multisystemic Therapy (MST) for child abuse and neglect	DCYF	204 families	\$6,648	FY 2014 dollars
Nurse Family Partnership	DOH	225 families	\$6,000	FY 2015 dollars
Parenting with Love and Limits	DCYF	62 families	\$6,946	FY 2014 dollars
Parents as Teachers	DOH	138 families	\$3,500	FY 2015 dollars
Subsidized guardianship (Title IV-E waivers)	DCYF	525 children	(\$4,192)	Payments encourage long-term caregivers (e.g., family members) to assume legal guardianship without adoption. The Results First Model treats subsidized guardianship as an avoided cost. FY 2013 data.
Team Assertive Community Treatment	DCYF	38 families	\$7,920	FY 2015 dollars
Trauma Systems Therapy	DCYF	132 families	\$5,405	FY 2015 dollars
Triple P Positive Parenting Program	DCYF	56 families	\$2,349	DCYF delivers Triple P only at Level 4 (severe behavioral needs) and Level 5 (complex, high-needs) – FY 2015 dollars

¹⁴ For additional information, see Rhode Island Office of Management & Budget. “Results First – Adult & Juvenile Justice Cost Evaluation.” September 2015. Available at <http://omb.ri.gov/documents/performance/results-first/Results%20First%20Program%20Inventory%20September%2020152.pdf>

Table 7 illustrates that evidence-based program costs range per participant from \$2,349 for the Triple P Positive Parenting Program (Levels 4 and 5) to \$7,920 for Team Assertive Community Treatment. Costs may differ based on the intensity of the program, location of the service, and the needs of the youth. For example, Team Assertive Community Treatment provides comprehensive psychiatric treatment, rehabilitation, and support to persons with serious and persistent mental illness, leading to relatively higher per-family costs.

Benefit-Cost Analysis Results

For programs evaluated WSIPP, OMB was able to conduct a benefit-cost analysis to determine their relative cost-effectiveness. As previously noted, the Results First model calculates the benefit-cost ratio of programs intended to reduce child abuse and neglect and out-of-home placements. Table 8 illustrates the benefit-cost analysis of six programs. (All benefit-cost proposals are expressed in 2014 dollars.)

When conducting the benefit-cost analysis, OMB faced several constraints. Though DCYF and DOH administer 11 evidence-based programs, OMB could conduct full cost-benefit analysis for only three of these programs. Three programs – Flexible Funding, Triple P, and Subsidized Guardianship – have been evaluated primarily for child welfare outcomes, allowing OMB to quantify the full value of their benefits. However, Flexible Funding and Subsidized Guardianship have benefits but no cost to the state, preventing the calculation of a benefit-cost ratio. Further, as previously noted, DCYF administers Triple P only to the highest-need youths (Levels 4 and 5). Such targeted treatment has additional effects, such as on child mental health outcomes. Although delivery only to the highest-need youths is appropriate in Rhode Island, the greater levels of service lead to higher costs, thereby negatively affecting the benefit-cost ratio in the model. Additional information about the benefits specific to the high-need populations will lead to more accurate benefit-cost estimates in the future.

Also, three general prevention programs (Healthy Families America, Nurse Family Partnership, and Parents as Teachers) have been evaluated to provide positive outcomes in child welfare as well as other areas such as substance abuse, mental health, and general prevention (e.g., improved health and educational attainment). However, the Rhode Island Results First model currently quantifies the benefits of only the child welfare-related outcomes, thereby understating the full benefits. As OMB populates additional components of the Results First model, OMB expects the benefit-cost ratio for these programs to increase as additional health and education benefits are included in later analyses.

Of the six programs evaluated, the benefits of three programs – Flexible Funding (Title IV-E waivers), subsidized guardianship, and Nurse Family Partnership – exceeded their costs. Nurse Family Partnership's positive benefit-cost ratio of \$2.31 is particularly noteworthy because the model does not capture the complete benefits of the program. Three other programs – Triple P, Healthy Families America, and Parents as Teachers – show benefit-cost ratios of less than \$1 (i.e., costs exceed benefits); however, for the aforementioned reasons, OMB believes the benefits of these programs to be insufficiently captured in the model at this time.

