Regional Partnership Grants Cross-Site Evaluation and Evaluation-Related Technical Assistance

2012 Regional Partnership Grants to Increase the Well-Being of and to Improve the Permanency Outcomes for Children Affected by Substance Abuse:

Fifth Annual Report to Congress

U.S. Department of Health and Human Services
Administration for Children and Families
Administration on Children, Youth and Families
Children's Bureau

ADMINISTRATION FOR CHILDREN & FAMILIES

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RPG
Regional Partnership Grants and Cross-Site Evaluation

Mathematica

Children's Bureau

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EXECUTIVE SUMMARY

Statistics showing the increasing toll substance abuse is taking on families, children, and health systems across the country have policymakers, service providers, and individuals struggling to find solutions. From 2003 to 2018, the number of people with a substance use disorder (SUD) involving opioids (heroin and prescription pain relievers) rose from about 1.5 to 2.0 million (Substance Abuse and Mental Health Services Administration [SAMHSA], 2019). Furthermore, opioid abuse or dependence during pregnancy increased 127 percent from 1998 to 2011 (Maeda, Bateman, Clancy, Creanga, & Leffert, 2014). When mothers use opioids during pregnancy, babies experience neonatal abstinence syndrome (NAS).

Exposure to substances prenatally puts children at risk of poor health outcomes, including premature birth, asthma, and fetal alcohol syndrome (Hudak, Tan, the Committee on Drugs, the Committee on Fetus and Newborn, 2012; Minnes, Lang, & Singer, 2011; National Academies of Science, Engineering, and Medicine [NASEM], 2016; SAMHSA, 2012). Older children are at risk as well. An estimated 8.7 million children in the United States live with a parent with an SUD (Lipari & Van Horn, 2017). Although not all of these children will experience maltreatment, they are at increased risk for neglect and entering the child welfare system (Dunn et al., 2002; Staton-Tindall, Sprang, Clark, Walker, & Craig, 2013).

A. The Regional Partnership Grant (RPG) Program

Since 2006, Congress has authorized the U.S. Department of Health and Human Services (HHS) to make competitive Regional Partnership Grants (RPG) to support partnerships between child welfare agencies and organizations in SUD treatment and other social service systems to improve the well-being, permanency, and safety outcomes of children who were in, or were at risk of, out-of-home placement as a result of a parent's or caregiver's SUD.

- **First round of grants (RPG1).** The Child and Family Services Improvement Act of 2006 (Pub. L. 109-288) authorized and appropriated $145 million over 5 years. In October 2007, HHS made 2- to 5-year grants to 53 partnerships in 29 states.
- **Second round of grants (RPG2).** The Child and Family Services Improvement and Innovation Act of 2011 (Pub. L. 112-34) reauthorized the RPG program and appropriated $100 million of funding for new (RPG2) projects. In September 2012, HHS awarded new 5-year grants to 17 partnerships in 15 states. HHS also awarded 2-year grants to eight RPG1 partnerships to extend their RPG projects. HHS contracted with Mathematica to design and conduct a national cross-site evaluation reflecting the goals of the legislation and assessing program effectiveness.
- **Third round of grants (RPG3).** In September 2014, HHS awarded another round of 5-year grants to four partnerships in four states.
- **Fourth round of grants (RPG4).** In September 2017, HHS awarded 17 new RPG cooperative agreements in 17 states, 2 of which were with tribal communities.

B. Findings from the national cross-site evaluation of RPG2

The second round of grants, RPG2, has ended. This report presents the findings of the national cross-site evaluation. Each chapter introduction includes a text box similar to Box ES.1 summarizing the outcomes from the component of the cross-site evaluation relevant to the chapter.

Box ES.1. A summary of family outcomes

- Adult drug and alcohol use and severity decreased significantly from program entry to exit. Forty-one percent of adults were classified as high-severity drug or alcohol users at program entry, and only 16 percent were classified as high-severity users at program exit.
- Adult mental health and parenting attitudes improved significantly from program entry to exit. Adults reported significantly fewer symptoms of trauma, depression, and stress after enrolling in RPG, and expressed significantly fewer attitudes about parenting that placed their children at risk of maltreatment.
- Rates of substantiated maltreatment declined significantly after enrollment in the RPG program. More than one-third (36 percent) of children in RPG had an instance of substantiated maltreatment in the year before RPG, and this decreased to only 7 percent of children in the year after RPG enrollment. Data show that this reduction in maltreatment was not only attributable to removals of children from their homes and placement in safer environments but also occurred among children never removed from their homes before or during RPG enrollment.
- Removals from the home were less common in the year after RPG enrollment than in the year before. Twenty-nine percent of children experienced a removal in the year before RPG enrollment, and only 6 percent of children were removed from the home after entering RPG. Reunifications with the family of origin or other permanent placements were also more common in the year after RPG entry than in the year before RPG entry.
- Results for child well-being outcomes were mixed. Some outcomes showed improvement over time, several showed no changes, and one outcome was significantly worse at program exit than at entry.

Partnerships built their collaborations, achieving mixed progress toward service integration.

Most partnerships reported successes in four key areas: (1) improving communication among partner organizations, (2) increasing abilities to collaborate among partner organizations, (3) sharing a common goal within the partnership, and (4) building trust and relationships. Building on this foundation, partnerships enrolled families whose needs they planned to address.

Over the course of their projects, all 17 partnerships attained a shared vision and goals, which is an important objective of RPG. Some partnerships also made progress aligning operational processes such as coordinating across SUD treatment and child welfare agencies to provide cross-agency assessments and joint staff training. Most partnerships did not fully integrate their services, such as referrals or screening, or align timelines for recovery from SUDs and achieving child permanency. The partnerships reporting the most connections had relatively few members, built on existing relationships in place before RPG2, and during the grant period experienced challenges related only to factors under their control, such as intra-organizational operations. The least-connected partnerships were larger, with 18 or more members; were building new

relationships; and ran up against external challenges, such as state or federal policy changes, which the partnerships themselves could not resolve.

Grantees and their partners enrolled a target population that aligned with the intent of the RPG program

RPG broadly targets families in which adults have recognized or potential substance use issues that might put the children in their care at risk for maltreatment and removal from their homes. Each RPG project defined a more specific, local target population of need.

From October 2012 to April 2017, the RPG2 partnerships enrolled 11,416 people in their RPG projects, 55 percent of whom were children. The cross-site evaluation obtained these project enrollment totals from grantees' semiannual progress reports, and used data on the cross-site evaluation sample of 3,772 adults and 4,854 children in 2,887 families to examine the characteristics of families enrolled into the RPG projects.

Grantees and their partners generally succeeded in enrolling a population of children and adults whose needs aligned with the intent of the RPG program. For example, the adult population enrolled in RPG reported substance use frequency and severity similar to a national sample of people in SUD treatment settings. As further evidence of existing substance use issues among RPG adults, 27 percent were enrolled in state-funded SUD treatment before enrolling in RPG. Children in RPG were also at risk. Most children (62 percent) in RPG2 had some involvement in the child welfare system in the year before RPG via a report of maltreatment, removal from the home, or both.

Grantees offered evidence-based programs and practices to families, often targeting the needs of adults in the family

Applicants had wide latitude in designing their RPG project model. In the funding opportunity announcement, HHS emphasized the use of evidence-based or evidence-informed programs and practices (EBPs). In total, grantees offered more than 50 programs and practices with varying levels of evidence of effectiveness. Some grantees offered just one or two EBPs, but many RPG projects aimed to provide multiple EBPs. Despite this, cross-site evaluation data show that most RPG2 families received only one EBP.

The most common types of EBPs grantees offered were: (1) family-strengthening programs, (2) therapy or counseling programs, and (3) SUD treatment programs. Most families who received RPG programming received some sort of SUD treatment intervention either as part of RPG or through participating in other publicly funded treatment while enrolled in RPG. The majority of the EBPs that the grantees offered were intended for adults; few grantees offered EBPs intended for delivery directly to children.

Because of the difficulty of engaging and retaining at-risk families in programs and services, it can be a challenge to deliver the full number and length of services, referred to as *dosage,* recommended by EBP developers (Daro, Boller, & Hart, 2014). On average, families were enrolled in RPG for about 6 months, and received less than the recommended dosage of the EBP(s) in which they were enrolled. The potential effect of a lower-than-recommended dosage is unclear, because research in the field of early childhood interventions and other social services

has not yet demonstrated how and in what ways dosage is important to the achievement of targeted outcomes (Wasik, Mattera, Lloyd, & Boller, 2013).

Many adult and child outcomes improved significantly following entry into RPG

The overriding purpose of RPG is to improve child safety, permanency, and well-being in families with adult substance use problems. By comparing measures of child and family outcomes at baseline (RPG enrollment) and follow-up (RPG exit), the cross-site evaluation addressed the remaining evaluation question: What were the outcomes of adults and children who received services from the RPG projects? Adult outcomes, and child safety and permanency outcomes, all improved. However, results for child well-being outcomes were mixed. Some outcomes showed improvement over time, several showed no changes, and one outcome was significantly worse at program exit than at entry. These mixed outcomes might be because most RPG projects did not provide services directly to children, making it less likely they would improve child well-being. It could also be that the child well-being outcomes will improve over time as a result of the positive adult, permanency, and safety outcomes, even if they had not improved immediately after program completion.

Opioid users at program entry made significant improvements but tended to have greater needs than other, non-opioid using adults in RPG.

Compared with all other adults followed for the RPG2 cross-site evaluation, opioid users:

- Were more frequent users of other drugs. More than one-third (36 percent) of opioid users versus 23 percent of all adults followed for the cross-site evaluation reported also using cannabis or marijuana, 26 percent of opioid users versus 13 percent of all adults reported using amphetamines, and 27 percent of opioid users versus 9 percent of all adults reported using sedatives.
- Had greater mental health problems. Opioid users reported more depressive symptoms (49 percent of opioid users versus 36 percent of all adults were severely depressed) and had about 17 percent more trauma symptoms than the sample of all RPG adults.
- Expressed more high-risk parenting attitudes that placed children at risk for maltreatment. Almost one-quarter (23 percent) of opioid users versus 20 percent of all RPG adults had parenting attitudes that placed their children at risk of maltreatment.

Among all drug types that the adults in RPG reported using, the prevalence of prescription opioid use dropped the most from RPG entry to exit. About 16 percent of adults were recent prescription opioid users at program entry, and only 4 percent of adults indicated at program exit that they were recent prescription opioid users.

- Among these opioid users, the prevalence of prescription opioid use dropped from 79 percent at program entry to 14 percent at program exit. The prevalence of heroin use

dropped from 20 percent at program entry to 8 percent at program exit. Methadone use decreased from 21 percent at program entry to 11 percent at program exit.[1]

- There were large improvements in prevalence of recent use of other commonly used drugs as well. Sedative use prevalence dropped from 29 percent at program entry to 4 percent at program exit, amphetamine use prevalence dropped from 36 to 14 percent, and cannabis use dropped from 36 to 16 percent.

One notable difference was in terms of depression levels. More opioid users had severe depressive symptoms at program entry (48 percent) than did all RPG adults. This improved significantly at program exit: only 28 percent of those originally classified as opioid users continued to be classified at program exit as having severe depressive symptoms.

In short, the cross-site evaluation showed that the second cohort of RPG grantees achieved key goals of the program as outlined in the authorizing legislation.

[1] Methadone is a synthetic opiate primarily used in the detoxification and maintenance of patients who are dependent on opiates—particularly heroin (Anderson and Kearney, 2000). It may also be prescribed to treat pain, and is subject to misuse and abuse (National Institute on Drug Abuse, 2018). The data collection instrument used for the cross-site evaluation did not ask respondents who reported using methadone whether it was as part of treatment.

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I. INTRODUCTION

The statistics concerning the increasing toll substance abuse is taking on families, children, and health systems across the country have policymakers, service providers, and individuals struggling to find solutions. From 2003 to 2018, the number of people with substance use disorders involving opioids (heroin and prescription pain relievers) rose from about 1.5 million to 2.0 million (Substance Abuse and Mental Health Services Administration [SAMHSA], 2019). Furthermore, opioid abuse or dependence during pregnancy increased 127 percent from 1998 to 2011 (Maeda, Bateman, Clancy, Creanga, & Leffert, 2014). When mothers use opioids during pregnancy, babies experience neonatal abstinence syndrome (NAS). From 2000 to 2009, the number of mothers using opioids at the time of delivery went from about 21,000 to 23,000, the equivalent of one baby being born with NAS every 25 minutes (Patrick, Davis, Lehman, & Cooper, 2015). The alarming rise of opioid use has led to a large federal effort, the Comprehensive Addiction and Recovery Act, which includes increased funding for evidence-based opioid and heroin treatment and intervention programs (Public Law [Pub. L.] 114-198). Although opioid abuse has rightfully gained national attention, the number of parents using tobacco and abusing alcohol is substantially higher than the number addicted to opioids.

Exposure to drugs and alcohol prenatally puts children at risk of poor health outcomes, including premature birth, asthma, and fetal alcohol syndrome (Hudak, Tan, Committee on Drugs, & Committee on Fetus and Newborn, 2012; Minnes, Lang, & Singer, 2011; National Academies of Science, Engineering, and Medicine [NASEM], 2016; SAMHSA, 2012). Older children are at risk as well. Although not all of the estimated 2.1 million children living with a parent who abuses drugs or alcohol will experience maltreatment, they are at increased risk for neglect and entering the child welfare system. Because substance abuse can impair families' abilities to meet the physical and emotional needs of their children, it is often reported as the primary reason for a child's removal from the home (Child Trends, 2017; NASEM, 2016). In fact, nearly one-third of children entering foster care do so in part because of a parent's or caregiver's substance abuse (Child Trends, 2017).

According to the Adoption and Foster Care Analysis and Reporting System (AFCARS) report, the number of children in foster care increased from 427,000 in fiscal year (FY) 2015 to 437,000 in FY 2016. Parental drug use continues to be one of the most prominent reasons for children entering foster care. Adoption and Foster Care Reporting System data cite parental drug use as the primary reason for children entering care in 34 percent of FY 2016 cases, up from 32 percent in FY 2015 (Children's Bureau, 2017).

A. The Regional Partnership Grant (RPG) Program

Concerns about the effect of parental substance misuse on child welfare are not new. Since 2006, Congress has authorized the U.S. Department of Health and Human Services (HHS) to make competitive Regional Partnership Grants (RPG) to support partnerships between child welfare agencies and organizations in substance use disorder (SUD) treatment and other social service systems to improve the well-being, permanency, and safety outcomes of children who were in, or at risk of, out-of-home placement as a result of a parent's or caregiver's SUD.

- **First round of grants (RPG1).** The Child and Family Services Improvement Act of 2006 (Pub. L. 109-288) authorized and appropriated $145 million over 5 years for the first round of RPG funding. HHS made 2- to 5-year grants to 53 partnerships in 29 states. To monitor program outcomes as required in the legislation, HHS established performance indicators for the first round of grants that reflected the broad goals of the legislation and aligned with the diverse activities of the 53 regional partnerships. Each partnership was led by an organization that received the grant and led the partnership and its project and reported on the performance indicators that were most relevant to its specific partnership goals and target populations. To support grantees in achieving their program and performance goals, HHS provided technical assistance (TA) to grantees through a federal contract. These grants have ended and are described in four earlier Reports to Congress (HHS, 2012, 2013, 2014a, 2017a).
- **Second round of grants (RPG2).** The Child and Family Services Improvement and Innovation Act of 2011 (Pub. L. 112-34) reauthorized the RPG program and appropriated $100 million of funding for new grants.[2] In September 2012, HHS awarded new grants to 17 organizations in 15 states (Table I.1).[3] HHS contracted with Mathematica to design and conduct a national cross-site evaluation reflecting the goals of the legislation and assessing program effectiveness. Mathematica also provided TA to support grantees' submission of common data elements to the cross-site evaluation and to help grantees conduct their own required local evaluations. As part of its contract to manage the National Center for Substance Abuse and Child Welfare (NCSACW), supported through an intra-agency agreement between SAMHSA and the Administration on Children, Youth and Families, the Center for Children and Family Futures provided program-related TA to the grantees. In 2012, HHS also awarded 2-year grants to eight RPG1 partnerships to extend their RPG projects (Administration for Children and Families [ACF], 2012b). The cross-site evaluation does not include these extension grants.
- **Third round of grants (RPG3).** In September 2014, HHS awarded another round of 5-year grants to four organizations in four states (Table I.1). As in RPG2, these new grantees also participate in the cross-site evaluation and conduct local evaluations. They receive similar evaluation- and program-related TA.
- **Fourth round of grants (RPG4).** In October 2016, HHS posted two new grant forecasts under RPG: (1) Regional Partnership Grants to Increase the Well-Being of, and to Improve the Permanency Outcomes for, Children Affected by Substance Abuse (ACF, 2017a); and (2) Regional Partnership Grants to Increase the Well-Being of, and to Improve the Permanency Outcomes for, Children Affected by Substance Abuse in American Indian/Alaska Native Communities (ACF, 2017b). Funding opportunity announcements were published May 19, 2017, with applications for both solicitations due July 10, 2017. In September 2017, HHS awarded 17 new RPG cooperative agreements in 17 states, 2 of which were with tribal communities.

[2] HHS also offered existing grantees new grants of $500,000 per year for up to 2 years (ACF, 2012b) to extend their programs. This report does not discuss those grants.

[3] The number of grantees was larger under the first round of RPG funding because total program funding for that round was significantly higher. Program funding was $145 million in 2006 and $100 million in 2012.

RPG2 grants, which are the subject of this report, ranged from $500,000 to $1 million in federal funds annually, and required grantee matching funds that increased from 15 percent to 25 percent of the federal grant amount over the 5-year grant period. Of the 17 grantees, 10 had received RPG1 funding; the other 7 were new to the RPG program. Grantees were mainly state agencies or local service providers:

- Six grantees were state agencies. Four of these were state child welfare agencies or agencies responsible for administering the Substance Abuse Prevention and Treatment Block Grant (hereafter referred to as "state substance use services agencies"). In one state, the state child welfare and substance use services agency jointly received the grant. The sixth state-level grantee was a state judicial branch.
- One grantee was a county child welfare agency.
- Eight grantees were local organizations that provided services to individuals and families. Two were SUD treatment providers, three were health or mental health service providers, and three provided child welfare or other child and family services.
- One grantee was a hospital that provided SUD treatment and related services.
- One grantee was a university.

The intent of the grants was to improve collaboration between the SUD treatment and child welfare systems. To do so, the grants required partnerships between these two systems and other related agencies. Partnerships took different approaches to providing services; some offered a focused suite of services to all participants; others offered a range of customized services depending on each family's needs. Services provided by the partnerships included case management, residential and outpatient SUD treatment, parenting and/or family-strengthening programs, treatment for trauma or mental health problems, family drug treatment courts, counseling and peer support groups, health care, housing support, employment services, and child development services.