Table 8: Per Participant Benefit-Cost Analysis for Evidence-Based Programs (FY 2014 dollars)

Program Name	Total Benefits	Taxpayer Benefits	Non-taxpayer Benefits	Costs	Benefits Minus Costs (NPV)	Benefit to Cost Ratio (BCR)	Odds of Positive NPV
<i>Full Cost-Benefit Analysis: Child Welfare Outcomes</i>							
Flexible funding (Title IV-E waivers)	\$1,020	\$337	\$682	\$0	\$1,020	N/A	99.7%
Triple P Positive Parenting Program (All levels)*	\$1,144	\$377	\$767	(\$2,349)	(\$1,205)	\$0.49	43.0%
Subsidized guardianship (Title IV-E waivers)	\$3,214	\$1,234	\$1,980	\$4,192	\$7,406	N/A	100.0%
Multisystemic Therapy (MST) for child abuse and neglect**	TBD	TBD	TBD	TBD	N/A	N/A	N/A

* The Results First model assumes delivery of Triple P to all need levels; DCYF delivers Triple P only to the highest-need populations (Levels 4 and 5). As a result, the model likely understates the benefit-cost ratio of this program.

** DCYF delivers MST, which is an evidence-based program associated with positive outcomes. The current Results First model needs additional rigorous evaluations to calculate the benefits of the program; OMB will rerun the analysis when the model has been updated.

Partial Cost-Benefit Analysis: Public Health & General Prevention Outcomes

Program Name	Total Benefits	Taxpayer Benefits	Non-taxpayer Benefits	Costs	Benefits Minus Costs (NPV)	Benefit to Cost Ratio (BCR)	Odds of Positive NPV
Nurse Family Partnership	\$20,571	\$5,156	\$15,415	(\$8,899)	\$11,672	\$2.31	49.0%
Healthy Families America	\$4,410	\$1,206	\$3,204	(\$6,394)	(\$1,984)	\$0.69	45.0%
Parents as Teachers	\$1,690	\$414	\$1,277	(\$5,191)	(\$3,501)	\$0.33	2.0%

NOTE: All three Public Health/General Prevention programs are evidence-based and proven to improve outcomes in numerous areas of child well-being. The Rhode Island Results First model can currently calculate only the benefits associated with avoiding child abuse and neglect. As additional impacts are included in the model, OMB expects the benefit-cost ratio for these programs to increase.

Recent Improvements & Recommended Next Steps

The Results First approach to evidence-based policymaking can support Rhode Island's efforts to reduce incidences of child abuse and neglect and to minimize the use of congregate care settings. The state's high use of congregate care settings is not only costly for the child welfare system, but also leads to less desirable outcomes for children than foster family placements or reunification. As DCYF realigns its services to promote better child welfare outcomes, OMB recommends continued focus in the following three areas:

- Ensure that children are matched with programs appropriate to their needs;
- Invest in additional evidence-based programs delivered in home and community settings to prevent child abuse and neglect and to provide alternatives to congregate care. This programming effort should involve selecting programs with rigorous research showing their effect on child welfare outcomes; and
- Review programs regularly to ensure they are implemented according to best practices and achieve desired outcomes.

In the last two years, DCYF has worked with numerous partners – including the Annie E. Casey Foundation, the Casey Family Programs, and the Harvard Kennedy School's Government Performance Lab – to restructure child welfare programming and operations to improve outcomes. These efforts have led to improvements in the areas identified by OMB, discussed below.

Needs Assessment for Placement & Program Referral

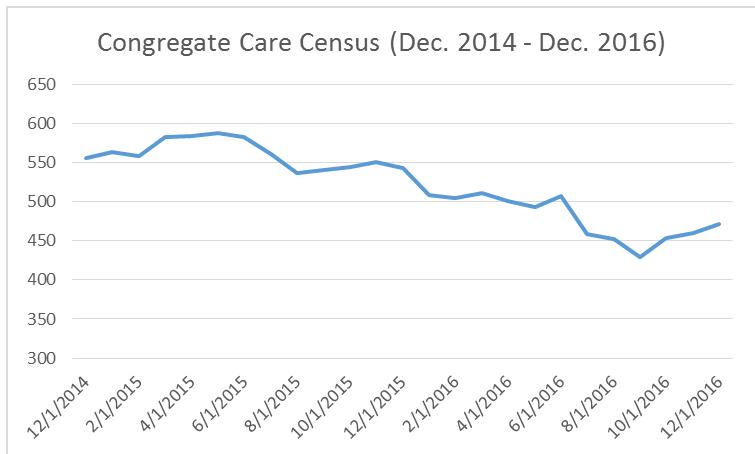
In its March 2014 program inventory report of adult and juvenile justice programs, OMB noted that the Department of Corrections and DCYF had different approaches to program referrals and recommended that all referrals be guided by the results of a needs assessment screening tool.¹⁵ Similarly, when developing the child welfare inventory with DCYF, OMB found several programs in the child welfare system that were more appropriate for juvenile justice or behavioral health outcomes.