Table I.1. Grantees and the geographic areas and congressional districts they served

Grantee	Geographic area	Congressional district
Center Point, Inc.	Located in San Rafael, California, and serving Alameda, Contra Costa, Marin, San Francisco, and Sonoma counties	CA-2, 5, 11,12, 13
Georgia State University Research Foundation, Inc.	Located in and serving DeKalb County and Atlanta, Georgia	GA-4, 5, 6
Judicial Branch, State of Iowa	Located in Des Moines, Iowa, and serving Wapello County	IA-2, 3
Northwest Iowa Mental Health/Seasons Center	Located in Spencer, Iowa, and serving Buena Vista, Clay, Dickinson, Emmet, Lyon, O'Brien, Osceola, Palo Alto, and Sioux counties	IA-4
Children's Research Triangle	Located in Chicago, Illinois, and serving the tri-county region of Cook, Will, and Kankakee counties	IL-1, 2, 3, 7
Kentucky Department for Community Based Services	Located in Frankfort, Kentucky, and serving Daviess County	KY-2
Commonwealth of Massachusetts	Located in Boston, Massachusetts, and serving Fall River and New Bedford	MA-4, 8, 9
Families and Children Together	Located in Bangor, Maine, and serving Penobscot and Piscataquis counties	ME-2
Preferred Family Healthcare	Located in Springfield, Missouri, and serving Greene, Barry, Lawrence, and Stone counties	MO-7
The Center for Children and Families	Located in Billings, Montana, and serving all Montana counties	MT-1
State of Nevada Division of Child and Family Services	Located in Carson City (agency) and Clark County (grant site), Nevada, and serving Las Vegas	NV-1, 2
Summit County Children Services	Located in Akron, Ohio, and serving Summit County	OH-11, 13, 14, 16
Oklahoma Department of Mental Health and Substance Abuse Services	Located in Oklahoma City, Oklahoma, and serving all Oklahoma counties	OK-1, 2, 3, 4, 5
Health Federation of Philadelphia, Inc.	Located in and serving Philadelphia, Pennsylvania	PA-1, 2
Helen Ross McNabb Center	Located in Knoxville, Tennessee, and serving three Tennessee Department of Children's Services regional catchment areas: Knox, East Tennessee, and Smoky Mountain	TN-1, 2, 3
Tennessee Department of Mental Health and Substance Abuse Services	Located in Nashville, Tennessee, and serving Bedford, Cannon, Coffee, Davidson, Marshall, Maury, Rutherford, and Warren counties	TN-4, 5, 6
Sentara RMH Community Health	Located in Harrisonburg, Virginia, and serving Harrisonburg, Staunton, and Waynesboro and Bath, Highland, Page, Rockingham, and Shenandoah counties	VA-6

From October 2012 to April 2017, the RPG2 partnerships enrolled 11,416 adults and children in their RPG projects (Table I.2). Total enrollment in RPG2 projects ranged from 83 people (Georgia State University Research Foundation) to 2,060 people (Helen Ross McNabb Center, Tennessee). All partnerships enrolled adults and children, but in different proportions depending on the focus and settings they chose for their RPG projects. To illustrate, by 2017 just 13 percent of the Georgia State University Research Foundation's enrollees were children, whereas 66 percent of enrollees with the Center for Children and Families, Montana, were children.

Table I.2. Cumulative enrollment in RPG2, by grantee

Grantee and state	Reported in April 2017	
	Total adults and children enrolled	Percentage of total enrollment who are children
Center Point, Inc., California	238	53
Georgia State University Research Foundation	83	13
Children's Research Triangle, Illinois	285	82
Judicial Branch, State of Iowa	501	60
Northwest Iowa Mental Health Center/Seasons Center	207	49
Kentucky Department for Community Based Services	311	57
Families and Children Together, Maine	929	53
Commonwealth of Massachusetts	685	62
Preferred Family Healthcare, Missouri	1,165	63
The Center for Children and Families, Montana	236	66
State of Nevada Division of Child and Family Services	261	45
Summit County Children Services, Ohio	1,419	53
Oklahoma Department of Mental Health and Substance Abuse Services	1,042	63
Health Federation of Philadelphia, Inc.	199	46
Helen Ross McNabb Center, Tennessee	2,060	62
Tennessee Department of Mental Health and Substance Abuse Services	1,003	54
Sentara RMH Community Health (formerly Rockingham Memorial Hospital), Virginia	776	55
Total	**11,416**	**55**

Note: The four grantees in the new RPG3 cohort had enrolled a total of 749 adults and children by April 2017. These grantees are not the focus of this report.

Source: April 2017 RPG semiannual progress reports filed by grantees.

B. Reports to Congress

The RPG cross-site evaluation provides legislatively mandated performance measurement and assesses the extent to which the RPG2 and RPG3 grants have successfully addressed the needs of families with SUD that come to the attention of the child welfare system. It comprises studies of implementation and partnerships, outcomes, and impacts. Each year, HHS develops an annual Report to Congress to describe the activities of the ongoing partnerships and summarize evaluation findings to date (HHS, 2014b, 2015, 2016a). A summary of findings from the prior reports to Congress follows.

The first Report to Congress (HHS, 2014b) described how HHS made the grants to the 17 partnerships funded in 2012, identified the grantees, and discussed their planned projects and first-year milestones achieved. It showed that:

- **Partnerships included required members.** Each partnership consisted of at least four and as many as 29 partner agencies, including child welfare agencies responsible for administering the state's plan under title IV-B or IV-E of the Social Security Act.
- **RPG projects featured evidence-based and evidence-informed programs and practices (EBPs).** Of 51 distinct program and practice models proposed by all RPGs combined, 37 had been reviewed by at least one of five evidence sources; seven others had been evaluated at least once, and of the seven remaining models, four were described by their developers as based on research or evidence.
- **HHS successfully established a TA system.** HHS established an infrastructure to provide ongoing program- and evaluation-related TA to grantees through the NCSACW and Mathematica, respectively.[4] Together, in the first year they received and responded to more than 100 requests for TA.
- **Most grantees' initial evaluation designs met HHS goals for levels of evidence.** HHS reviewed the rigor of the designs grantees proposed to evaluate their projects. The review concluded that, if well implemented, 12 local evaluations could offer strongest, promising, or limited evidence on program effectiveness. The other seven could not provide evidence of effectiveness but did offer descriptive information, such as change over time.

The second Report to Congress (HHS, 2015) described the progress in the early implementation of the RPG2 projects. This report found:

- **By April 2014, 16 of the 17 grantees had begun enrollment.** The number enrolled at each site by then ranged from 35 to 700, for a total of 3,365 participants, 65 percent of them children. Nearly all grantees had obtained institutional review board approval for their local evaluations, and 13 had begun enrolling families into the national cross-site evaluation.
- **Not only their own efforts but also external factors affected partnerships' progress implementing their RPG projects.** Fourteen grantees in 12 states described contextual factors that inhibited or spurred RPG implementation. The main obstacles related to (1) child welfare system issues (11 grantees); (2) substance use, or policies affecting SUD treatment or individuals with SUDs (7 grantees); and (3) federal or state economic and fiscal conditions (7 grantees).
- **Grantees actively requested TA, including help to obtain needed administrative data.** Grantees submitted 77 requests for TA and made another 69 inquiries through an RPG help desk operated by Mathematica. Numerous grantees asked for assistance obtaining administrative child welfare and SUD treatment data they needed for their own evaluations and to submit to the cross-site evaluation. Although in most instances their requests were well received, as of March 2014, five RPG projects still did not have agreements in place to obtain child welfare data, and nine did not have agreements for obtaining SUD treatment data.

[4] The Center for Children and Family Futures, Inc., managed NCSACW, which is funded by the Administration for Children, Youth, and Families and SAMHSA.

- **HHS launched the cross-site evaluation.** HHS approved the final design of the cross-site evaluation, received Office of Management and Budget (OMB) clearance for data collection, and completed development of two web-based systems for grantees to submit enrollment, services, baseline, and outcome data.

The third Report to Congress (HHS, 2016a) updated the status of RPG projects' implementation and provided an early description of the families served by the RPG2 projects and the services they received. It also introduced the new cohort of RPG3 grantees. Findings included:

- **Implementation progressed despite challenges.** During their third year of implementation, some projects faced challenges related to state-level policy or fiscal changes, staff turnover in child welfare organizations, and difficulty meeting enrollment targets. However, projects also demonstrated creativity, innovation, and the use of best practices to meet such challenges.
- **As intended, RPG2 projects served at-risk children and adults, and had engaged them in a subset of planned EBPs.** By April 2015, the 17 RPG2 projects had enrolled a total of 5,517 participants, 59 percent of them children. As intended, RPG2 projects enrolled some children with documented maltreatment or other previous experience with the child welfare system. Of the 567 children in the sample for whom records were received, 31 percent had one or more substantiated episodes of maltreatment in the year before enrollment in RPG. At enrollment, 37 percent of the RPG2 adults in the cross-site evaluation sample exhibited high severity of substance use (either drug or alcohol use or both) in the past 30 days. At least 20 percent of adult RPG2 participants had been in one or more publicly funded SUD treatment programs during the year before their enrollment in RPG. In total, RPG2 grantees had enrolled participants in 19 different EBPs to date.

HHS required partnerships to propose specific, well-defined programs that were *evidence based* or *evidence informed*. Evidence-based programs or practices are those that evaluation research has shown to be effective. Evidence-informed programs or practices use the best available research and practice knowledge to guide program design and implementation, but their effectiveness has not yet been documented. Because of the central importance of the EBPs to RPG effectiveness, the cross-site evaluation examined the quality and context of EBP implementation. The fourth Report to Congress (HHS, 2018) described these analyses. That report found:

- **Quality of implementation.** Providers of the subset of EBPs examined in detail for the cross-site evaluation had key factors that bring about quality EBP implementation fully or partially in place. These factors were in three categories: staff competence, organizational supports, and leadership. Implementation research suggests that having in place specific structures, processes, and resources in each category increases the probability that an EBP will achieve its intended outcomes.
    - **Staff competence.** The goal of staff selection and hiring is to identify staff equipped to implement an EBP in the way intended by its developers and who possess the skills to build rapport with participants. Both help bring about the intended outcomes of an EBP consistently. Frontline staff (those who worked directly with RPG participants) and their supervisors had college, graduate, or professional degrees and from 2 to 10 or more

years of experience. They had received initial but not ongoing training in the delivery of their EBP(s) and felt they would have benefitted from additional training on tailoring content, implementing SUD components, cultural diversity, and dealing with crisis situations. Staff frequently interacted with their supervisors and received coaching on how to deliver EBPs.

- **Organizational support**. This refers to the structures and systems in place for staff to use while delivering EBPs. Some staff said implementation teams had been formed, but few reported having written plans to guide implementation of their EBPs. Though written plans for the overall RPG projects were often in place, frontline staff were unaware of written plans to guide EBP implementation. Data systems were in place to help track clients' needs and agencies' operations, although the type of system available differed for frontline staff and leadership. Staff had appropriate education levels, professional or technical credentials, and cultural competency and a strong commitment to the organization's mission. Forty percent of staff expressed concern that funding levels were inadequate, and their project's sustainability after RPG was therefore in question.
- **Leadership.** Leadership as examined for RPG refers to a core group of individuals who guide the staff providing services and identify and who solve everyday and more complex problems that arise when delivering EBPs. Frontline staff reported that they experienced consistent communication with their managers and supervisors, who were also easily accessible to them. However, staff reported they did not have the same open communication with the leadership of their organizations or the overall RPG project.

- **Context of implementation.**
  - **RPG projects implemented by the 17 RPG2 grantees varied in their structure and focus.** Grantees embedded some projects in SUD treatment agencies, others in community-based service agencies, and some within family courts or other settings. Across the RPG2 grantees, the number of EBPs offered ranged from one to 13. Most grantees selected their specific RPG EBPs because they or their partners already had experience delivering them, rather than based on an assessment of the fit for their chosen RPG target populations.
  - **Limited referrals to RPG from child welfare agencies, policy changes in the child welfare system, and difficulties enrolling and retaining participants challenged RPG2 projects.** The most common challenge to implementing their projects, cited by half of RPG2 grantees, was limited referrals from child welfare due to staffing constraints, staff turnover, or staff concerns about the long-term sustainability of RPG services.
  - **The RPG3 grantees, funded in 2014, were enrolling populations in need of a range of supports for both children and adults to improve children's safety, permanency, and well-being.** More than half of the children RPG3 grantees included in the cross-site evaluation had experienced removals in the year before RPG programming, and many had substantiated or unsubstantiated records of abuse or neglect in the same year. Adults in the sample experienced high levels of financial and emotional strain. Most biological parents were single and had annual incomes below $10,000, and about half reported being unemployed. RPG3 adults expressed more severe symptoms of depression and

parenting stress, on average, than nationally representative samples, and many also expressed some attitudes about parenting that placed their children at risk for future maltreatment. RPG3 adults had higher levels of substance use on average than in the general population. Many reported that they had recently used substances, and many had been in a publicly funded treatment program for substance use in the year before enrolling in RPG.

C. The current report

This is the final Report to Congress on the RPG2 cohort of partnerships, which were funded in 2012. As such, it fulfills a mandate in the reauthorizing legislation for HHS to publish evaluation results to describe: (1) the programs and activities conducted and services provided under the grants; (2) the extent to which grantees achieved goals set forth in their grant applications; and (3) whether RPG addressed the needs of families with substance abuse problems who come to the attention of the child welfare system, and improved child and family outcomes. To fulfill this mandate, the report addresses four research questions using data from the cross-site evaluation (Strong, Avelar, Francis, Angus, & Esposito, 2013):

1. Who was involved in each RPG project and how did the partners work together?
2. Who were the target populations of the RPG projects, and did RPG projects reach their intended target populations? What were the characteristics of enrolled participants?
3. Which EBPs did the RPG projects select, and how well did they align with RPG projects' target populations and goals? How were the EBPs implemented and what services were provided?
4. What were the outcomes of children and adults who enrolled in the RPG projects?

Each research question is the topic of a report chapter, organized as follows:

- Chapter II uses data from the partnership study of the cross-site evaluation to describe the RPG partnerships and their work together.
- Chapter III uses data grantees entered to an enrollment and services reporting system to describe the adults and children enrolled in RPG.
- Chapter IV discusses the EBPs that the partnerships planned to offer as part of their RPG projects, those offered, and any differences compared with original intentions. It then uses enrollment and services data, including detailed data on 10 EBPs selected for in-depth examination, to describe RPG-related programs and services delivered to participants, including the dosage and duration of services.
- Chapter V analyzes differences in child well-being, safety, and permanency and adult substance use and treatment between baseline and follow-up data collection. Measures from baseline data collected at enrollment show how participants were faring before entering RPG. Grantees then collected the same data at a later, follow-up point, and submitted all data to the cross-site evaluation via a web-based data collection system for comparison over time.
- Chapter VI summarizes the report and examines the performance of the RPG projects.

Each chapter introduction includes a text box summarizing the outcomes from the component of the cross-site evaluation relevant to the chapter.

D. Limitations

The cross-site evaluation sought to document grantees' activities and performance, to study the partnerships and the implementation of EBPs by grantees and their partners, and to examine outcomes. Findings from the study reflect several limitations.

The partnership, implementation, and outcome studies were all descriptive in nature, not experimental. Experimental designs such as randomized controlled trials or quasi-experimental designs can attribute program outcomes to the program being studied. These types of designs were not feasible for the RPG cross-site evaluation due to factors such as the very different program models used by the 17 partnerships and the difficulty of finding suitable comparison sites (for evaluating the partnerships) or groups (for evaluating EBP implementation and outcomes). HHS places a high value on experimental designs and continues to seek opportunities to include a subset of RPG grantees in a cross-site experimental evaluation.

The cross-site evaluation focused on implementing EBPs; it does not examine all services the partnerships provided. HHS required partnerships to propose specific, well-defined programs that were evidence based or evidence informed. Therefore a high priority for the cross-site evaluation was to examine enrollment into services and content provided as part of the identifiable EBPs. The cross-site evaluation collected data on 50 EBPs across all partnerships and collected more detailed data on 10 selected, focal EBPs to examine in depth. To ensure the data collection burden on grantees was not excessive, the cross-site evaluation did not collect similar data on RPG services, such as housing, transportation, child care, or use of navigators, recovery coaches, or peer mentors provided to participants.

Sample sizes were small for some outcome measures. Along with providing detailed data on EBP enrollment and participation, grantees collected data from adults participating in RPG when they enrolled (baseline) and exited (follow-up). The cross-site evaluation used these data, along with administrative child welfare and SUD treatment records, to estimate changes over time in RPG-targeted outcomes. The analysis included only participants who provided both baseline and follow-up data. In some cases, particularly for measures administered only to parents with children in a certain age group, samples were small. When samples were small, data were weighted and sensitivity analyses were performed to ensure data were as representative as possible of all 17 RPG2 grantees. Importantly, sample sizes for measuring child safety and permanency, and participation in public SUD treatment, were ample and did not require weighting. These measures were constructed from administrative data sources available for virtually all RPG participants.

II. BUILDING INTERAGENCY COLLABORATION AND PARTNERSHIPS TO BETTER SERVE FAMILIES

Collaboration is the process by which individual organizations come together to undertake a joint initiative and work toward achieving common goals (Blakey, 2014). The need for cross-system collaboration to serve families potentially involved with child welfare and SUD treatment systems motivated Congress to create the RPG program in 2006. A major aim of RPG as outlined in the 2012 funding opportunity announcement is fostering "interagency collaboration and the integration of programs, activities, and services" (ACF, 2012a). Interagency collaboration, especially communication and coordination between agencies, is a key feature of partnerships able to implement EBPs well (Durlak & DuPre, 2008).

Collaboration matters for RPG because a successful partnership among child welfare, SUD treatment providers, and the courts should improve the efficiency with which providers can meet the needs of families with multisystem involvement and promotes positive outcomes for children and families (Green, Rockhill, & Burrus, 2008; McAlpine, Marshall, & Doran, 2001; Semidei, Radel, & Nolan, 2001; Smith & Mogro-Wilson, 2008). Collaboration spans a continuum ranging from shared goals and communication to basic exchanges of resources, such as referrals between agencies, to more substantial integration of services over time. The literature suggests partnerships make strides in developing their collaborations, moving from basic exchanges toward more service integration. However, they are likely to do so at differing paces because achieving seamless, integrated service collaborations is widely regarded as difficult (Blakey, 2014; Byles, 1985; Coates, 2017; Green et al., 2008).

Using data from a survey of partners and qualitative data from site visit interviews and semiannual progress reports submitted by grantees over the course of the grant, this chapter examines collaboration within the RPG partnerships, addressing two cross-site evaluation research questions (Strong et al., 2014):

1. Who was involved in each RPG project?
2. How did the partners work together?

This chapter describes the extent to which RPG partnerships developed selected elements along the continuum of collaboration necessary to achieve positive outcomes for children and parents (Blakey, 2014). Over time, the goal is for RPG partners, such as child welfare and SUD treatment providers, to work jointly on common problems they face, collaborate to address those issues, and grow more interdependent as a result (Smith & Mogro-Wilson, 2008; Van de Ven & Ferry, 1980). The chapter starts by describing the RPG partnerships, including who was involved in each partnership at full implementation (Section A).[5] It then provides a framework for understanding the structure of RPG partnerships and the elements of collaboration in place (Section B). Section C examines partnerships' progress toward interagency collaboration and

[5] The term *full implementation* refers to the point at which the program becomes fully operational, with key staff in place, full participant caseloads, and the program is integrated into the normal routine of the organization. Though grantees reached full implementation at different times, the partner survey and site visits by design were conducted when all programs had reached full implementation, during Year 3 of the grant period.

the shared characteristics that make for highly connected partnerships, using data from the survey of RPG partners. Using qualitative data, Sections D and E describe the successes and challenges reported by partnerships, as a means to situate the quantitative findings from the survey data.

Box II.1. A summary of key findings about RPG partnerships

- RPG partnerships included an average of 12 partner organizations with a range of 4–24 partner organizations. Child welfare agencies and SUD treatment providers comprised most partnerships, with support from mental health providers, courts, or government. Most partners donated in-kind resources to the partnership, such as staff time or office space.
- Partnerships achieved mixed progress toward collaboration. All 17 partnerships attained a shared vision and goals for their RPG partnership. Some partnerships made progress aligning operational processes such as coordinating across SUD treatment and child welfare agencies to provide cross-agency assessments. However, most partnerships did not integrate their services, such as referrals or screening, or align timelines for recovery from SUDs and child permanency.
- The most connected partnerships, as measured for the cross-site evaluation, had relatively few members, built on existing relationships in place before RPG2, and experienced only internal challenges related to factors under their control, such as intra-organizational operations. Conversely, the least connected partnerships were very large, with 18 or more members; were building new relationships; and faced external challenges, such as state or federal policy changes, that the partnerships themselves could not resolve.
- Most partnerships reported successes in four key areas: (1) improving communication between partner organizations, (2) increasing abilities to collaborate between partner organizations, (3) sharing a common goal within the partnership, and (4) building trust and relationships.

A. Characteristics of partnerships

To qualify for RPG funding, each RPG applicant had to include in its partnership the state child welfare agency responsible for administering the state's plan under title IV-B or IV-E of the Social Security Act. In addition, partnerships could be of any size but were to include at least one of the following parties:

- A state substance abuse agency
- An Indian tribe or tribal consortium
- Nonprofit or private child welfare service providers
- Community health service providers
- Community mental health providers
- Local law enforcement agencies
- Judges and court personnel
- Juvenile justice officials
- School personnel
- Tribal child welfare agencies, or consortia of such agencies
- Other child and family service agencies or entities

All 17 of the funded RPG projects met these criteria. HHS tracked the number of partners and any changes or additions, along with other information about each funded partnership, through semiannual progress reports. Grantees filed reports every 6 months from April 2013 through April 2017. The cross-site evaluation used portions of the reports to describe changes in the partnerships (discussed here) and the context in which partnerships operated (discussed in Section D) as well as to corroborate thematic findings from other data sources.

1. Number of partners

RPG projects had an average of 12 partner organizations, including the organization that received the RPG grant (the grantee). Partnerships ranged in size from 4 to 24 organizations. Over the course of the grant period, some grantees added or removed partners. Table II.1 shows the variation in the number of partners by grantee and the change in the number of partners, from the start of the grant period to full program implementation, about 3 years later. Seven partnerships decreased in size during that period, eight partnerships increased, and two remained the same. Most grantees dropped or added fewer than four partners over that period. Only two grantees dropped or added six or more partners.

Table II.1. Change in number of RPG partners from March 2013 to April 2015

Grantee	Number of partners at start of grant	Number of partners at full program implementation	Change in size
Center Point, Inc., California	23[a]	8	-15
Families and Children Together, Maine	29[a]	24	-4
Commonwealth of Massachusetts	26[a]	23	-3
State of Nevada Division of Child and Family Services	23[a]	20	-3
Summit County Children Services, Ohio	9	7	-2
Oklahoma Department of Mental Health and Substance Abuse Services	7	5	-2
Children's Research Triangle, Illinois	5	4	-1
Sentara RMH Community Health, Virginia	11	11	0
Kentucky Department for Community Based Services	7	7	0
Georgia State University Research Foundation	7	8	+1
The Center for Children and Families, Montana	11	12	+1
Northwest Iowa Mental Health Center/Seasons Center	5	7	+2
Health Federation of Philadelphia, Inc., Pennsylvania	4	7	+3
Tennessee Department of Mental Health and Substance Abuse Services	6	9	+3
Helen Ross McNabb Center, Tennessee	14	18	+4
Judicial Branch, State of Iowa	10	14	+4
Alternative Opportunities, Inc., Missouri	18	24	+6

[a] Several projects proposed a large number of partners for various reasons. Maine expected to enroll participants from many referral sources. Massachusetts provided RPG services across the state, so it included mental and behavioral health services and SUD treatment providers from many locations. California's partners included advisors in addition to partners that played operational roles, such as providing referrals. Nevada offered a wide range of services, including financial assistance for pregnant and parenting participants, financial assistance for childcare costs, a developmental play gym for low-income families, and adult education and Tests of General Educational Development preparation.

Sources: Grantees' semiannual progress reports for September 2012 to March 2013 and RPG grant applications as reported in the first Report to Congress and the partner survey conducted in spring 2015.

2. Types of organizations involved in the partnerships

To examine the membership, structure, and qualities of each RPG partnership, during spring 2015, the cross-site evaluation surveyed one representative from each of the 17 grantee organizations and one representative from each of the grantee's partner organizations (see Appendix A for the partnership study survey instrument). The survey asked about characteristics of the partnership, such as the types of organizations in the partnership and what resources partners shared for RPG, how well grantees and their partners worked together, and communication and service coordination among partners.

Families served by RPG faced co-occurring issues that required attention from multiple systems and service providers (Altshuler, 2005; Connell-Carrick, 2007; Drabble, 2011). About 40 percent of grantee agencies were from SUD treatment fields and child welfare agencies. The other grantees included organizations such as mental health service providers, courts, corrections, judicial agencies, or departments in state or local government.

The RPG grantees engaged diverse organizations in their partnerships to widen the pool of resources available to children and families or to sponsor or evaluate their projects. Almost one-third (32 percent) of partners of the grantee organizations identified themselves in the survey as SUD treatment providers or child welfare providers. However, many other types of organizations were also represented. For example, 10 percent of RPG partner organizations were mental health service providers; 12 percent were courts, corrections, or judicial agencies; 11 percent were from departments in state or local government; and 8 percent were research organizations.

3. Shared resources

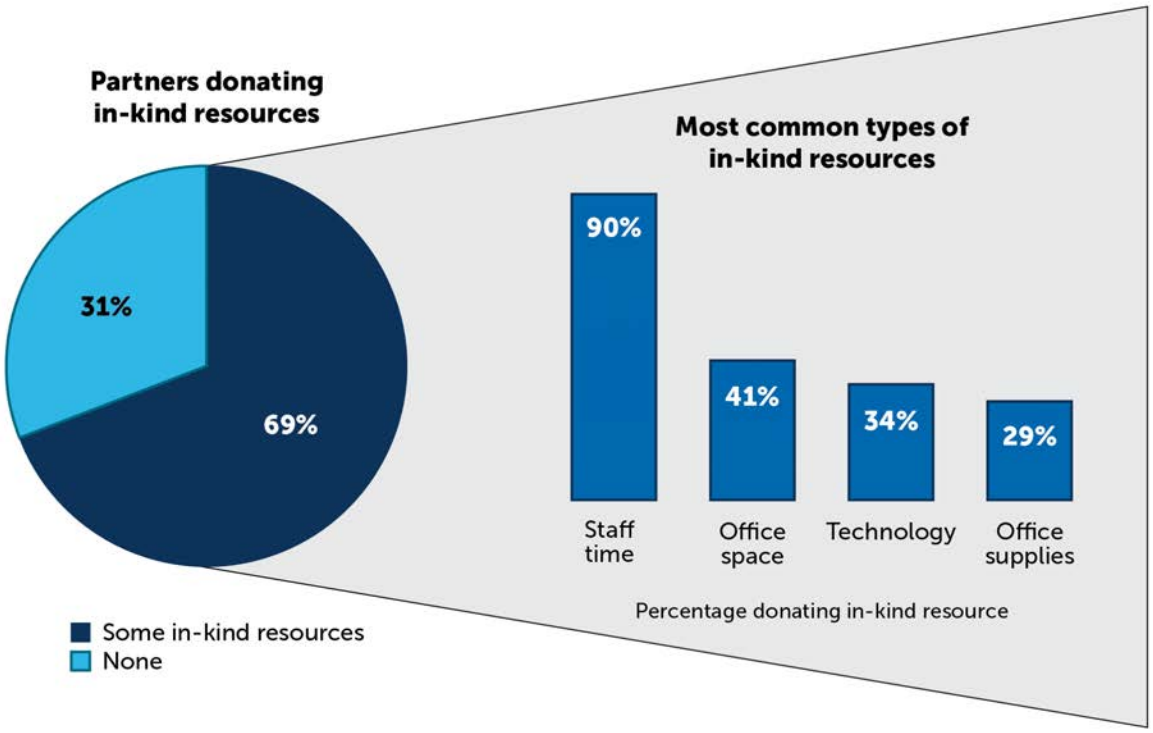
Advancing collaborations often involves sharing resources, such as blending funding or making in-kind investments in the partnership (Drabble, 2011). The partner survey asked about the types of monetary and nonmonetary resources RPG partners shared. Among the partner organizations providing information on this topic,[6] about 30 percent reported receiving some funding for the RPG program from the grantee organization in the past fiscal year. On average, each partner that reported getting a share of RPG grant funds received about $100,000, with actual amounts ranging from $21,000 to $260,000.[7]

Partners also reported sharing nonmonetary resources with the partnerships. As Figure II.1 shows, two-thirds (69 percent) of all members in the partnerships donated in-kind resources. Nearly 90 percent of those partners who made in-kind investments named staff time as the resource they donated to the RPG program. Many partners reported also investing other resources, such as office space (41 percent), technology (34 percent), or office supplies (29 percent).

[6] Only three-quarters of the partners surveyed responded to the question about funding received from the grantee. The remaining participants did not respond or indicated they did not know whether their organization shared in funding from the grant.

[7] Three grantees reported sharing no RPG funds with their partners.

Figure II.1. Percentage of partner organizations providing in-kind resources and types of in-kind resources donated to partnership



Note: The types of in-kind resources sum to greater than 100 percent because survey respondents could select more than one type of in-kind resource they were donating to the partnership.
Source: RPG partner survey.

B. Building interagency collaboration

Sharing similar values, working toward a common purpose, and having the capacity to provide coordinated services to support families form the building blocks of collaboration among agencies and integrating services (Drabble, 2011; Green et al., 2008). However, establishing these building blocks is difficult and takes time. Each organization within a partnership has its own mission, legal requirements, and way of operating, which must be reconciled to integrate services across organizations. For example, it could be relatively easy for partners to agree on the goals of the RPG program but difficult for multiple partners to integrate services for families among multiple agencies.

Figure II.2, derived from partner survey findings, is a framework for understanding the overall structure of RPG partnerships along the continuum of collaboration. It shows the types and levels of collaboration RPG partnerships achieved, from developing a shared vision and goals for RPG (level one), to better aligning operations across child welfare, SUD treatment, and other systems (level two), to integrating some or all services (level three).

As suggested by the pyramid shape of Figure II.2, every RPG partnership achieved some elements of the first level of collaboration, some achieved elements of aligned operations, and a smaller number achieved elements of integrated services.

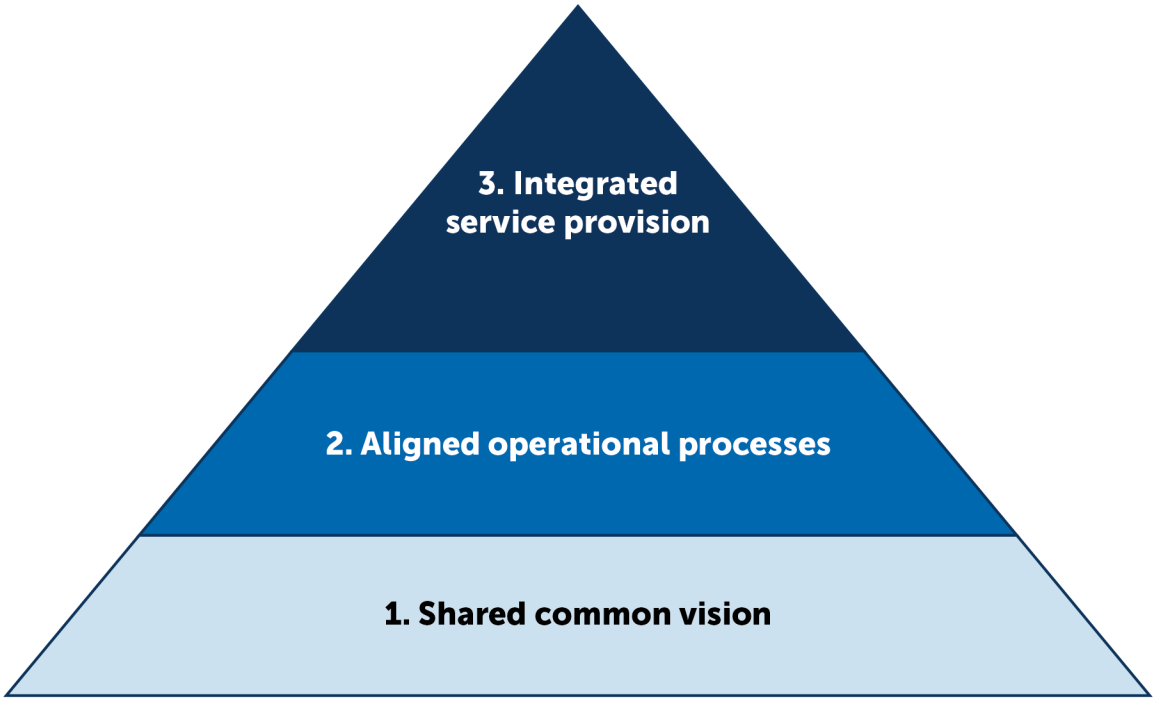
Box II.2. Measuring collaboration

RPG partners reported their perceptions of the collaboration within their partnership through two multi-item scales collected as part of the RPG partner survey: the Working Together Survey (Chrislip & Larson, 1994) and the Collaborative Capacity Instrument (NCSACW, 2017).

Working Together Survey: This instrument measures five dimensions of positive collaborations: (1) context of the collaboration, (2) results of the collaboration, (3) structure of the collaboration, (4) collaboration process, and (5) collaboration members.

Collaborative Capacity Instrument: This instrument measures partners' capacity to collaborate in five areas: (1) services; (2) screening and assessment; (3) shared principles, approaches, and time frames; (4) joint staff training; and (5) tracking and sharing information.

Figure II.2. Levels of interagency collaboration



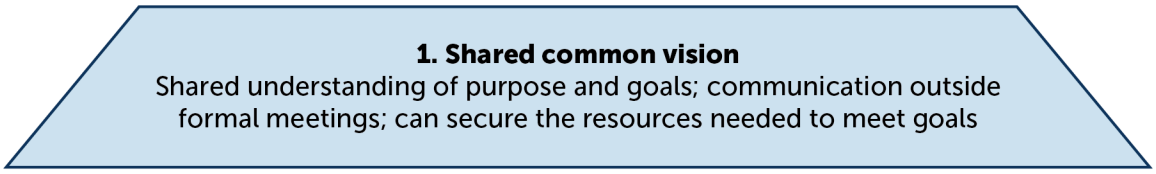
1. A shared vision for RPG

The vast majority of partnerships indicated partners had a shared vision for their work. Figure II.3 shows the elements of this shared vision. They include good communication with partners,

an interest in solving a common problem, and feeling that partners could obtain the right resources to accomplish RPG goals.

- The majority of partners in all 17 RPG projects agreed they were working on a critical problem. They had a shared understanding that the main purpose of the partnership was to improve the provision of child welfare and SUD treatment services through their work with other partner organizations. More than two-thirds of partnerships reported they had shared standards for communicating. Moreover, communications were widespread. Social network data showed that partnership members made three-quarters of the possible communication connections (as opposed to service networks, discussed in Section B.3) between other partners, in addition to their communications during formal RPG meetings. Communication across a large proportion of the members of a partnership is one element that fosters interagency collaboration (Blakey, 2014; Cooper, Evans, & Pybis, 2016; Drabble, 2011; Fletcher et al., 2009; Green et al., 2008).
- Respondents from more than two-thirds of the partnerships felt their collaboration was effective in obtaining the resources they needed to accomplish their shared goals for RPG.

Figure II.3. Elements of a shared common vision

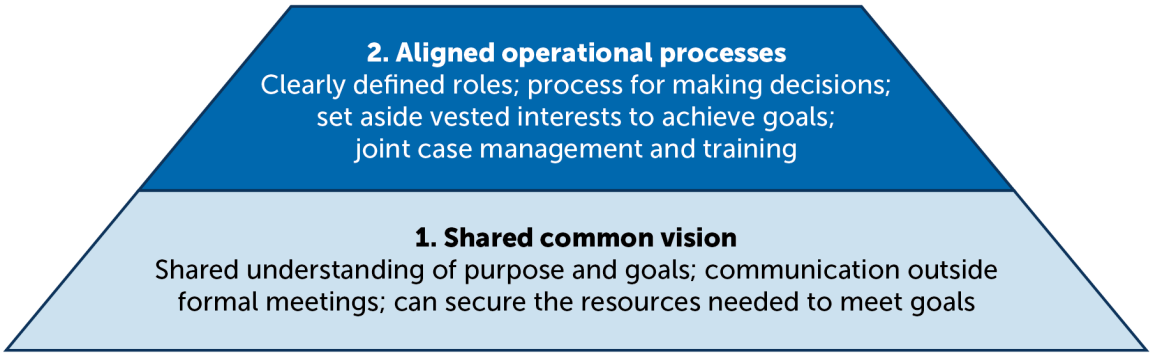


2. Aligned operational processes across partners

RPG partnerships also made progress toward aligning operational processes. As shown in Figure II.4, this included having clear partner roles and a process for decisions. Partners agreed they could set aside differences to focus on RPG goals and some reported joint activities.

- Respondents from 10 of the 17 RPG partnerships indicated they had clearly defined roles for partner organizations. Research on teams has shown that collaboration improves when the roles of individual team members are clearly defined and well understood (Erickson, 2012).
- About half of partnerships reported having a shared process for making decisions for the RPG project, including being more interested in a good outcome for their RPG program rather than improving the positions of their own organizations.
- Importantly, members of most partnerships agreed they had the capacity to coordinate services. Half of partnerships had the capacity to coordinate across SUD treatment and child welfare agencies to provide cross-agency assessments. Three-quarters of partnerships reported having staff from both treatment providers and child welfare agencies participate in joint case management activities or holding joint training sessions across partner organizations.

Figure II.4. Elements of aligned operational processes



3. Providing integrated services

All RPG partnerships reported achieving elements at the first level of collaboration, a shared, common vision. Most partnerships aligned some of their RPG-related operational processes, at the second level. Fewer grantees had in place elements of integrated service provision, which might not have been an explicit goal for all partnerships. As shown in Figure II.5, elements at this level of coordination include sharing information, coordinating screening, assessment, referrals, and treatment or other services, and negotiating shared time frames.

- Ten or more partnerships reported having various capacities to track and share information. Approximately two-thirds of partnerships had approaches to sharing client information across child welfare, courts, and agencies providing SUD treatment and tracking clients to monitor their outcomes. Ten had developed shared outcomes for families and had some agreement on how to use outcome information.
- Based on a social network analysis, the partner survey found most partnerships achieved limited success coordinating services. Though each partnership varied, across all 17 partnerships, on average, partners used only one-quarter of the possible relationships with other partners to coordinate or collaborate on services. Services examined included screening and assessment, RPG program referrals, case management or coordination, SUD treatment, mental health and trauma services, and other social and family services. The aggregated density scores for these networks averaged 0.2 (see Box II.3). There is evidence that interactions between a larger proportion of partners makes more resources, skills, and knowledge available to the family or child (Colvin, 2017; Granovetter, 1983). Furthermore, when a larger proportion of partners interact and connect within partnerships, families have multiple entry points to seek services. No entry point into the network of partners is a dead end because families can be routed to the services needed (Friedman et al., 2007).

- Fewer than half of RPG partnerships felt that SUD treatment providers, child welfare agencies, and the courts in their service areas had negotiated shared principles, or that the partnership had developed responses to conflicting time frames associated with child welfare services, SUD treatment, and other services. The Adoption and Safe Families Act mandates that, with some exceptions, child welfare agencies file a petition to terminate parental rights once a child has resided in foster care for 15 of the previous 22 months. While courts have some discretion to extend timelines when parents are making progress toward recovery, there are frequent disagreements between caseworkers, judges, and substance use treatment professionals on whether progress is "good enough" to reunify the family (Radel, Baldwin, Crouse, Ghertner, & Waters, 2018).

Box II.3. Measuring connections using social network analysis: definitions

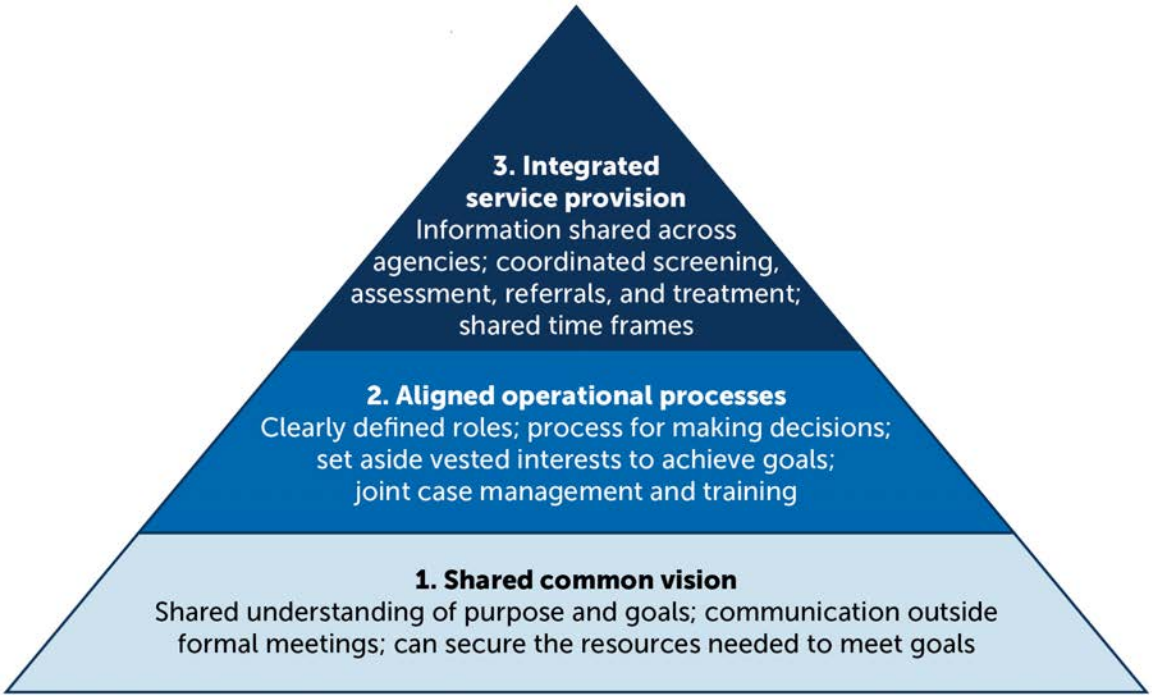
The partner survey asked for partners' perceptions of their RPG collaboration. It also collected social network data to measure the connections within each RPG partnership network.