DCYF has improved its approach to assessing the needs of youths in care and referring them to appropriate programs and settings. In March 2016, DCYF implemented a Level of Need Assessment: a standardized questionnaire used to assess risk and other needs. The Level of Need Assessment includes components of the Child and Adolescent Needs and Strengths (CANS) assessment tool and is used by DCYF's Central Referral Unit to guide youth placement and services. DCYF expects that a standardized approach to placements will reduce the use of unnecessarily restrictive settings for out-of-home placements.

Additionally, DCYF is improving utilization management to monitor placements for the most effective outcomes. Child welfare systems employ utilization management to improve services to children and families and to sustain those improvements over time. DCYF is implementing a systematic review process to ensure that the child welfare system is providing the appropriate services at the most suitable locations for the proper duration to support the safety, permanency, and well-being of youth in care. The utilization management review process focuses on case-level practices and services before, during, and after a child/family receives services.

¹⁵ Rhode Island Office of Management & Budget. "Results First – Adult & Juvenile Justice Program Inventory." March 2014. Available at <http://omb.ri.gov/documents/performance/results-first/IB%20Program%20Inventory%20030714.pdf>

DCYF has made progress in reducing the congregate care census in recent years. As of December 1, 2016, DCYF reported 471 placements in congregate care settings – down 15.3 percent from December 2014, and down 6.0 percent since implementation of the Level of Need Assessment in March 2016. OMB will continue working with DCYF to monitor the congregate care census to assess the impact of policy and programmatic changes in the child welfare system.



Invest in Home & Community-Based Programs

One of the reasons for Rhode Island's reliance on congregate care settings is a lack of evidence-based programming and supports in home settings. By delivering services to children in their homes or with foster families, DCYF can promote better outcomes and contain costs. In 2016, DCYF undertook a comprehensive re-procurement of child welfare services. As part of the Request for Proposal process, DCYF specifically called for additional home-based services and aimed to increase the number of evidence-based programs available to youths and families in the child welfare system. Additionally, DCYF has developed a new strategy for the recruitment, development, and support of foster families, which will streamline and enhance access to services, ensure access to training and resources, and improve long-term outcomes for children and families. DCYF expects to procure the new, coordinated system for foster families in spring of 2017.

To demonstrate the potential impact of new evidence-based services, OMB ran the Results First benefit-cost analysis for programs not currently delivered in Rhode Island. For program costs, OMB used cost estimates from the program evaluation literature reviewed by WSIPP; program benefits are specific to Rhode Island. Table 9 illustrates that additional evidence-based programs could be highly cost-effective. Structured Decision Making – a program currently being considered by DCYF – has a positive benefit-cost ratio of \$4.85, while Parent Child Interaction Therapy and SafeCare have even higher ratios – \$14.77 and \$23.52, respectively. When DCYF completes the re-procurement of its services and has updated program and placement cost data, OMB can run the Results First analysis for current and new programs. OMB recommends that future procurement efforts include the Results First benefit-cost analysis to inform the selection of contracted programs to the greatest extent possible.

Table 9: Potential New Programs for Improved Child Abuse & Neglect / Out-of-Home Placement Outcomes

Program Name	Total Benefits	Taxpayer Benefits	Non-taxpayer Benefits	Costs	Benefits Minus Costs (NPV)	Benefit to Cost Ratio (BCR)	Odds of Positive NPV	Evidence Rating (Number of Clearinghouses)
SafeCare	\$4,282	\$1,117	\$3,164	(\$182)	\$4,100	\$23.52	99.1%	Highest (1) 2nd Highest (2)
Parent Child Interaction Therapy	\$23,834	\$6,239	\$17,594	(\$1,614)	\$22,220	\$14.77	100.0%	Highest (3) 2nd Highest (1)
Alternative Response	\$2,360	\$630	\$1,730	(\$239)	\$2,121	\$9.87	99.1%	2nd Highest (1)
Intensive Family Preservation Services (Homebuilders©)	\$17,862	\$11,009	\$6,853	(\$3,429)	\$14,433	\$5.21	100.0%	Highest (3)
Structured Decision Making Risk Assessment	\$92	\$35	\$57	(\$19)	\$73	\$4.85	81.0%	2nd Highest (2)

Program Evaluation

As noted in OMB's March 2014 program inventory of adult and juvenile justice programs, evidence-based programming is effective only if it is delivered with fidelity to program models and best practices. Evaluation is particularly important when multiple service providers offer the same program to a population to ensure that programs are delivered consistently and outcomes are achieved as desired. DCYF and DOH do conduct ongoing monitoring and evaluation of programs, and DCYF has included active contract management as a component of the re-procurement of existing child welfare services.

Conclusion

OMB's evaluation of child welfare programs in DCYF and DOH demonstrate that Rhode Island is committed to evidence-based policymaking and targeting limited resources to cost-effective programs. DCYF and DOH deliver numerous evidence-based programs, as demonstrated by their positive evaluations in numerous clearinghouses. While the state's ability to conduct benefit-cost analysis of those programs is limited at this point, OMB will work to expand the Results First model to capture the full benefits of existing programs and to evaluate new programs. Further, DCYF is expanding the use of needs assessment tools and procuring more evidence-based programs in home and community settings to reduce congregate care placements. OMB will continue working with DCYF, its national partners, DOH, and the Pew-MacArthur Results Initiative to build on recent progress and promote the use of evidence and benefit-cost analysis in child welfare policymaking and budget decisions.

Appendix A: Summaries of Evidence-Based Programs in Results First Model

Descriptions for the evidence-based programs in the Results First model were prepared by the Washington State Institute of Public Policy. Descriptions also include whether the program is primarily targeted toward child welfare outcomes (i.e., reducing cases of child abuse and neglect; reducing out-of-home placements) or are focused on general prevention with multiple benefits.

Family Team Decision-Making – Family Team Decision-Making, used in Washington State’s child welfare system, involves meetings with parents and other family members, the child (when appropriate), friends, foster parents, caseworkers, and other professionals to make decisions involving child removal, change of placement, and reunification or other permanency plans. (Child Welfare)

Flexible Funding (Title IV-E waivers) – The flexible funding allowed by states obtaining Title IV-E waivers is designed to allow states to reallocate dollars normally used for foster care to other types of child welfare services, such as prevention or treatment. (Child Welfare)

Healthy Families America – Healthy Families America (HFA) 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. (General Prevention)

Intensive Family Preservation Services (Homebuilders®) – Intensive Family Preservation Services 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. These programs are intended to prevent removal of a child from his or her biological home (or to promote his or her return to that home) by improving family functioning. (Child Welfare)

Nurse Family Partnership for Low-Income Families – The Nurse Family Partnership program provides intensive visitation by nurses during a woman’s pregnancy and the first two years after birth. 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. (General Prevention)

Other Family Preservation Services (non-Homebuilders®) – “Other” Family Preservation Services Programs have the same goals as “intensive” family preservation services: to prevent removal of a child from his or her biological home (or to promote his or her return to that home) by improving family functioning. However, “other” FPS programs lack the rigorous criteria for implementation as defined by the Homebuilders® model. (Child Welfare)

Other Home Visiting Programs for At-Risk Mothers and Children – This broad grouping of programs focuses 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. This group of programs also includes a subset that is specifically targeted toward preventing repeat pregnancy and birth in the adolescent years. (General Prevention)

Structured Decision-Making Risk Assessment – The Structured Decision-Making (SDM) model is a system of assessment tools used at various decision points in the child welfare system. Washington State's child welfare system has implemented the SDM risk assessment tool to classify families on their risk of further child maltreatment. This effect size is specific to Washington's implementation of the risk assessment, and should not be interpreted as a statement on the effectiveness of Structured Decision Making as a whole. (Child Welfare)

Subsidized Guardianships (Title IV-E Waivers) – Subsidized Guardianship is a permanent placement alternative that does not require termination of parental rights. (Child Welfare)

Triple P Positive Parenting Program (All Levels) – Triple P – Positive Parenting Program (all levels) 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. (Child Welfare)

Appendix B – Child Welfare System Costs

DCYF Child Placements (indicated cases, child abuse and neglect) -- FY 2012 - FY 2013						
	Total Child Count	Total Placement Days	Total Payments	Average Placement Days	Average Payment per Youth	Average Payment per Day
<i>More Restrictive Settings</i>						
Residential Treatment Center	117	20,522	\$6,017,049	175	\$51,428	\$ 293
Emergency Shelter	295	11,595	\$3,051,168	39	\$10,343	\$ 263
Group Homes	498	61,201	\$15,712,254	123	\$31,551	\$ 257
Private Agency/Specialized Foster Care	1,099	173,715	\$17,863,768	158	\$16,255	\$ 103
Non-Kinship Foster Care	1,791	259,286	\$4,948,858	145	\$2,763	\$ 19
Kinship Foster Care	2,001	324,250	\$5,500,720	162	\$2,749	\$ 17
Semi-Independent Living	85	11,306	\$2,732,588	133	\$32,148	\$ 242
Independent Living	15	2,502	\$286,544	167	\$19,103	\$ 115
<i>Less Restrictive Settings</i>						
Total	5,901	864,377	\$ 56,112,949			
			Weighted Average	146.5	\$ 9,509	\$ 65