As defined for the cross-site evaluation, a network consists of all the organizations within a partnership that work together on a specific component of the RPG project, such as screening or assessment, referrals, or case management. Within a network, one survey respondent representing each partner organization indicated whether he or she had a connection to (relationship with) each of their other partner organizations on that component of the project. The partner survey collected data on eight social networks (two communication networks and six service coordination networks) for each grantee.

A connection is counted if a respondent reports that his or her organization communicated or coordinated with another organization in the RPG partnership on that project component. These responses are combined to create density scores for each network.

A density score is the proportion of actual connections reported, out of all possible connections among partners. If an organization had a connection with all the other organizations, the density score for that network would be one. If no connections were made, the density score would be zero.

Figure II.5. Elements of integrated service provision



C. Characteristics of connected partnerships

Depending on the designs of their individual RPG projects, RPG partnerships strove to link information, processes, and program elements such as substance use or trauma screening and assessments, referral to RPG, case management, participation in EBPs, SUD treatment receipt, and supports, such as recovery coaches. Research suggests that better integrated, more "connected" partnerships can better help a participant secure and navigate multiple services or program elements (Friedman et al., 2007). Moreover, integration of programs, activities, and services was also a specific goal mentioned in the 2012 funding opportunity announcement (ACF, 2012a).

To explore what characteristics were associated with RPG partnerships that achieved more of the elements of integrated service provision, including denser communication and service networks, the cross-site evaluation used quantitative survey data to rank the RPG partnerships based on the dimensions of communication and coordination of services, such as screening, assessments, referrals, mental health and trauma, or other services. Projects in which a larger proportion of partners reported being connected on multiple dimensions received higher coordination rankings than those with few interconnected partners. The cross-site evaluation ranked the RPG partnerships from 1 to 17 and then examined qualitative data collected as part of the site visits to each grantee to shed light on the characteristics of the most connected and least connected partnerships.

1. Characteristics of the four most connected partnerships

The four most connected partnerships had relatively few members, built on existing relationships, and experienced only internal challenges related to factors under their control.

Partnerships were small to moderately sized. Each of the four partnerships with the highest rankings was small to moderately sized. On average, the partnerships were composed of nine partner organizations and ranged in size from 4 to 12 partner organizations.

All four highly connected partnerships had also received RPG1 grants. It takes time to solidify working relationships across multiple organizations to coordinate complex services (Drabble, 2011). Although all of the 17 projects included some partner organizations with previous relationships, more than half of the partners in the most connected projects had worked together for multiple years. Partners reported that they continued or built upon RPG1, and thus were poised to collaborate effectively from the beginning of RPG2. In fact, many of the members in these connected partnerships had worked together for almost 10 years.

Box II.4. Ranking the grantees on their degree of collaboration

To inform future RPG cohorts, it is valuable to understand the characteristics and experiences of RPG partnerships that reported the greatest degree of interagency collaboration and contrast these characteristics and experiences with those that reported the least amount of collaboration, as measured by the social network analysis. To identify these partnerships, the social network density scores were used to rank all 17 of the RPG partnerships, relative to the other partnerships, on the extent of their collaboration with their partner organizations. For each of the eight social networks (two communication networks and six service coordination networks), each partnership was ranked from 1 to 17 based on its density score. For example, a partnership that had the highest density score for the network "coordination of substance abuse and mental health treatment services" was ranked 1 and the partnership with the lowest density score was ranked 17. The assigned rank of the eight social networks were then averaged to create a partnership's collaboration ranking.

Partnerships experienced internal challenges. The four partnerships reported they had faced challenges such as the referral agency not providing enough referrals for RPG or staff turnover. These challenges, which the partnerships were able to address among themselves, were different in kind from those described by the least connected partnerships, described next.

2. Characteristics of least connected partnerships

The four partnerships that were least connected each had 18 or more members, were building more new relationships rather than existing ones, and faced challenges stemming from factors beyond their control.

Partnerships were large. Each of the four partnerships with the lowest collaboration rankings had from 18 to 24 partners. Yet, on average, the service networks in these four RPG partnerships had density scores of just 0.11 (only 11 percent of all possible services-related connections between partners were reported). In comparison, on average, the four partnerships that were the most connected had service network density scores of 0.35.

Partnerships built new relationships. Survey respondents from the four least-connected projects indicated they were largely building new relationships with their partner organizations.

Partnerships experienced external challenges. The four least-connected partnerships described policy, population, and funding challenges that were difficult or impossible to resolve. In contrast, challenges that the most-connected partnerships reported were internal to the partnership, therefore within their ability to address. The next section discusses both types of challenges in more detail.

D. Challenges facing RPG partnerships

Members of the cross-site evaluation team conducted site visits to each RPG partnership in fall 2015 and winter 2016, the third year of the grants. Along with interviewing leadership and staff from the grantee agency, they interviewed partners who participated in the initial or ongoing implementation of the RPG projects. The cross-site evaluation used data from the site visits and semiannual progress reports filed with HHS by grantees to explore commonalities among the partnerships and the external (contextual) and internal (partnership) challenges they faced.

1. External (contextual) challenges

Factors within the external environment or setting can help or hinder interagency collaboration (Graham & Barter, 1999; Herlihy, 2016; Ryan, Tracy, Rebeck, Biegel, & Johnson, 2001). Data submitted from grantees through their semiannual progress reports showed that partnerships commonly faced contextual issues in three areas: shifting policy priorities, funding availability, and changing trends in substance use.

Changes to local, state, or federal policy. More than half of the partnerships reported shifts in federal, state, and local policies that affected their ability to provide services to families. Most policy changes occurred at the state and local levels. For example, a new state policy that required screening applicants for drug use with every Temporary Assistance for Needy Families (TANF) application affected one grantee. Many RPG participants submitted multiple TANF applications a year, but the state funded only one screening per year for any TANF applicant. This budgetary constraint affected the RPG partner organization conducting the screening, limiting its ability to help families obtain TANF benefits.

A county child welfare agency decided to prioritize family reunification over parental SUD treatment. As a result, children were reunified with their families before a parent completed treatment or despite his or her continuing substance use if another adult in the home could care for the child. Once the parent and child were reunited, the child welfare caseworker would close the case, reducing the motivation of the parent with the substance use issue to continue treatment.

Although most changes were to state and local policies, one partnership was affected by changes to both state and federal policies. In this site, the state agency that oversees SUD treatment stopped funding residential treatment. At the same time, passage of the Patient Protection and Affordable Care Act (ACA) broadened options for insurance coverage for SUD. However, the RPG partner providing outpatient treatment often did not accept the types of insurance RPG families obtained through the healthcare marketplace established in the state after ACA.

State budget crises and funding issues. More than half of the RPG projects reported their states faced severe budget crises or had changed Medicaid funding, affecting the partnerships' ability to provide services. At one project, funding issues led to a stressful, uncertain working environment and affected whom the grantee could serve. Without adequate funding, some RPG programs could take on only the most serious cases of child abuse and neglect. Similarly, another partnership reported that state funding changes created a difficult environment. Programs closed, staff had not received salary increases in years, and participant needs became more complex, requiring involvement from multiple systems or partners.

Changing substance use trends. Several projects reported that the substances prevalently used in the populations they served changed over time. Often, opioid use increased. This change had implications for their planned SUD treatment services due to a higher risk of overdose and concerns about greater potential for relapse.

One project experienced an increase in its service area of newborns affected by neonatal abstinence syndrome. Although the project's funding was inadequate to serve these children, the RPG project was one of the only programs capable of providing services, so the partnerships added these children to their caseload.

2. Internal (partnership) challenges

In addition to the contextual challenges faced by partnerships, most also described challenges affecting their day-to-day services. RPG partnerships worked through these issues to varying degrees.

Staffing issues. In site visit interviews and progress reports, all RPG projects reported challenges with workforce development and staff turnover. For example, some partnerships had funds to hire staff but could not identify qualified candidates. The inability to fill positions led to significant delays with serving newly referred participants. Partners also discussed staff turnover as a challenge to collaboration. One site visit interviewee said the key staff member from every RPG partner organization left his or her position, leaving no one to champion the RPG project. The remaining staff were unsure of whom to contact and uncertain about how to rebuild relationships among the partners.

Difficulty blending different priorities across partner organizations. Almost three-quarters of the partnerships described the challenge of negotiating diverging priorities among staff from different organizations, particularly those of child welfare agencies and SUD treatment providers. Commonly, partners said the key challenge was the differing focus of child welfare agencies, whose main aims are to provide a safe environment for children and to reunify the family and SUD treatment providers, who focus on adult recovery. On interviewee said, "The drug treatment message is that your recovery is more important than anything, including picking up your child from school sometimes, and that can conflict with a family therapy/support message."

Tension working with the court system. Nearly three-quarters of the partnerships also described tensions working with courts. During the site visit interviews, many partner representatives of both child welfare agencies and SUD treatment providers reported having a weak or nonexistent relationship between the RPG partnerships and the court system. One child

welfare partner commented that it was difficult to reconcile the different agencies' policies and practices with the different laws for substance misuse and for child protection. For example, public defenders who prioritized parents' legal rights discouraged SUD assessments and treatment because they feared the courts would use the fact that people were participating in these programs to criminalize them and, when children were removed from the home, would lengthen the time before family reunification.

Difficulties obtaining referrals. More than half of the partnerships reported difficulties obtaining referrals and enrolling adequate numbers of participants due to several operational issues. For example, partners reported confusion between the organizations with how to make referrals to RPG, despite training and providing strategies for making referrals. In addition, partner organizations described a lack of clear guidelines on whom to refer to the RPG program or an unwillingness by some partners to share participants with other organizations. Staff turnover, a problem for all 17 partnerships, impeded some grantee sites from obtaining referrals. Partners said that, because of the staff turnover at partner agencies providing referrals to RPG, they had to continually train the new staff on how to provide the referrals.

Challenge sharing data across organizations. More than half of the partnerships faced some type of difficulty obtaining or sharing data between organizations. Interviewees said each organization had different legal requirements to release information. Therefore, participants who received services from multiple partner organizations had to sign multiple releases for the various organizations to obtain data. Partners felt that fewer hurdles to sharing data would have many positive effects. It would avoid duplication across agencies and could lead to fewer financial inefficiencies, ultimately providing better outcomes for children and families. For example, access to information would enable staff to identify issues and provide services in time to prevent housing instability and out-of-home placements.

E. Partnership successes

Despite challenges, site visit interviewees also reported successes in four key areas during their participation in the RPG program: improving communication between partner organizations, increasing partner organizations' abilities to collaborate, developing a common goal among the partnerships, and building trust and relationships across the partnership.

Increased and more effective communication between partner organizations. About three-quarters of the partnerships reported increased and more effective communication. A partner at one RPG project described how the project improved communication between organizations: before beginning a new project, they have thoughtful communication with the partner organizations about their roles and goals for the project. Other partnerships said their work on RPG enabled them to create a new culture of communication between partner organizations and allowed them to communicate more regularly, preventing many issues from escalating into large, unmanageable problems.

Increased ability for partner organizations to collaborate. Through their work on RPG, three-quarters of the partnerships said their capacity to collaborate effectively with other partner organizations improved. Partners said staff from different organizations met regularly to better understand how different priorities or new initiatives affect other partner organizations; they learned how to move forward together and share constructive feedback.

Partners also described an ongoing commitment to collaborate across organizations that improved and grew as a result of RPG. As one representative explained, child welfare agencies, mental health and SUD treatment providers, the juvenile courts, and judges and attorneys developed a mutual understanding for how to align their work. This understanding would not have been possible without participating in RPG.

Establishing a shared goal. More than half of the partnerships established a common goal across partner organizations, rather than considering only their organization-specific goals. For example, one partner believed that making every partner organization's goal the same helped to develop the partnership.

Building trust and relationships across partnerships. Respondents from approximately one-third of the RPG projects said that partners built trust and relationships across their partner organizations and at every level of the organization, such as leadership and frontline staff.

F. Limitations

Two main limitations affect findings of the RPG partnership study described in this chapter: data collection timing and the lack of input from RPG families.

1. The partner survey and cross-site evaluation site visits occurred only once, during the third and early fourth year of the 5-year grant period. Thus, these findings do not reflect whether and how partnerships continued to evolve and how they functioned by the end of the grant period. Partnerships might have established more elements of collaboration, developed more connections within their service networks, and experienced or overcome additional successes and challenges.
2. It is possible that partnerships with only a few connections in their service networks nevertheless served families as capably as partnerships with more connected partners. Families might benefit equally from RPG partnerships that have only two service providers coordinating on services or those in which many partners coordinate to provide services. Though research suggests more connected partnerships can provide more and better services (Colvin, 2017; Friedman et al., 2007), the RPG cross-site evaluation did not collect participants' views on their experiences of navigating RPG services to explore this topic.

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III. WHOM DID RPG SERVE?

The Child and Family Services Improvement Act of 2006 (Pub. L. 109-288), which established the RPG program, broadly targeted families in which adults had recognized or potential substance use issues that might put the children in their care at risk for maltreatment and removal from their homes. The RPG program was motivated, in part, by the recognition, emerging since about 1999 (HHS, 1999), that such families often become involved in both the SUD treatment and the child welfare systems. One or both of these systems acting alone could not effectively address the needs of such families.

Each RPG project defined a more specific, local target population of need, and selected one or more programs to provide to that target population. Some grantees planned to serve families in which children had already been removed from their homes. Several grantees planned to use RPG funds to work with women with diagnosed SUDs who were already in treatment. Some planned to focus on families in which an adult was court involved for substance use, possession, or other criminal activities related to drugs. Grantees also planned to serve children of different ages. Some wanted to work with children ages birth through 5, whereas others planned to serve children up to age 18 or older. Thus, the circumstances of children and adults varied across the RPG projects.

Despite naming an intended target population, it is not always the case that the population that ultimately enrolls in and receives a program aligns with what the program intended. For example, programs sometimes cannot successfully enroll families with the intended characteristics. Programs sometimes relax or waive inclusion criteria due to low enrollment or for other reasons, or the originally intended target population at the time of grant writing is not of interest when sample enrollment begins.

This chapter examines the degree to which the actual population that did receive services from each project aligned with the intended RPG and project-specific target populations. It addresses the following research questions:

1. Who were the target populations of the RPG projects?
2. What were the characteristics of the participants who actually enrolled in RPG?
3. To what extent did RPG projects reach their planned target populations? Why were some more successful than others?

The structure of this chapter aligns with these three research questions. Section A describes the target populations RPG partnerships intended to serve. Section B uses RPG cross-site evaluation data provided by grantees to describe whether enrolled adults and children, respectively, met criteria for substance use issues and child maltreatment as grantees articulated in their grant applications. Section C provides a richer description of the populations served, using additional data for information that was not specified in grant applications, including overall risk and well-being. Section D examines the degree to which the target population identified in the legislation and grant applications and the characteristics of the families enrolling in RPG aligned. Section E takes a closer look at one subgroup served by RPG projects: opioid users. Section F describes limitations.

Box III.1. A summary of key findings about the RPG populations served

- The target populations identified by each RPG project varied slightly, but in general, all projects targeted families including adults with substance abuse problems and children in or at risk of removal from the home, in agreement with the RPG-enabling legislation.
- In general, RPG projects served a population that aligned with their target population definitions and the overall RPG target population set forth in the legislation.
  - The adult population served by RPG had a substance use profile that was similar to a national sample of individuals in substance use treatment settings.
  - Most children in RPG had some involvement in the child welfare system in the year before entry in RPG—either via maltreatment, removal from their homes, or both.

A. RPG project target populations

In its application, each RPG partnership identified a target population of need in its area and proposed an intervention intended to meet the needs of that target population. The descriptions of the intended target populations for the projects were extracted from the partnerships' grant applications, summarized in the first Report to Congress (HHS, 2012) and reproduced in Table III.1.

Table III.1. RPG projects' planned target populations

State	Grantee organization	Planned target population[a]
California	Center Point, Inc.	Women with diagnosable substance use disorders (in either residential or outpatient substance abuse treatment settings) and their children ages 0–5 who are in or at risk of an out-of-home placement.
Georgia	Georgia State University Research Foundation, Inc.	Adult criminal drug court participants and their children.
Illinois	Children's Research Triangle	Children who are in out-of-home care due to substance use in their families.
Iowa	Judicial Branch, State of Iowa	Families with children ages 0–12 in which parents are substance-involved and children are in or at risk of placement in foster care.
Iowa	Northwest Iowa Mental Health Center/Seasons Center	Children ages 0–18 who are in or at risk of an out-of-home placement as a result of a parent's or caregiver's substance abuse.
Kentucky	Kentucky Department for Community Based Services	Families with children ages 0–3 that are at risk of an out-of-home placement due to substantiated abuse and neglect and a parent's substance abuse.
Maine	Families and Children Together	Rural families with children ages 0–5 who are at risk of an out-of-home placement and who are affected by a parent's or caregiver's substance abuse.
Massachusetts	Commonwealth of Massachusetts	Families whose children have been removed or are at imminent risk of removal from the home because of parental substance abuse.
Missouri	Preferred Family Healthcare.	Families with children who are in or at risk of an out-of-home placement as a result of a caretaker's parent's substance abuse.

Table III.1. (*continued*)

State	Grantee organization	Planned target population[a]
Montana	The Center for Children and Families	Families identified by Child Protective Services with children ages birth–12 who are in or at risk of an out-of-home placement due to a parent's or caregiver's substance abuse.
Nevada	State of Nevada Division of Child and Family Services	Low-income women with an open Child Protective Services case and identified substance abuse disorder and their children ages birth–17 who are in or at risk of an out-of-home placement.
Ohio	Summit County Children Services	Families that have child welfare cases with court involvement (that is, a protective supervision order, or a child has already been placed in out-of-home care) due to parental or primary caregiver's substance abuse.
Oklahoma	Oklahoma Department of Mental Health and Substance Abuse Services	Families affected by parental substance abuse with children who are in or at risk of an out-of-home placement.
Pennsylvania	Health Federation of Philadelphia, Inc.	Families with children ages birth–5 who have been placed outside the home as a result of or largely due to parental substance abuse.
Tennessee	Helen Ross McNabb Center (formerly Child & Family Tennessee)	Children affected by parental substance abuse who are in or at risk of out-of-home placement, and their families.
Tennessee	Tennessee Department of Mental Health and Substance Abuse Services	Families with children ages birth–17 who are in or at risk of an out-of-home placement due to a parent or caretaker's substance abuse.
Virginia	Sentara RMH Community Health	Families with children who are in or at risk of an out-of-home placement as a result of a parent's or caretaker's substance abuse.

[a] Descriptions use terminology from applications to refer to substance-related characteristics, behaviors, or diagnoses, such as substance use disorder, substance abuse, substance-involved, and substance use.

Sources: RPG applications and semiannual progress reports for September 2012–March 2013, and HHS decision memo for the RPG program, August 29, 2012 (HHS-2012-ACF-ACYF-CO-0321).

1. Common elements of intended target populations

Although the intended target populations of children and adults varied somewhat across projects, there were many common elements or criteria.

- **Adult substance use issues.** All successful applicants indicated a plan to provide service to adult caregivers with substance use issues; however, few gave more detailed inclusion criteria for what defined the specific substance use-related characteristics, behaviors, or diagnoses they targeted. One used the phrase *substance use disorder* to refer to a clinical diagnosis of substance abuse. Two mentioned involvement in either adult or family drug court as a means of identifying adults with substance use issues.
- **Child in or at risk of out-of-home placement.** Nearly all applications (15 of 17) explicitly mentioned that they intended to serve children in or at risk of an out-of-home placement, but most did not provide more detailed criteria about exactly how "at risk of out-of-home placement" was to be defined.
- **Child demographics.** Most of the RPG2 applications (11 of 17) indicated an age-inclusion criteria for children.

2. The concept of target populations

The 17 grant applications described target populations that aligned well with the broader RPG target population. Because most projects included additional, more specific criteria for their particular programs (for example, focusing on female parents or children of a certain age), the project's target populations were somewhat narrower, as shown in Figure III.1.

The target population of the overall RPG program, shown as the large circle in Figure III.1, is a subset of the universe of at-risk families with adult substance use issues. Among these families, the RPG focuses on the subset in which children are in or at risk of out-of-home placement due to adult substance use issues.

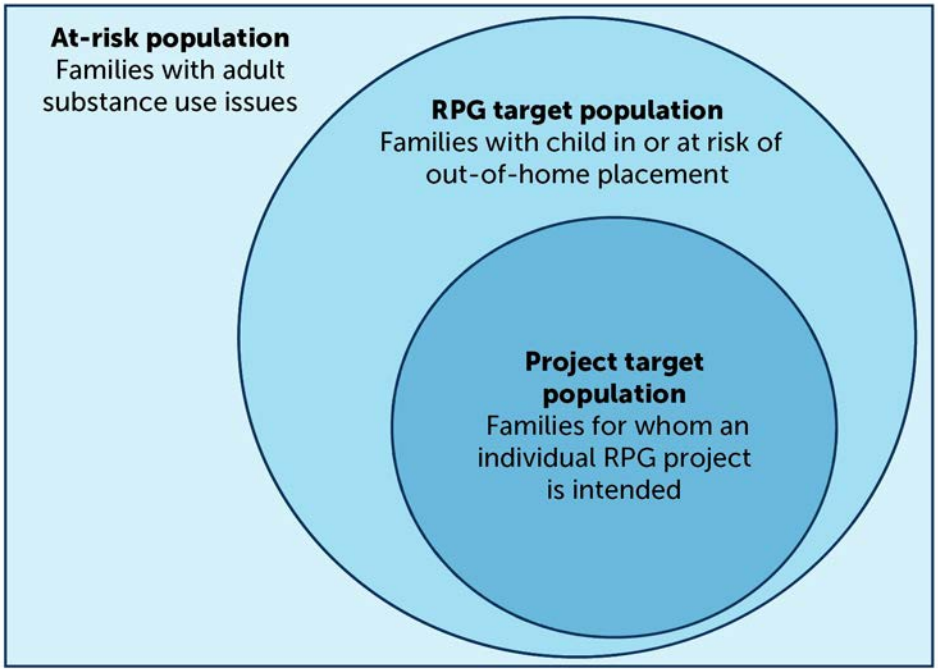
In turn, the project-specific target populations (represented by the smaller circle in the figure) are subsets of this broad RPG target population, based on each project's specific inclusion criteria, such as ages of participating children.

All partnerships that received RPG funding articulated inclusion criteria aligned with the RPG target population. The chapter will return to this figure later, in Section D, to discuss whether and to what extent RPG projects successfully enrolled their intended target populations.

Box III.2. Substance use terminology in this report

- Substance: A psychoactive compound with the potential to cause health and social problems, including SUDs.
- Substance use: The use—even one time—of any substance.
- Substance misuse: The use of any substance in a manner, situation, amount or frequency that can cause harm to users or to those around them.
- Substance use disorder (SUD): A medical illness caused by repeated misuse of a substance or substances.
- Substance use disorder treatment: A service or set of services that can include medication, counseling, and other supportive services designed to enable an individual to reduce or eliminate alcohol and/or other drug use, address associated physical or mental health problems, and restore the patient to maximum functional ability.
- Substance use issues: The term used in this report to encompass *substance use, substance misuse*, and *substance use disorder.*
- These definitions come from the Surgeon General's Report on Alcohol, Drugs, and Health (https://addiction.surgeongeneral.gov/sites/default/files/glossary-and-abbreviations.pdf). The term *substance abuse* is outdated terminology used in this report only when referring to legislation, documents, or data collection instruments that use the term.

Figure III.1. RPG target population and project target population



3. The concept of service populations

Learning for Action distinguishes programs' service populations from their target populations.[8] It defines service populations as the full set of people served by any part of the program. The *target population* is the subset of people for whom the program was designed, that programs planned to actively recruit and retain, and for whom they hold themselves accountable for achieving outcomes. The characteristics of people enrolled and served by a program might differ from the intended target population.

The cross-site evaluation collected a comprehensive set of data from adults enrolled in RPG to understand whether and to what extent those enrolled met RPG and project-specific target criteria. At program entry, RPG projects obtained demographic information from enrollees and administered standardized instruments (defined in Box III.3) to adults to gather information on them and one selected child. The cross-site evaluation contractor selected these instruments for use in the cross-site evaluation and provided them to grantees. Grantees also obtained administrative SUD treatment and child welfare data for the year before RPG enrollment and submitted it to the cross-site evaluation. In combination, these data provided information on the extent to which the RPG projects actually enrolled and served adults and children whose characteristics aligned with the RPG and their specific target populations. See Appendix C for information on the data and methods used to summarize outcome data in this chapter.

[8] Learning for Action works with social sector organizations to develop strategies, build capacity, and conduct evaluations. See http://learningforaction.com.

Box III.3. Standardized instruments

A standardized instrument or test is one that

- Requires all respondents or test takers to answer the same questions, or a selection of questions from common set or bank of questions, in the same way, and is scored in a standard or consistent manner, which makes it possible to compare the relative performance of individuals or groups
- Adapted from The Glossary of Education Reform (http://www.edglossary.org/standardized-test/)

Standardized instruments are always administered, scored and interpreted the same way. These instruments undergo a robust development process and undergo extensive field testing. The cross-site evaluation scored these instruments using the rules provided by the publishers and compared the RPG sample with a normative population (either typical or high-risk, depending on the measure), to provide context for all findings from the instruments.

B. The populations RPG2 projects served

RPG projects served populations that largely aligned with their defined target populations. Adults reported drug and alcohol use comparable to individuals enrolled in SUD treatment settings nationally, and a subset of adults had previously been enrolled in state-funded SUD treatment settings. In addition, most focal children enrolled in RPG had prior contact or involvement in the child welfare system at the time of enrolling in RPG.[9]

From January 2014 to July 2017, RPG2 projects enrolled 2,887 cases into the cross-site evaluation.[10] An RPG case consists of the group of individuals who present themselves to enroll in an RPG project. An RPG case can be, but is not always, the same as the family unit. Depending on program designs and target populations, RPG served members of the family, household, or other individuals who might or might not be biologically related. For example, some projects offered services intended to serve all members of the family, whereas others offered services targeted to parents, children, or a parent–child dyad. Some projects made cases more inclusive by serving foster parents or other adult caregivers in addition to serving biological parents and children. The number of cases enrolled ranged from 36 to 467 across the 17 projects. These cases comprised 8,626 parents and children, including 3,772 adults and 4,854 children.

RPG cases were typically small, with two or three members, and in most instances included biologically related parents and children. The most common composition of an RPG case was a two-member case, an adult and child. Half of the RPG cases were two-member cases, with a biological parent, usually the mother, present in almost all of these cases (96 percent). Cases with three or more members occurred less frequently than two-member cases. About 22 percent of cases included three members, and fewer included four (15 percent) or five or more members (13 percent). These cases also typically included biological parents and their children: from 86 percent of three-member cases to 57 percent of cases with five or more members that included

[9] The cross-site evaluation defines involvement in the child welfare system using language from the Child Welfare Information Gateway (2013), in which a report of suspected abuse child abuse or neglect is described as how most families become involved in the local child welfare system.

[10] RPG projects enrolled 11,416 people—55 percent of the children—in their RPG programs, beginning in 2012 (Table I.2). Enrollment in the cross-site evaluation and collection of data began after receipt of Office of Management and Budget (OMB) clearance in early 2014.

biologically related parents and children. For the remainder of this chapter, we primarily refer to the RPG cases as families.

1. Adult substance use

Drug use was common among adults entering RPG. As shown in Table III.2, the average drug use score on the Addiction Severity Index, Self-Report Form (ASI-SR) was 0.12 on a scale of 0 to 1, which is slightly higher than the average observed from a nationwide sample of individuals in SUD treatment settings, as described by McLellan, Cacciola, Alterman, Rikoon, and Carise (2006). This national sample might be considered comparable to the target population for the RPG program. The RPG mean score for alcohol use of 0.05 is markedly lower than the national mean of 0.22 in this study.

More than one-third of RPG adults had drug or alcohol severity scores that suggested high severity of use (severity score for a drug or alcohol that was above the average observed in McLellan et al. [2006]). Only 6 percent of adults were categorized as having this level of severity for alcohol use, but 32 percent were in the high-severity category for drug use, and 36 percent were considered in this high-severity category for either drugs or alcohol or both substances. There was meaningful variation in high-severity drug or alcohol use across grantees. One RPG project served a population in which 60 percent of adults were considered high-severity drug or alcohol users according to this definition; another project served a population in which only 4 percent of adults were characterized as high-severity users. Most projects had 30 to 60 percent of their adults characterized as high-severity users.

Box III.4. Data used to assess adult substance use issues

The extent and severity of substance use by adults in RPG was measured through the ASI-SR. Along with indicating the use of alcohol and other drugs, the ASI has been shown to be predictive of SUDs (Rikoon, Cacciola, Carise, Alterman, & McLellan, 2006). However, the instrument itself is not sufficient to establish this diagnosis and was not used for that purpose in the cross-site evaluation. Grantees administered the ASI to adults at enrollment (baseline), and again at RPG exit. Baseline data were used to examine target population characteristics.

As another indicator of substance use issues, the cross-site evaluation examined whether enrolled adults had received publicly funded SUD treatment. This was assessed by using administrative data grantees obtained from their state SUD treatment agencies.

As further evidence that grantees enrolled adults with substance use issues, more than one-quarter of adults that were followed for the cross-site evaluation had previously enrolled in state-funded SUD treatment. Among eligible adults in RPG, 27 percent had been in one or more state-funded SUD treatment programs during the year before enrolling in RPG. Results from the 2018 National Survey on Drug Use and Health show that of the 20.3 million people who had an SUD, 89.8 percent did not receive SUD treatment. Thus, as a whole, RPG adults had been enrolled in SUD treatment at rates much higher than among the average adult population or high-risk sample. However, participation in SUD treatment varied widely among RPG projects in the year before RPG enrollment. One project served a population in which 63 percent of adults had previously enrolled in state-funded SUD treatment, whereas another project served a population in which only 9 percent of the adults had previously enrolled in treatment.

Table III.2. Substance use among adults before RPG enrollment

	RPG mean score (SD)	National mean score (SD)[a]	Adults in high-severity category (percentage)[b]
Drug use	0.12 (0.15)	0.10 (0.13)	32
Alcohol use	0.05 (0.12)	0.22 (0.25)	6
Use of drugs or alcohol or both	NR	NR	36
Sample size	1,858 to 1,990		

[a] As reported in McClellan et al. (2006), which focused on a nationwide sample of individuals in SUD treatment settings.

[b] The percentage of adults in the high-severity category is calculated relative to the number with complete data for a given type of substance use.

Note: ASI-SR = Addiction Severity Index, Self-Report Form; NR = not reported; SD = standard deviation; SUD = substance use disorder.

Higher scores on the ASI-SR indicate higher severity of substance use. Sample sizes vary by measure due to item nonresponse.

Source: Baseline administration of the ASI-SR, including data submitted to the cross-site evaluation through August 2017.

2. Children in or at risk of out-of-home placement

RPG seeks to serve families with children who are in or at risk of out-of-home placements, and grantees planned to do so. To examine this risk, the cross-site evaluation used administrative data obtained by grantees from their state child welfare agencies. The evaluation obtained data for one child in each RPG family, referred to as the focal child.[11]

These data, as displayed in Figure III.2, showed that most focal children served by RPG had contact with the child welfare system, due to substantiated or unsubstantiated maltreatment, removal, or both, in the year before RPG enrollment.[12] More than one-quarter (29 percent) of children (7 percent in the circle on the left and 22 percent in

Box III.5. Administrative data on child safety and permanency

Two types of information from administrative data were collected about focal children: safety (maltreatment) and permanency (removals and reunifications).

Safety data provide information on whether a child is the subject of maltreatment reports, which include cases of both abuse and neglect. These data help show the extent to which RPG projects enrolled children with reported or alleged maltreatment that was investigated and determined to either be substantiated (confirmed) or unsubstantiated (insufficient evidence to conclude that a child experienced maltreatment).

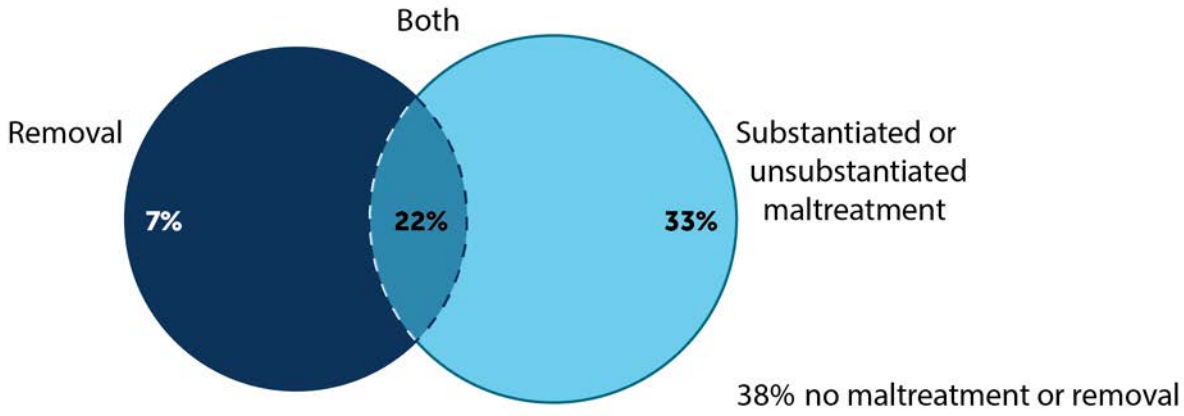
Permanency data show whether a child has been removed from his or her home in a given period. In addition, these data show where children who are removed from the home are subsequently placed within the foster care system and, if they exit the system, whether they are reunified with their parents or achieve another permanent living situation, such as adoption. These data help show previous involvement of focal children within the foster care system.

[11] Each RPG project set a rule for choosing the focal child in each RPG case—such as the youngest child or the child who would receive the most services. This was the child on whom projects obtained data on safety, permanency, and well-being. One child was studied in depth because the burden of obtaining these detailed data on all children in every RPG case would have been beyond the resources of the RPG projects.

[12] According to the Child Welfare Information Gateway, most families have their first contact with the child welfare system due to a report of suspected child abuse or neglect (Child Welfare Information Gateway, 2013).

the intersection of both circles) had experienced a removal. More than half (55 percent) of children (33 percent in the circle on the right in Figure III.2, plus 22 percent in the intersection) were the subject of at least one prior substantiated or unsubstantiated report of maltreatment. About one-fifth (22 percent, shown by the intersection of both circles), had experienced both removal and reported maltreatment. Thus, 62 percent of focal children (those in either circle or the intersection of Figure III.2) had some prior contact or involvement in the child welfare system before enrolling in RPG.

Figure III.2. Children experiencing removals, substantiated or unsubstantiated maltreatment, or both, in the year before RPG enrollment (n = 2,726)



To reiterate, as shown in Table III.3, in the year before entry into RPG, 55 percent of focal children were the subject of at least one report of maltreatment. In comparison, only 4 percent of children in the United States had such reports (HHS, 2017b). [13] More than one-third (36 percent) had a report of substantiated maltreatment, and 26 percent had one or more unsubstantiated reports of maltreatment.[14] About one-sixth (16 percent) of children in the cross-site evaluation sample, were reported to experience abuse. About one-third of children in the sample (33 percent) experienced neglect. Approximately 19 percent of the overall sample had a report of maltreatment that was not characterized as either abuse or neglect.

[13] The 2017 Child Maltreatment Report did not directly report maltreatment prevalence rates overall, combining both substantiated and unsubstantiated maltreatment. However, it did provide counts of relevant categories. The national prevalence rate of maltreatment was estimated by dividing the sum of substantiated, unsubstantiated, and indicated dispositions by the total child population in 2015.

[14] A child can have both substantiated and unsubstantiated cases of maltreatment, and in these data 185 had both such maltreatment episodes during this period. Both unsubstantiated and substantiated maltreatment reports are important to understand in this population. A report sponsored by the Office of Planning, Research, and Evaluation (Casanueva, Dolan, Smith, and Ringeisen, 2012) shows that children with both unsubstantiated and substantiated maltreatment records are at similar risk for poor child well-being outcomes.

Table III.3. Percentage and number of focal children with substantiated and unsubstantiated reports of maltreatment in the year before entering RPG

Type of maltreatment	Percentage of focal children with report	Number of focal children with report[a]
Reported maltreatment (abuse, neglect, or other)	55	1,496
Substantiated maltreatment	36	973
Unsubstantiated maltreatment	26	708
Reported abuse (includes physical, sexual, psychological, and emotional abuse)	16	438
Reported neglect (failure to provide needed, age-appropriate care; includes medical neglect)	33	910
Reported other maltreatment	19	525

[a] Children can have had multiple instances of maltreatment and, therefore, appear in multiple rows in this table.

Note: The percentages reported are relative to 2,726 focal children enrolled in the study as of August 2017.

Source: Administrative records in the year before RPG enrollment from state or county child welfare agencies obtained by grantees and submitted to the cross-site evaluation in August 2017.

RPG projects approached prior maltreatment as a target population or future risk criteria differently. One project served a population in which only 3 percent of the focal children had previously reported maltreatment, whereas another project served a population in which nearly all focal children (92 percent) were the subject of prior reported maltreatment. Eight projects served families in which most focal children had a prior instance of reported maltreatment.

A relatively smaller proportion of children had experienced a removal from their homes before enrolling in RPG but still at rates markedly higher than the national average. More than one-quarter (29 percent) of focal children had been removed from the home at least once during the year before RPG enrollment (Table III.4). In 2015, less than 1 percent of children in the United States entered foster care (HHS, 2016b, 2017b).[15]

Table III.4. Child removals, reunifications, and placements occurring in the year before enrolling in RPG (percentage and number)

Removal or placement	Focal children experiencing event (percentage)	Focal children experiencing event (number)
Removed from home (n = 2,726)	29	786
Reunited with family (n = 786)[a]	4	29
Placed in permanent setting (n = 786)[a]	5	38

[a] Percentage of focal children experiencing a removal in the year before enrolling in RPG who experienced reunification or permanency before RPG enrollment.

Source: Administrative records in the year before enrolling in RPG from state or county child welfare agencies obtained by grantees and submitted to the cross-site evaluation in August 2017.

[15] Estimate calculated from the number of children entering foster care in 2015 (268,509) from the AFCARS Report by the total estimated number of children in the United States in 2015 (74,382,502).

Like the prior maltreatment results, rates of removals in the year before enrolling in RPG varied across RPG projects, suggesting that some projects might have more actively prioritized enrolling children with this background. Three projects served populations with rates of removal higher than 50 percent, and three projects served populations with rates of removal lower than 10 percent.

Achieving reunification and permanency were relatively rare in the year before enrolling in RPG among the subset of focal children who experienced a removal during this time. Only 4 percent of children were reunited with their families, and an additional 1 percent (5 percent total) were discharged into a permanent placement, as shown in Table III.4. A *permanent placement* is defined as either experiencing reunification, adoption, or guardianship during that period. Among all 786 children who experienced a removal in the year before enrolling in RPG, by the end of the grant period (August 2017), 29 percent were reunified with their families of origin and 39 percent obtained a permanent placement.

3. Child age

A subset of RPG2 projects set a target age range for the child population they planned to serve. Among these projects, 97 percent of enrolled children were within those age ranges. Overall, RPG projects served families with relatively young children. Among the 4,854 children enrolled in RPG2, the average age was 5 years old; more than half (53 percent) of children were of preschool age or younger (Table III.5).

Table III.5. Children's ages among families enrolling in RPG

	All children (percentage)	Focal children (percentage)
Average age at enrollment into RPG (years)[a]	5.1	4.3
Age at enrollment, by category (percentage)		
Younger than 1[b]	21	28
1 to 4	32	33
5 to 8	24	20
9 or older	24	18
Sample size	**4,854**	**2,887**

[a] Children not yet born by the time of RPG enrollment are not included in this calculation.

[b] This category includes those children who were not yet born to pregnant mothers by the time of RPG enrollment.

Note: Because of rounding, category percentages can add to slightly more or less than 100 percent. The sample size for each statistic was the number of children with a nonmissing response to the question.

Sources: RPG Enrollment and Service Log data from January 1, 2014, to July 14, 2017.

4. Trauma

Neither the RPG authorizing legislation nor the applications submitted by the 17 RPG2 partnerships specifically identified trauma as a targeting criteria. Yet, in response to scientific findings that continue to emerge about the long-term neurological, behavioral, relational, and other impacts of maltreatment on children, HHS has urged states and child welfare systems to do more to attend to children's behavioral, emotional, and social functioning, including addressing trauma (ACF, 2012b; Samuels, 2012). A national sample of more than 2,220 children in child welfare found that over 70 percent met criteria for having been exposed to trauma (Greeson et al., 2011). The experience of trauma is not limited to children, however; for example, most

women in substance abuse treatment have experienced trauma as children or adults (Covington, 2010). In the 2012 RPG funding opportunity announcement, ACF placed an emphasis on the adoption and implementation of *trauma-informed* programs and services. In addition, many grantees adopted trauma-specific programs designed to address child or adult trauma.[16]

Implicitly then, RPG2 sought to serve families in which adults or children might exhibit symptoms of trauma. Therefore, for the cross-site evaluation, RPG projects administered standardized instruments to adults at enrollment to collect information on adult and child trauma. These data show that both adults and children enrolled in RPG reported symptoms of post-traumatic stress at program entry, though it appears that children might have had more trauma experiences than the adults in this population. (Boxes III.6 and III.7 discuss the instruments used to measure adult and child trauma symptoms.)

Adult trauma symptoms. On average, RPG adults reported experiencing nearly one-quarter of the 40 symptoms of post-traumatic stress disorder assessed by the Trauma Symptoms Checklist (TSC-40) standardized instrument. The average score on trauma symptoms was 29 on a scale of 0 to 120, indicating that, on average, adults experienced some post-traumatic symptoms (Table III.6). When comparing this score with the literature, Tracy et al. (2012) observed an average TSC-40 score of 43.2 using a sample of 240 women enrolled in SUD treatment. Heffner, Blom, and Anthenelli (2011) presented TSC-40 means for 15 women with alcohol dependence who did not relapse during study participation (with a score of 23.1) and means for 12 women who did relapse (with a score of 47.0). The RPG sample had somewhat fewer frequent trauma symptoms than comparable samples of adults with substance use issues.

Table III.6. Measures of trauma at baseline

	Sample mean score (SD)	National mean score (SD)	Percentage of individuals in high-risk category	Sample size
Adult trauma symptoms	29.0 (20.2)	NA	NA	1814
Focal child trauma symptoms	55.9 (15.9)	50 (10)	28	728

Note: NA = not available; SD = standard deviation.

Adult trauma symptoms were assessed using the Trauma Symptoms Checklist; child trauma symptoms were assessed using the Trauma Symptom Checklist for Young Children. For both measures, higher scores represent higher levels of trauma symptoms for the respondent.

Source: Baseline administration of standardized instruments, including data submitted to cross-site evaluation through August 2017.

Child trauma symptoms. On average, caregivers who completed the Trauma Symptom Checklist for Young Children (TSCYC) rated children in RPG as having more trauma symptoms than children in the general population assessed by the TSCYC. The TSCYC assesses post-traumatic stress disorder symptoms in children experiencing one or more traumatic events, such

[16] *Trauma-informed* organizations, programs, and services are based on an understanding of the vulnerabilities of trauma survivors, so that these services and programs can be more supportive and avoid retraumatizing participants. *Trauma-specific* programs are designed to reduce symptoms of trauma.

as anxiety, depression, anger and aggression, and post-traumatic stress. The mean score of TSCYC total post-traumatic stress was 56 for focal children at RPG entry, compared with the national mean score of 50 (Table III.6). More than one-quarter (28 percent) of children in RPG were classified as being at high risk with elevated symptoms of post-traumatic stress disorder.

C. Description of overall population served, including risk exposure

RPG grantees served a population that cannot be described solely using the broad target criteria of adult substance abuse, prior reports of child maltreatment, removals, and child age. To more fully understand the characteristics of families being enrolled and whether they were at risk, it is necessary to consider the mental health of adults and well-being of children in the cases. This information helps to illustrate the multiple risks facing this population.

1. Adults' mental health

Primary caregivers in RPG expressed more symptoms of stress and depression, on average, than a normative sample of adults. This suggests that adults enrolling in RPG might have experienced other issues commonly co-occurring with substance abuse or symptoms that influence maltreatment.

Parenting stress. RPG adults expressed higher-than-average levels of parenting stress, a key concern for this population, given the literature that shows that parenting stress is correlated with parent substance abuse (Sinha, 2001) and abusive parenting behaviors (Chan, 1994; Webster-Stratton, 1988). The mean score for parenting stress on the Parenting Stress Index (PSI) (M = 74.5) was slightly higher than the national mean score of 69.0 (Table III.7), and slightly higher than the average (M = 73.4) reported among a sample of low-income parents enrolling children in Head Start (Reitman, Currier, & Stickle, 2002). On the PSI, 19 percent of RPG biological parents were categorized as having high-risk levels of stress, which is higher than 10 percent at high risk in the general population.

Box III.6. Standardized instruments used to assess adults

Mental health: SUD can cause, or result from, mental health problems. For example, experiences of trauma strongly predict subsequent substance abuse problems (National Child Traumatic Stress Network, 2008). And both stress (Sinha, 2001) and depression (Grant, 1995) have been shown to either cause or result from substance use, based on findings from literature reviews and national epidemiological studies. To measure these mental health constructs, the cross-site evaluation measured adult trauma symptoms using the TSC-40, parental depression using the Center for Epidemiologic Studies Depression Scale, and parenting stress using the PSI.

Parenting attitudes: Parents with negative attitudes about parenting, in particular parents with unrealistic expectations for their children, can produce frustration, anger, and a potential for child abuse and neglect. The Adult-Adolescent Parenting Inventory-2 was developed to distinguish the attitudes about parenting of maltreating and nonmaltreating parents. It includes five subscales: expectations of children, parental empathy toward children's needs, use of corporal punishment, parent–child family roles, and children's power and independence. The cross-site evaluation selected this measure to describe those attitudes about parenting and the degree to which primary caregivers expressed attitudes that put their children at risk of maltreatment.

Table III.7. Measures of adult mental health at baseline

Baseline scale	Sample size	Sample mean score (SD)	National mean score (SD)	Percentage of adults in high-risk category	Percentage of adults in high-risk category in the national sample
Parenting stress	1,100	74.5 (21.2)	69 (15.5)[a]	19	10
Depressive symptoms	1,795	12.1 (9.0)	4.7[b]	36	6[b]

[a] National means and SDs for the PSI-SF were calculated based on the percentile ranks associated with raw scores in the scoring manual (Abidin, 1995).

[b] In a representative sample of low-income parents of children in Head Start in the 2009 cohort of the Family and Child Experiences Survey.

Note: PSI-SF = Parenting Stress Index-Short Form; SD = standard deviation.

Parenting stress was assessed using the PSI-SF; depressive symptoms were assessed using the Center for Epidemiologic Studies Depression Scale (CES-D). For both measures, higher scores represent a worse mental health assessment score for the respondent.

Source: Baseline administration of standardized instruments, including data submitted to cross-site evaluation through August 2017.

Parental depression. RPG adults reported noticeably more depressive symptoms than a representative sample of low-income parents. The mean score for depressive symptoms (M = 12.1; Table III.7) was much higher than the mean score of 4.7 for a representative sample of low-income parents of children in Head Start in the 2009 cohort of the Family and Child Experiences Survey (FACES) (Aikens, Moiduddin, Tarullo, & West, 2012). Based on the Center for Epidemiologic Studies Depression Scale (CES-D), 36 percent of RPG adults were severely depressed, which was also much higher than the 6 percent reported in FACES. These results suggest that a subset of RPG adults was likely to require further evaluation and assessments to identify interventions to address these potential mental health issues that could adversely affect child safety.

Parenting attitudes. Across the five parenting attitudes measured by the cross-site evaluation, 15 to 27 percent of the adults in the RPG sample expressed attitudes classified as indicating a potential risk for maltreatment. In four of the five categories of attitudes about parenting assessed by the Adult-Adolescent Parenting Inventory-2 (AAPI-2) instrument, the RPG sample had slightly higher (worse) parenting attitudes, compared with the national average (Table III.8). More specifically, on average, RPG adults expressed attitudes that suggested (1) inappropriate expectations for their children, (2) lack of empathy for their children, (3) that they oppressed children's independence, and (4) that they valued corporal punishment, more so than the average or typical caregiver. In sum, the AAPI-2 results illustrate that some attitudes held by a subset of the adult population do place children in the home where there is a risk of maltreatment.

Table III.8. Parenting attitudes at baseline

Parenting attitude	Sample mean (SD)	Percentage of adults in high-risk category	Percentage of adults in high-risk category in the national sample
Inappropriate expectations for child	6.1 (1.7)	18	16
Lack of empathy for child	6.2 (2.0)	27	16
Oppresses child's independence	5.9 (2.2)	27	16
Treats child like an adult peer, not a child	5.5 (2.0)	15	16
Values corporal punishment	5.6 (1.9)	16	16

[a] National means and SD (mean = 5.5, SD = 2) for the AAPI-2 are presented in the scoring manual for the instrument (Bavolek & Keene, 1999).

Note: AAPI-2 = Adult-Adolescent Parenting Inventory-2; SD = standard deviation.
These scales are transformed so that higher scores indicate negative parenting attitudes.

Source: Baseline administration of the AAPI-2 instrument, including data submitted to cross-site evaluation through August 2017 (n = 2017).

2. Child well-being

The RPG program not only aims to maintain or increase children's safety and permanency but to improve their well-being. The standardized instrument that collected data at baseline when children entered RPG also provided additional measures of children's risk. These risks were more common among RPG focal children compared with national samples of children.

Sensory processing. Focal children in RPG were deficient in sensory processing at baseline compared to a national sample of children. Assuming that several focal children may have had prenatal exposure to substances, research suggests that they may develop limitations with sensory processing as infants or toddlers (Chasnoff, Wells, Telford, Schmidt, & Messer, 2010). Based on the Infant-Toddler Sensory Profile (ITSP), which identified children who were over- or under-responsive to stimuli, at RPG entry, 34 percent of focal children in RPG fell into the high-risk category (that is, under-responsive in terms of registering audio, visual, or tactile stimulation, or over-responsive to these stimuli) for sensory processing (Table III.9). This rate of atypical sensory processing is worse than the 32 percent of children in the high-risk category in the national sample.[17]

[17] The sample or national mean (or standard deviation) for the ITSP is not reported because the scores are not ordinal in terms of measuring problems (that is, scores either too low or too high indicate problems).

Box III.7. Standardized instruments about child well-being

Sensory processing. Sensory processing, the way the brain takes the information from the senses and turns it into appropriate behavioral responses, is one of the areas shown to be affected by prenatal substance exposure (Chasnoff, Wells, Telford, Schmidt, & Messer, 2010). Children who have difficulties processing sensory information or responding to the information through appropriate behaviors are considered to have sensory processing disorder. They often have difficulties performing everyday tasks and exhibit elevated emotional and behavioral problems and lower levels of adaptive social behaviors (Ben-Sasson, Carter, & Briggs-Gowan, 2009). The cross-site evaluation used ITSP (Dun, 1999, 2002) to examine sensory-processing difficulties of children in the RPG. The ITSP identifies children who are over- or under-responsive to stimuli, both of which indicate sensory processing difficulties and can be detrimental to children's well-being. These children are characterized as being at high risk. The ITSP can be used with children ages birth to 36 months.

Executive functioning. Executive functioning, a set of skills such as inhibiting impulses, flexible thinking, and working memory that children can use to regulate their emotions and behaviors, is another area that prenatal substance exposure can affect (Behnke, Smith, Committee on Substance Abuse, and Committee on Fetus and Newborn, 2013). Caregiver parenting skills are also a correlate of executive functioning (Masten, 2011). Children with difficulties in executive functioning are also prone to exhibiting social skill deficits and problem behaviors (Schonfeld, Paley, Frankel, & O'Connor, 2006). For these reasons, the cross-site evaluation used the Behavior Rating Inventory of Executive Function (BRIEF) to assess children's difficulties in controlling their impulses, moving freely from one situation or activity to another, controlling emotional responses, or being organized. There are two age-specific versions of the BRIEF: the BRIEF-P for preschool children (ages 2 to 5 years) (Gioia, Espy, & Isquith, 2003) and the BRIEF for school-age children (ages 5 to 18 years) (Gioia, Isquith, Guy, & Kenworthy, 2000).

Children's behavior. Children's emotional and behavioral problems are also associated with caregiver substance use (Behnke et al., 2013), caregiver well-being, and parenting stress and skills (Neece, Green, & Baker, 2012). The cross-site evaluation used the Child Behavior Checklist (CBCL) to measure children's emotional and behavior problems, including internalizing (for example, anxiety, depression) and externalizing (for example, attention, aggression) problems and total problems (combination of the two former categories and other problems). There are two versions of the CBCL—one for preschool-age children (ages 1.5 to 5.0 years) (Achenbach & Rescorla, 2000) and one for school-age children (ages 6 to 18 years) (Achenbach & Rescorla, 2001).

Socialization. Experience of maltreatment is related to deficits in socialization skills ("the performance of daily activities required for personal and social sufficiency" [Sparrow, Cicchetti, & Balla, 2005, p. 6]) that put children at increased risk for developmental delays, poor relationships with peers, or falling behind in school (Becker-Weidman, 2009; Viezel, Lowell, Davis, & Castillo, 2014). The cross-site evaluation used the Vineland Adaptive Behavior Scales II – Socialization scale (Vineland II) (Sparrow et al., 2005) in RPG to measure children's socialization skills, including interactions with others, use of play and leisure time, and use of coping strategies. The Vineland II can be used with individuals of any age.

Trauma symptoms. Exposure to traumatic events such as maltreatment or abuse can affect multiple domains of children's well-being and may have adverse effects into adulthood (Stoddard, 2014). Many traumatized children receiving services ended up in treatment for emotional or behavioral problems caused by exposure to trauma (Cohen, Berliner, & Mannarino, 2010). Thus, describing children's trauma symptoms can help identify risk factors for children receiving RPG services. The cross-site evaluation used TSCYC (Briere, 1999) to assess children's trauma symptoms at baseline. This measure is applicable to children ages 3 to 12 years. The TSCYC assesses post-traumatic stress disorder symptoms in children experiencing one or more traumatic events, such as anxiety, depression, anger or aggression, and post-traumatic stress.

Table III.9. Child well-being before receiving services at RPG entry

Aspect of child well-being	Sample size	Sample mean (SD)	National mean (SD)	Percentage of focal children in high-risk category	Percentage of children in high-risk category in the national sample
Sensory processing	605	n.a. [a]	n.a. [a]	34	32
Executive functioning	924	54.0 (14.7)	50 (10)	23	8–10
Emotional, behavioral, and other problems					
Emotional problems	1,021	52.0 (12.6)	50 (10)	20	10
Behavioral problems	1,013	53.0 (13.2)	50 (10)	21	10
Total problems score	1,012	52.6 (13.8)	50 (10)	23	10
Socialization	929	98.9 (25.5)	100 (15)	12	3

[a] The sample and national means and standard deviations for the Infant Toddler Sensory Profile are not reported, because the scores are not ordinal in terms measuring problems (that is, scores either too low or too high indicate problems).

Note: n.a. = not applicable; SD = standard deviation.

The sample sizes vary by measure because caregivers reported on different subsets of children depending on the child's age and due to instrument or item nonresponse.

Sensory processing was assessed using the Infant-Toddler Sensory Profile, executive functioning was assessed using the Behavior Rating Inventory of Executive Function, emotional and behavioral problems were assessed using the Child Behavior Checklist, and socialization skills were assessed using the Vineland Adaptive Behavior Scales. Higher scores on the Vineland II represent higher levels of socialization skills in children; higher scores on the remaining measures in the table represent more negative child outcomes.

Source: Baseline administration of standardized instruments, including data submitted to cross-site evaluation through August 2017.

Executive functioning. Focal children in RPG had more difficulties in executive functioning than a general population of children. At RPG entry, focal children scored 54 on average on the BRIEF and BRIEF-Preschool (BRIEF-P) assessment of executive functioning, compared with the national mean of 50 (Table III.9). The percentage of children classified as high risk in executive functioning also showed such a pattern when compared with the national sample. Nearly one-quarter (23 percent) of RPG children were classified as high risk; in contrast, 8 to 10 percent of children in the national sample were in the high-risk category (Gioia , Espy, & Isquith, 2000; Gioia, Isquith, Guy, & Kenworthy, 2003).

Emotional and behavioral problems. Relative to a national sample of children, focal children in RPG had more emotional and behavioral problems as well as a higher total amount of problem behaviors. The mean scores of emotional, behavioral, and total problems for focal children at RPG entry ranged from 52.0 to 53.0 on the CBCL, compared with the national mean of 50 (Table III.9). Up to 23 percent of children in RPG were categorized as at high risk for these problems; in comparison, 10 percent children in the national sample were in the high-risk category (Achenbach & Rescorla, 2000, 2001).

Socialization skills. More focal children in RPG were rated as high risk in socialization skills on the Vineland II compared with the national sample, although their average standard scores were comparable to the general population of children. The mean score of the Vineland II Socialization domain for focal children in RPG was 98.9 at program entry, similar to the national

mean of 100 (higher scores on the Vineland II represent higher levels of socialization among children) (Table III.9). However, 12 percent of focal children in RPG were classified as high risk; in comparison, about 3 percent of children in the national sample were in the high-risk category.

D. Alignment between intended target population and enrolled population

As a whole, RPG served adults with substance use issues and their children in or at risk of out-of-home placements. However, grantees differed in their individual performance in terms of enrolling this target population, and their project-specific target populations.

1. Grantees' performance meeting RPG criteria of enrolling adults with substance use issues

Some grantees were more successful than others in enrolling an adult population with substance use issues. The cross-site evaluation characterized an RPG project as successful at enrolling this population if it met at least one of the following criteria: (1) at least 50 percent of adults were characterized as high-severity drug or alcohol users as rated by the ASI; (2) at least 50 percent of adults had been enrolled in state-funded SUD treatment before enrolling in RPG; or (3) if the grantee solely enrolled cases via drug courts, residential SUD treatment settings, or when children were already in foster care as a result of family substance use issues.

Ten RPG projects successfully enrolled an adult population meeting one of these criteria of adults with substance use issues. Of the 10 projects, five served a population of adults in which the majority were high-severity drug or alcohol users as measured by the ASI. Two projects served families of adults who were in residential SUD treatment settings. Two projects served a majority of adults enrolled in state-funded SUD treatment before enrolling in RPG. Three projects served an adult population in which, by definition, the adult had a demonstrable substance use problem. These projects were working with adults in the drug court system or adults whose children had already been removed from the home as a result of substance abuse.

Four RPG projects were moderately successful at enrolling a target population of adults with substance use issues. These projects had at least 30 percent of enrolled adults with either a drug or alcohol use score placing them at high severity according to the ASI, or at least 30 percent of enrolled adults with prior enrollment in state-funded SUD treatment.

Three projects had limited success enrolling adults with demonstrable substance use issues. Among these projects, fewer than 30 percent of adults had high-severity ASI drug or alcohol use scores, and fewer than 30 percent of adults participated in state-funded SUD treatment.

2. Projects' performance meeting RPG criteria of enrolling children in or at risk of placement in foster care

All RPG projects succeeded in enrolling children meeting the age criteria they had set. Projects were also generally more successful enrolling families with children in or at risk of removal from the home than enrolling adults with substance use issues. The cross-site evaluation characterized a project as successfully enrolling this child target population if it met at least one of the following criteria: (1) at least 50 percent of children were in an out-of-home care setting at program entry, (2) at least 50 percent of children had experienced removal in the year before

program entry, or (3) at least 50 percent of children had experienced a reported maltreatment episode in the year before RPG program entry.

Thirteen RPG projects enrolled a child population that met at least one of these criteria. Nine projects met exactly one of the requirements, and four projects served populations that met multiple criteria. For example, one RPG project served a population in which 78 percent of focal children were in an out-of-home setting at program entry, 62 percent had experienced a removal in the year before program entry, and 70 percent were the subject of at least one report of maltreatment during this year, suggesting that the project had successfully enrolled a target population in which the overwhelming majority of children were in or at risk of an out-of-home placement.

Four projects were moderately successful at enrolling a target population of children. These grantees enrolled a population in which at least 30 percent of focal children met one or more of the criteria. Although these projects did not enroll a sample in which most children had demonstrable current or prior involvement in the child welfare system, 33 to 46 percent of children across grantees met at least one of these requirements.

3. Projects' performance meeting RPG criteria of enrolling both adults with substance use issues and children in or at risk of placements in foster care

Most RPG projects enrolled a target population of both children and adults. Nine projects enrolled populations in which both the majorities of adults *and* children met the intended target criteria discussed earlier. Five enrolled populations in which either the majority of adults or children met the target criteria but not both. Three projects enrolled a population in which fewer than 50 percent of adults and children met the target population definition.

4. Projects' performance enrolling samples that aligned with their project-specific inclusion criteria

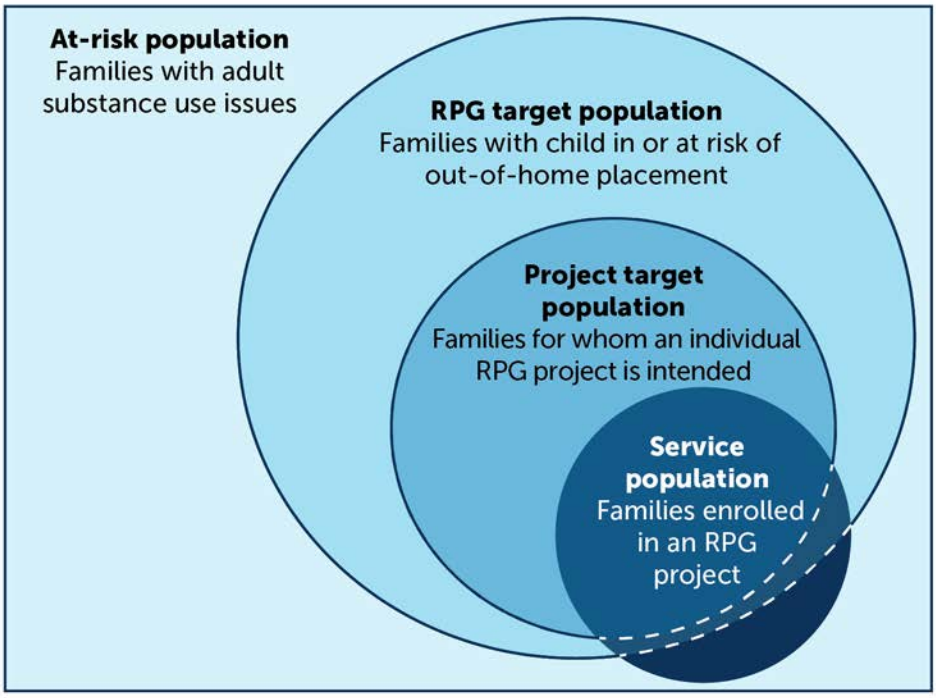
As noted earlier, most applications submitted by the funded RPG partnerships articulated a project target population that was largely in line with the RPG target population (families with adult substance use problems with children in or at risk of out-of-home placement) and focused on specific demographics to home in on their target population, such as serving mothers in residential SUD treatment settings or serving families with young children. But did the service population align with the RPG and project-specific target populations?

On average, RPG projects did serve a sample that met the RPG and project-specific targeting criteria. Of course, there were some exceptions. For example, about 3 percent of families enrolled in RPG included children outside of the target age ranges identified by the selected projects, and a small number of projects served families where less than half of the enrolled sample was in or at risk of out-of-home placement. However, this was the exception, and most projects did enroll a sample that aligned with their intention.

Figure III.3, an updated version of Figure III.1, displays this finding. The service population, the new dark blue circle, largely overlaps with each grantee's intended target population, identified as the project target population. A substantial majority of the service population had characteristics of the locally defined grantee project target populations as well as the more

broadly defined RPG target population. (Note: the size of the box and circles in Figure III.3 are not proportional to their numbers in the national or project-specific populations.)

Figure III.3. The RPG target population, project target population, and service population



E. A profile of opioid users

The Adoption and Foster Care Analysis and Reporting System (AFCARS) data for FY 2015 showed that the number of children in foster care, after declining for 7 years, had increased for the third consecutive year (Children's Bureau, 2016a). Over that time (FY 2012 to FY 2015), the percentage of child removals that cited parental substance use as a contributing factor increased 13 percent, the largest percentage increase compared with any other circumstance related to removal (Children's Bureau, 2016b). Updated AFCARS data showed that the number of children in foster care continued to rise for the fourth consecutive year in 2016 (Children's Bureau, 2017). The data showed that 34 percent of FY 2016 cases cited parental drug use as the primary reason for children entering care, up from 32 percent in FY 2015. About 92,000 children were removed from their homes in FY 2016 because of a drug use problem.

Box III.8. Substances used

When looking at use of specific substances by RPG adults in the 30 days before enrollment, more adults reported using cannabis or marijuana (23 percent) than any other substance. Prescription opioids, amphetamines, and sedatives were the next most commonly used substances among RPG adults, with 9 to 16 percent of adults reporting recent use. Methadone and heroin were less common, with recent use reported by about 4 percent of the sample.

From 2003 to 2018, the number of individuals with SUDs involving opioids (heroin and prescription pain relievers) rose from about 1.5 to 2.0 million (SAMHSA, 2019). Furthermore,

opioid abuse or dependence during pregnancy increased 127 percent from 1998 to 2011 (Maeda et al., 2014). The alarming rise of opioid use has led to a large federal effort, the Comprehensive Addiction and Recovery Act, which includes increased funding for evidence-based opioid and heroin treatment and intervention programs (Pub. L. 114-198).

Recent increases in the misuse of opioids could be causing or contributing to this increase in substance use–related removals (Breslin, 2018; Conn, 2018).

To better understand their backgrounds, the cross-site evaluation examined the subset of adults enrolling in RPG who indicated as part of the ASI that they were recent opioid users. Adults were classified as opioid users if they used heroin, methadone, and/or prescription opioids in the 30 days before program entry, based on self-report data on the ASI-SR.[18]

About 20 percent of adults were classified as opioid users, according to this definition. Among opioid users, 63 percent solely used prescription opioids, 11 percent used heroin alone, and 10 percent used methadone alone. Only 15 percent of adults used multiple forms of opioids: most commonly, they used prescription opioids and either heroin or methadone, but not both.

Compared with all other adults taking the ASI at enrollment, opioid users:

- **Were more frequent users of all other drugs.** More than one-third (36 percent) of opioid users versus 23 percent of all adults reported using cannabis or marijuana; 26 percent of opioid users versus 13 percent of all adults reported using amphetamines; and 27 percent of opioid users versus 9 percent of all adults reported using sedatives.
- **Had greater mental health problems.** Opioid users reported more depressive symptoms (49 percent of opioid users versus 36 percent of all adults were severely depressed) and had about 17 percent more trauma symptoms than the broader sample of RPG adults.
- **Expressed more high-risk parenting attitudes that place children at risk for maltreatment.** Almost one-fourth (23 percent) of opioid users versus 20 percent of all adults had high-risk parenting attitudes that placed their children at risk for maltreatment.

In Chapter V, the cross-site evaluation revisits this subgroup of interest to consider whether and how these risks changed over time.

F. Limitations

Three prominent limitations affect the analyses and findings described here:

1. Grantees might have adapted their criteria for their target population based on experiences during the planning or early implementation phases of the study. In such cases, the cross-site evaluation could have characterized a grantee as underperforming by holding it accountable

[18] Methadone is a synthetic opiate primarily used in the detoxification and maintenance of patients who are dependent on opiates—particularly heroin (Anderson and Kearney, 2000). It may also be prescribed to treat pain, and is subject to misuse and abuse (National Institute on Drug Abuse, 2018). The data collection instrument used for the cross-site evaluation did not ask respondents who reported using methadone whether it was as part of treatment.

to an out-of-date description of a target population that was not its final intended target population.

2. The data used by the cross-site evaluation to assess grantees' performance in enrolling adults with substance use issues might not be optimal in all cases. To operationalize adult substance use issues, the cross-site evaluation relied on the ASI, a self-report instrument that might be prone to under-reporting of substance use frequency and severity (Ehrman, Robbins, & Cornish, 1997; McDonell et al., 2016).

3. The administrative data on publicly funded SUD treatment participation used in the cross-site evaluation does not capture individual enrollment in private-pay settings, so it might also undercount the number of participants who had engaged in treatment before enrolling in RPG projects.

IV. WHAT TYPES OF SERVICES DID RPG FAMILIES RECEIVE?

To qualify for the second round of 5-year RPG grants made in 2012, applicants had to adopt and implement specific, well-defined program services and activities that were based on or informed by evidence.[19] They were also expected to ensure their programs were an appropriate fit for the characteristics and needs of the groups targeted for services (Administration for Children and Families, 2012a). *Evidence-based programs or practices* use a defined curriculum or set of services, which when implemented with fidelity as a whole, have been validated by some form of scientific evidence. *Evidence-informed programs or practices* use the best available research and practice knowledge to guide program design and implementation; they allow for innovation while incorporating the lessons learned from existing research (Child Information Gateway, n.d.). The cross-site evaluation referred to 51 named, well-specified program or practice models proposed in the successful grant applications as evidence-based or evidence-informed programs or practices or "EBPs" (for more information, see Strong et al., 2013, and Appendix D).

However, research shows the services delivered to families in the child welfare system are typically not evidence-based treatments (Bauman et al., 2015; Horwitz et al., 2014; Hurlburt, Barth, Leslie, Landsverk, & McRae, 2007; National Academies of Science, Engineering, and Medicine, 2016). Only in the past decade have discussions emerged about using EBPs for families involved in child welfare who have co-occurring SUDs and/or mental and behavioral health conditions (Barth et al., 2005; Chaffin & Friedrich, 2004; Horwitz et al., 2014; Swenson & Schaeffer, 2011).

Box IV.1. A summary of key implementation findings

- RPG projects offered a single EBP or multiple EBPs as part of a menu or package to meet the needs of their target populations. Some projects enrolled families in fewer EBPs than they offered.
- Most RPG families received one EBP. Families receiving more than one EBP were mostly enrolled in grantees offering a package that typically included SUD-focused EBPs.
- Family strengthening was the type of EBPs most commonly offered by projects and received by families, followed by therapy or counseling and SUD-focused EBPs.
- The EBPs grantees selected to implement generally aligned with the target populations served by grantees under the RPG projects.
- Most families received less than the developers' recommended dosage of a focal EBP.
- Focal EBPs were mostly attended by adults, and session discussions focused on adult-centered topics.
- Most families were engaged in EBPs, but engagement declined over time.
- Families enrolled in RPG for about 6 months on average, with about 5 months in EBPs, but this varied widely by grantee.
- Half of RPG families successfully completed their RPG programs.

[19] Evidence-informed practices use the best available research and practice knowledge to guide program design and implementation (HHS, 2011).

Understanding how service providers offered EBPs and how RPG families received them, particularly in a field that has historically been slow to adapt and integrate EBPs (Aarons, Hurlburt, & Horwitz, 2010), was a central goal of the cross-site evaluation. This chapter describes the EBPs offered by grantees and how the EBPs were delivered to RPG families. Specifically, it aims to answer two program-focused research questions:

1. Which EBPs did the RPG projects select and how did they align with RPG projects' target populations and goals?
2. How were the EBPs implemented, and what services were provided?

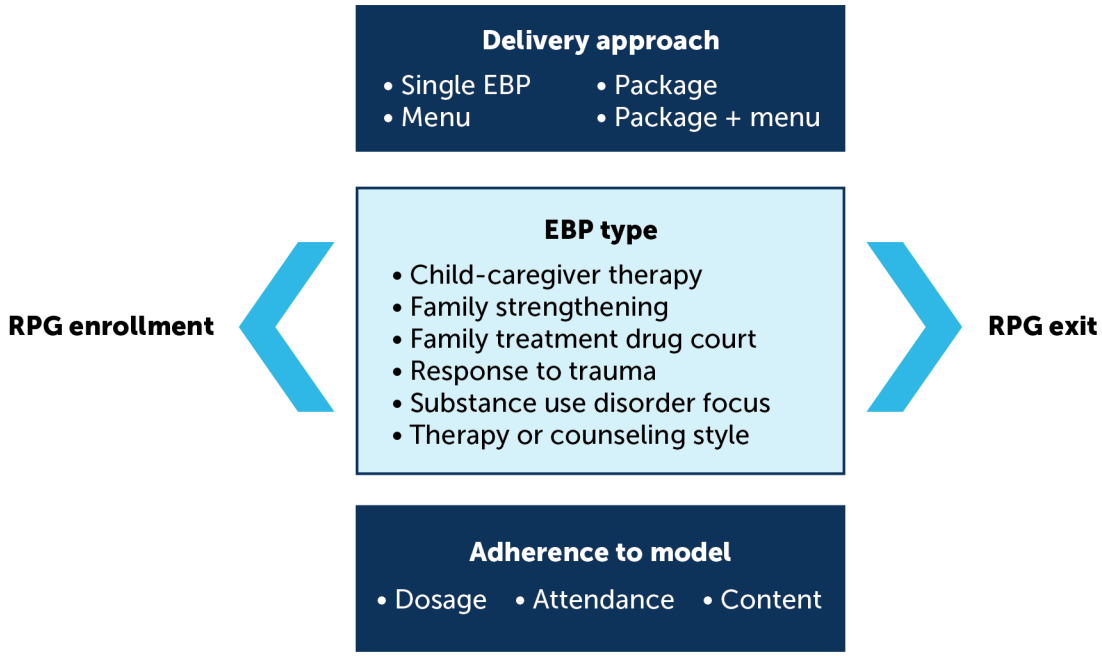
The structure of the chapter follows the expected path of families through RPG programs. Section A describes this path and introduces a figure used to illustrate and examine the path. Section B identifies the number and types of EBPs grantees offered and the ones in which participants were actually enrolled. Section C discusses, in more detail, the implementation of 10 EBPs that were studied in depth for the cross-site evaluation, including the dosage, duration, and content of services. Section D describes program completion and exit. Section E describes limitations of the data and analyses.

A. Path through RPG

Figure IV.1 illustrates the typical flow for families from RPG enrollment to receipt of services in the setting of an EBP to family exit from their RPG program. As it shows, when a family enrolls into an RPG project, indicated by the arrow on the left of the figure, they are offered one or more EBPs. These EBPs can be classified into types based on the focus of the service, as shown in the large center box of the figure, labeled "EBP Type."

The number and combination of EBPs available to families as part of each RPG project were influenced in part by which of four delivery approaches the RPG partnerships established. The different approaches that the projects used, as developed from cross-site evaluation data, are listed in the top box. When a family receives an EBP, several measures regarding whether the EBP's delivery adheres to the EBP developer's specifications can determine the family's experience. These factors include program or practice dosage, attendance, and content, as presented in the bottom box of the figure. At some point after enrolling and participating in EBPs, families then exited the RPG project, either by completing EBPs and services or dropping out. This chapter covers each of these components of the RPG project flow, except for RPG enrollment, which Chapter III discussed. This chapter will address the elements of the figure in more detail.

Figure IV.1. RPG project service delivery and family receipt of services flow



B. EBPs offered and received

Unlike many grant programs, RPG did not require all partnerships to implement a common program model or approach to their projects. As a result, to address the needs of their target populations, grantees offered a variety of EBPs. Some grantees provided psychosocial EBPs common in behavioral health, others chose family support services, and still others provided SUD treatment. Some grantees offered a combination of EBP types.

In addition to EBPs, projects offered services outside the setting of an EBP. These included case management, peer recovery supports, navigators, and wraparound services, for instance. In some cases, these non-EBP services were the focus of their RPG programs. For example, one project's main service was a family navigator who assessed families' needs, referred families to services provided by the grantee agency and other community providers, and helped to coordinate services received across providers.

To track EBP enrollment, grantees submitted data on when families enrolled into and exited from each EBP they received. These data provide information on how many EBPs each family received and for how long.

1. RPG projects offered single or multiple EBPs to meet the needs of their target populations

The variety of EBPs offered by RPG projects reflected the different decisions the partnerships made when designing their RPG projects to address the needs of their target populations and their approach to service delivery. Table IV.1 provides the number of EBPs each project ever offered. The fewest number of EBPs ever offered by an RPG project was 1 and the most was 17. Of the 17 RPG2 projects, 14 offered multiple EBPs and 3 offered a single EBP to families. The

highlighted section of Figure IV.2 shows that projects used one of four program delivery approaches to offer single or multiple EBPs:[20]

Table IV.1. EBP enrollments, by grantee

Grantee	Number of EBPs offered[a]	Number of EBPs with any enrollment[b]	Families enrolled in at least one EBP (percentage)	Average number of EBPs per family[c]
Single EBP				
Families and Children Together, Maine	1	1	38	1
Health Federation of Philadelphia, Inc.	1	1	75	1
Oklahoma Department of Mental Health and Substance Abuse Services	2[d]	2[d]	96	1
Package of EBPs				
Center Point, Inc., California	9	9	100	6
Helen Ross McNabb Center, Tennessee	13	6	81	2
Judicial Branch, State of Iowa	3	2	57	1
Kentucky Department for Community Based Services	6	6	66	3
State of Nevada Division of Child and Family Services	4	4	97	4
Menu of EBPs				
Children's Research Triangle, Illinois	7	5	83	1
Commonwealth of Massachusetts	5	5	79	3
Northwest Iowa Mental Health Center/Seasons Center	4	2	41	1
Preferred Family Healthcare, Missouri	17	11	98	2
Mixed strategy (package and menu)				
The Center for Children and Families, Montana	10	9	100	4
Georgia State University Research Foundation, Inc.	4	3	98	1
Sentara RMH Community Health, Virginia	4	4	99	3
Summit County Children Services, Ohio	3	3	28	1
Tennessee Department of Mental Health and Substance Abuse Services	2	1	76	1
Mean	5	5	75	2

[a] Number of EBPs offered is based on information from the Enrollment and Service Log and RPG site visits in fall 2015.

[b] Calculated as number of EBPs with at least one family enrolled.

[c] Calculated for families that participated in at least one EBP. Families that did not participate in an EBP were excluded.

[d] Only one EBP was offered to families in each of two subgroups: families required to receive parenting programming and individuals early in their recovery from substance use.

Note: EBP = evidence-based program or practice.

Source: RPG Enrollment and Service Log data from January 1, 2014, to July 14, 2017.

[20] These categorizations were introduced in the fourth Report to Congress (HHS, 2018). They have been revised to reflect additional information learned about RPG projects since the 2015–2016 site visits.

- **Single EBP.** Three of the RPG2 projects offered a single EBP to RPG participants. For example, one project's target population was families with children in out-of-home placements. These families received a variety of reunification-focused services through another agency, but the grantee noted that the parent–child relationship was not a focus of those services. The project filled this gap by offering RPG participants an EBP designed to strengthen and restore the parent–child relationship. The second of these three projects operated two EBPs but offered only one or the other of them to participating families. The project offered one EBP focused on parenting skills for families who were required by child welfare to receive parenting programming, and another EBP focused on therapy for individuals early in their recovery from SUD.
- **Package of EBPs.** Five RPG projects identified a set of EBPs that they would offer as an intact package of services for all or a subset of families these grantees served. For example, all families served in residential treatment by one project received the same set of three EBPs as a single package of services. Most of the projects taking this approach provided SUD treatment services, either in residential or intensive outpatient settings.
- **Menu of EBPs.** Four RPG projects developed individualized treatment plans for families based on their needs, and either the grantees' staff or the families themselves selected appropriate EBPs from a menu of available EBPs. One project, for example, received a mix of referred families with different short- and long-term needs, including those in an acute crisis or with an immediate need for intensive home services and those with mental health issues. Families were referred to different EBPs depending on their needs and the results of assessments done at intake by case workers. This differed from the package-of-services approach in that the project did not intend for each family to participate in all of the EBPs offered; instead, the grantee would offer the services (one or more EBPs) that best fit the needs of the family.

Mixed package and menu. Five projects used a mixed approach. This typically took the form of a package of EBPs that all participants received as well as additional EBPs offered based on a family's need. For example, one project offered a core EBP to all families and offered an additional EBP to families with children who met screening criteria.

Figure IV.2. A key aspect of service delivery: delivery approach

Across the service delivery approaches described earlier, some RPG projects enrolled families in fewer EBPs than they offered, as shown in Table IV.1. Thus, some EBPs were planned for but not used. In many instances, for example, projects dropped or replaced EBPs. Some reasons for these changes were the lack of qualified staff or other capacity limitations, avoiding duplicating existing services, filling unanticipated gaps in needed services, and perceived mismatches between planned EBPs and the needs of the service population grantees actually enrolled.

2. Most projects enrolled families in one EBP, consistent with their intended service delivery approach

RPG projects' choice of a service delivery approach (a single EBP, a menu, or a package of EBPs) reflected an intention to deliver services in a certain way. In practice, projects adhered to their intended approach in most instances.

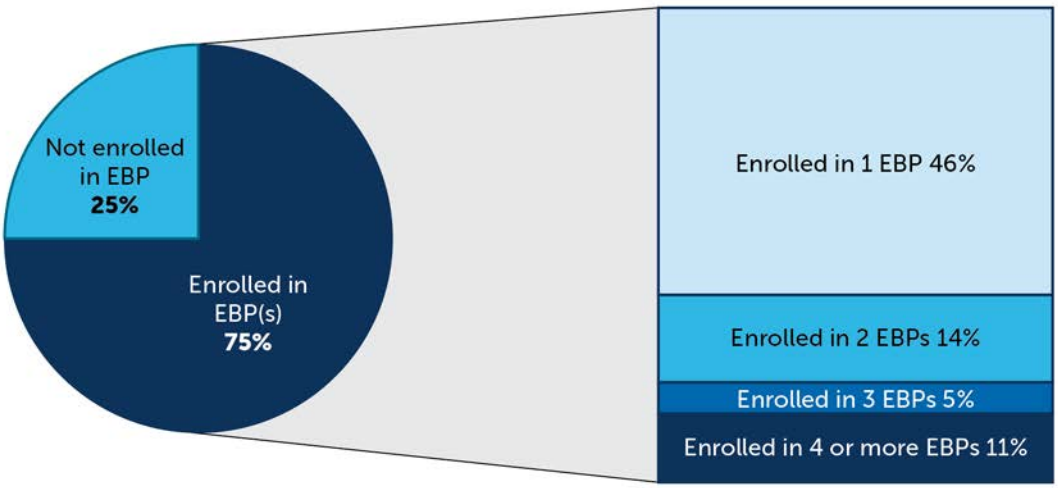
- **Single EBP.** These three projects offered a single EBP to families as planned.
- **Package of EBPs.** Four of the five projects in this category served families with multiple EBPs on average, in line with their planned approach. The one project that did not provide a package of services ultimately dropped one of the two EBPs it had planned to originally offer to families, so most families received only a single EBP.
- **Menu of EBPs.** Two of the four projects offering a menu of EBPs enrolled their families in a single EBP on average, whereas two projects enrolled families in two or more EBPs on average. Because the treatment plans were individualized in these grantees, families might not have been offered more than one EBP because RPG project staff recommended only one. Other families might have been urged to enroll in multiple EBPs; however, the data do not make it possible to discriminate between the two possibilities. Both are consistent with the menu-of-services approach, as this approach emphasizes determining the number of EBPs to use individually for each family.
- **Mixed package and menu.** Two of the five projects in this category enrolled families in multiple EBPs on average, whereas three did not. For at least two projects, selecting an additional EBP was optional and based on meeting specific screening criteria. Two other projects had difficulties with low enrollments into EBPs or dropped EBPs during the grant period because they were not a good fit for the needs and circumstances of the families they served. For these projects, although the intent was to serve families through multiple EBPs, this did not occur.

Thus, among RPG projects that proposed to offer a package or mixed strategy, which included more than one EBP, most grantees enrolled participating families in more than one EBP, on average. However, several projects, especially those that used a mixed strategy, experienced challenges doing so, and families served by some of these grantees received fewer than the intended number of EBPs.

3. Most RPG families enrolled in one EBP

Most families in RPG received only one EBP. Despite more than half of projects using a service approach than included a package of EBPs, only about 30 percent of all families in the cross-site evaluation actually enrolled in more than one EBP. Figure IV.3 shows the proportion of families in RPG enrolled in one or more or more EBPs among the 75 percent of participants enrolled in any EBPs, as shown in the pie chart on the left side of the chart. Most of those projects in which the average family received more than one EBP offered residential treatment services as part of their RPG projects. Residential treatment programs in RPG were more likely to offer a suite of EBPs as part of the encompassing nature of the treatment.

Figure IV.3. Number of EBP enrollments per family



Note: EBP = evidence-based program or practice.
Because of rounding, category percentages might add to slightly more or less than 100 percent.

Source: RPG Enrollment and Service Log data from January 1, 2014, to July 14, 2017.

Three-quarters of all RPG families in the cross-site evaluation successfully enrolled in at least one EBP. Table IV.1 shows that, of the 17 RPG projects, 12 enrolled at least 75 percent of their families in at least one EBP. Three projects enrolled fewer than 50 percent of their families in an EBP. For one of these three, the EBP offered was not the main focus of the program. The other two projects struggled with aspects of their RPG programs that influenced enrollment into EBPs, including low family enrollment into their RPG projects or lack of staff capacity.

One-quarter of families enrolled into RPG did not participate in any EBPs. This does not necessarily mean they did not receive any RPG services, however. For example, all projects offered case management services and some RPG projects offered peer mentoring and support, employment services, short-term housing assistance, or other services in addition to EBPs. The cross-site evaluation did not track these types of services. Some families, however, exited RPG before completing their RPG programs for possible reasons discussed in Section C. Projects might have intended to enroll these families in EBPs, but were unable to do so.

Participating families typically enrolled in an EBP soon after enrolling in RPG. For the average family, time to enrollment in their first EBP was 17 days, slightly more than 2 weeks after their initial enrollment into RPG. Thus, on average, projects enrolled a family into an EBP soon after entering RPG, rather than letting time lapse. Shortening the time participants have to wait after intake but before services begin might increase participants' engagement. One study in an outpatient facility by Crèvecoeur-MacPhail et al. (2010) showed an association with positive outcomes, including abstinence from or reduction in primary substance use and longer retention in treatment, related to service contacts within 30 days.

A few RPG projects, however, had average periods of 2 months or more between when a family enrolled into RPG and began receiving any EBPs. Staff caseload capacity might have

contributed to the extended wait for at least two grantees. One of the two projects had only enough staff to run one cohort of its group-based EBP at a time, so any families recruited after the start of the current cohort had to wait until the next cycle could start.

The other project struggled to retain staff, which kept its enrollment low. That project also replaced an EBP it initially selected because it was too demanding on staff time, choosing instead an EBP that was less demanding. In addition, one project enrolled families that required additional services, such as detoxification as a prelude to SUD treatment or inpatient services that the RPG project was not offering, before the family members could begin EBP services. Other projects also experienced delays in EBP enrollments because they had limited capacity to operate simultaneous group-based EBPs, so new RPG enrollees had to wait until the next EBP group began.

4. Family strengthening was the most commonly offered and used type of EBP

In total, RPG projects enrolled families into 35 EBPs with varying levels of evidence that the cross-site evaluation classified into six EBP types, as shown in the highlighted box in Figure IV.4 and defined in Box IV.2 (see Appendix D for a list of all EBPs offered by the RPG projects).[21] Nearly all grantees offered and enrolled families in a family-strengthening EBP. Table IV.2 displays the number of EBPs offered and used in each type of EBP as well as the percentage of RPG families enrolled in those EBPs. Fourteen projects enrolled families into 14 family-strengthening EBPs. In fact, nearly half (48 percent) of all RPG families enrolled in EBPs of this type. RPG projects provided family-strengthening EBPs as a key service to RPG families, regardless of the project's main focus. For example, projects that provided SUD treatment still provided family-strengthening services for RPG.

Figure IV.4. Key aspects of service delivery: EBP type commonly offered and received

[21] Projects offered nearly 50 EBPs in total, including EBPs for which projects had no enrollments because programs were dropped or replaced with others.

Table IV.2. EBP enrollments, by type

EBP type[a]	Number of EBPs with enrollments in each type	Number of grantees enrolling families in EBPs of this type[b]	Percentage of all RPG families enrolled in EBPs of this type
Family strengthening	14	14	48
Therapy or counseling style	5	11	23
SUD focus	9	8	22
Child–caregiver therapy	3	7	10
Response to trauma	3	3	2
Family treatment drug court	1	1	2

[a] EBPs were grouped into types using the approach from Strong et al., (2013), with two revisions: Seeking Safety is now classified as an EBP for SUD, and Trauma-Focused Cognitive Behavioral Therapy is now classified as a therapy or counseling EBP. Both were classified as response to trauma EBPs in Strong et al., (2013). These EBPs are complex models that can be classified in multiple categories. These two EBPs were reclassified based on information on how grantees were implementing these focal EBPs, and to equalize distribution of sample across the categories.

[b] Calculated as the number of projects with at least one family enrolled in a type of EBP.

Note: EBP = evidence-based program or practice; SUD = substance use disorder.

Source: RPG Enrollment and Service Log data from January 1, 2014, to July 14, 2017. A list of all EBPs in each type is provided in Appendix D.

Box IV.2. Six types of EBPs

The EBPs used by projects fall into six broad categories, in the following order of prevalence:

1. **Family strengthening.** These programs focus on at least one of the following goals: increasing family functioning, promoting family group decision-making, improving parenting or life skills, and supporting children's emotional and behavioral development. Programs in this category can serve both adults and children—for example, in sessions that break out into age groups—or can be directed only to adults.
2. **Therapy or counseling style.** These include evidence-based approaches to therapy or counseling that providers can use in various settings and include time-limited and goal-oriented counseling styles (for example, Cognitive Behavioral Therapy and Motivational Interviewing).
3. **SUD focus.** These programs seek to help clients overcome an SUD and avoid relapse. Programs can serve either individuals or groups and in an outpatient or residential setting.
4. **Child–caregiver therapy.** These therapeutic programs focus on the child–caregiver relationship; treatments include elements of family functioning, therapy, and in some cases, SUD treatment and response to trauma EBPs.
5. **Response to trauma.** Programs included in this group are designed for adults and/or children who have experienced trauma. Individual therapies or group curricula aim to help clients cope with trauma and develop resilience.
6. **Family treatment drug court.** These programs are specialized courts designed to work with families involved in the child welfare system due primarily to a parent's SUD. The court serves as a vehicle through which parents enter substance use treatment and receive wraparound services.

Source: Strong, Avellar, Francis, Angus, & Esposito, 2013.

The next most commonly used EBP types were therapy- or counseling- and SUD-focused EBPs. Eleven projects enrolled families in five therapy- or counseling-style EBPs, and 23 percent of all RPG families enrolled in one of these EBPs. Eight projects enrolled families in eight SUD-focused EBPs; 22 percent of all families enrolled in one of these EBPs. Ten percent or fewer enrolled in the other three types: child–caregiver therapy, EBPs providing response to trauma, or family treatment drug court.

5. How many RPG families included adults who received SUD treatment?

In addition to being enrolled in EBPs classified as having an SUD focus, adults might have received substance use services in addition to or outside of RPG. Specifically, families could also be enrolled in publicly funded SUD treatments from other (non-RPG) treatment providers. Based on both grantees' own information about SUD-focused EBP enrollments under RPG and the administrative data on participation in other publicly funded programs that grantees obtained from state child welfare agencies, at least 57 percent of families participated in SUD treatment during RPG.[22] This might underestimate the proportion of families in which an adult enrolled in SUD treatment. Two of the 17 grantees were unable to obtain administrative data on publicly funded substance use treatment for their states. Excluding those projects from the analysis results in 70 percent of families served by the other 15 grantees who were enrolled in some form of substance use treatment, before or during RPG.

6. EBPs largely aligned with projects' target populations

The EBPs projects selected to implement generally aligned with the target populations defined for the individual RPG projects. Most projects had broadly defined target populations that fit within the parameters of the RPG goal to serve families involved with child welfare due to parental or caregiver substance use issues. The types of EBPs offered aligned with the needs of that target population, such as family-strengthening programs, SUD treatment, and family treatment drug court as well as related needs, such as trauma-specific EBPs and therapies directed at the adult, child, or parent–child dyad.

However, a significant number of EBPs offered by the RPG projects might not have previously demonstrated effectiveness with the specific target population being served. After compiling evidence ratings from sources, such as the California Evidence-Based Clearinghouse for Child Welfare, for nine of the 50 EBPs offered by RPG projects, the cross-site evaluation concluded that evidence of effectiveness with families involved in child welfare because of adult substance use issues was lacking (Strong et al., 2013).[23]

For example, many projects adopted the Nurturing Parenting Programs to serve adult parents with substance abuse problems. At the time of the evidence review in 2013, that program,

[22] Grantees collected data on the characteristics of families entering RPG and the services received in a data collection system called the Enrollment and Service Log.

[23] Six of the nine included studies of families with substance use issues and five included studies with families involved in child welfare, but most did not include families in both categories. Although two program models reviewed were supported by studies with families with substance use issues and involved in child welfare, neither were studied with a randomized controlled trial.

although showing effectiveness with a child welfare population, did not have evidence of effectiveness with populations affected by substance use problems.

C. Implementing EBPs

To provide deeper analysis of services families received, the RPG projects collected detailed service data on 10 EBPs for the cross-site evaluation.[24] These *focal* EBPs represented the range of interventions that grantees were implementing, and each grantee implemented at least one of them. All 10 were session-based programs through which detailed data on various features and the content of each session could be collected (Box IV.3 describes the EBP implementation data).[25] The 10 focal EBPs did not encompass all six EBP types, so detailed implementation information is only available for three types of EBPs: family strengthening, SUD focus, and therapy-based EBPs (a combination of therapy- or counseling-style and child–caregiver therapy EBPs).

1. Nurturing Parenting Programs and Seeking Safety were the most used focal EBPs

The focal EBP with the largest enrollment was Nurturing Parenting Programs, categorized for the cross-site evaluation as a family-strengthening program. Table IV.3 shows the number of projects using each of the 10 focal EBPs, along with the number of families enrolled into them. Seven projects offered Nurturing Parenting Programs. Combined, they enrolled 697 families, almost one-quarter of all families enrolled in RPG. Curriculum-based family-strengthening focal EBPs, including Nurturing Parenting Programs, Celebrating Families!, and Strengthening Families Program, were offered by 11 projects, which enrolled 1,035 families in them.

Box IV.3. Data used for analysis on implementing EBPs

For each session of the focal EBPs provided to RPG families, grantees recorded the session date, attendees, session length, discussion topics, and alignment of the material received with the provider's plans. These data determined the frequency of EBP sessions, session length, and duration in the EBP,as well as the rates of attendance of individual family members and the content received. Multiple enrollments by an individual family into the same EBP were treated as separate receipt of that EBP. When grantees did not provide an EBP exit date for the family, the end of RPG cross-site data collection was used as the exit date.

Grantees also reported on family engagement in the EBP, once after the second session in which the family participated and again when the family left from the EBP (regardless of the number of sessions received). If a client never received a second session of an EBP, grantees then only reported an exit engagement score to the cross-site evaluation. For families that exited an EBP after two or more sessions, these data indicate how family engagement changed over the course of the EBP, for however long they received the EBP.

Seeking Safety was the second most-used focal EBP. Seven

[24] Including all EBPs for in-depth investigation in the study was not feasible because of the burden it would place on RPG projects to report on all the programs. Therefore, HHS selected a subset of 10 focal EBPs as the focus for detailed study, by assessing them against criteria developed during the design phase of the study (Strong et al., 2014).

[25] The cross-site evaluation defined *session-based* as an EBP designed to be delivered in a specific format for a discrete duration, such as Nurturing Parenting Programs. This would be in contrast to an EBP that involved practices or approaches that could be incorporated at any time in informal interactions as well as formal ones, such as Motivational Interviewing.

projects offered this EBP and enrolled a total of 499 families (17 percent of all RPG families). SUD-focused EBPs, including Seeking Safety, were offered by eight RPG projects; projects enrolled a total of 603 families in this type of EBP. Of the eight projects offering SUD-focused programs, six offered more than one EBP in this category.

A smaller number of RPG families enrolled in therapy-based focal EBPs. These EBPs combined the therapy- or counseling-style and child–caregiver therapy categories in Table IV.2. Eight projects offered this type of EBP. Cognitive Behavioral Therapy was the EBP in this category with the most enrollment; it served 198 families across three projects.

Table IV.3. Focal EBP enrollment

Focal EBP	Number of grantees enrolling families in EBP[a]	Number of families enrolled
Curriculum-based family strengthening	**Total = 11 grantees**	**Total = 1,035 families**
Celebrating Families!	3	114
Nurturing Parenting Programs	7	697
Strengthening Families Program	3	243
Curriculum-based SUD focus	**Total = 8 grantees**	**Total = 603 families**
Hazelden Living in Balance	4	249
Matrix Model	4	188
Seeking Safety	7	499
Therapy based[b]	**Total = 8 grantees**	**Total = 350 families**
Child–Parent Psychotherapy	4	126
Cognitive Behavioral Therapy	3	198
Parent–Child Interaction Therapy	2	34
Trauma-Focused Cognitive Behavioral Therapy	5	87

[a] Calculated as the number of projects with at least one family enrolled in the EBP.

[b] Therapy-based EBPs include both child-caregiver therapy EBPs and therapy- or counseling-style EBPs.

Note: EBP = evidence-based program or practice; SUD = substance use disorder.
EBPs in the table are listed alphabetically.

Source: RPG Enrollment and Service Log data from January 1, 2014, to July 14, 2017.

2. Most families received services for the duration recommended for each EBP but received fewer sessions than recommended

The cross-site evaluation examined the degree to which focal EBPs adhered to the parameters set by program and practice developers, as shown in Figure IV.5. The amount of services delivered and received, or dosage, is a key consideration in understanding how EBPs were implemented (Wasik, Mattera, Lloyd, & Boller, 2013). Information on dosage helps to determine the extent to which the implementation corresponds to the evidence-based program model (Dane & Schneider, 1998; Wasik et al., 2013). In addition, greater attention to fidelity and delivering dosage as intended as well as intensity of service delivery are associated with better participant and program outcomes (Derzon, Sale, Springer, & Brounstein, 2005; Durlak & DuPre, 2008).

Figure IV.5. A key aspect of service delivery: adherence to models

Measures of dosage reflect several program model components. These include: (1) the number of sessions, (2) session frequency, (3) session length, (4) overall duration of the model, and (5) cumulative dosage (Box IV.4 defines these terms). Table IV.4 provides each measure for the focal EBPs and indicates the developers' recommendations in terms of dosage. Some projects offered services in a manner that fits the constraints of their local projects, which may not have aligned with the developer's intent for dosage (such as providing an EBP that is expected to require 12 months of implementation in only 6 months).

Box IV.4. Definitions of key dosage terms

- *Recommended dosage:* The frequency, duration, or cumulative dosage of services recommended by program developers; for example, the recommended service duration for Celebrating Families! is 16 weeks.
- *Number of sessions:* The total number of interactions a family received using the EBP; for example, 24 sessions.
- *Session length:* The length of a session; for example, 60 minutes per session.
- *Service duration:* The length of time over which the EBP was delivered; for example, 12 weeks.
- *Frequency:* How often a family received the EBP; for example, two sessions per week.
- *Cumulative dosage:* The total amount of exposure to the EBP families received. Calculated by combining the number of sessions in which the family participated and the duration of each session received. For example, a family that received 24 60-minute sessions would have received a cumulative dosage of 24 hours.

Number of sessions. Some programs enroll participants but are unable to engage them in services. However, in RPG most families attended at least one session of the EBP in which they were enrolled. Just 3 to 6 percent of families never received any session of the focal EBP they were enrolled in, with the exception of Trauma-Focused CBT.[26] Across all focal EBPs, just 9 percent of families that attended *one or more* sessions attended *only one* session. That is, most families that participated in an EBP did so for at least two sessions.

Despite high levels of initial engagement in EBPs, more than half of the families enrolled in a focal EBP received fewer sessions of that EBP than recommended by the developer. The median number of sessions received matched or exceeded the recommended number of sessions for four focal EBPs: Celebrating Families!, Strengthening Families Program,

[26] The percentage of families not receiving any sessions is likely lower than the 11.4 percent reported for Trauma-Focused Cognitive Behavioral Therapy. One grantee implementing this EBP reported service data for only a subset of families. Without detailed service data for these families, it appears they never received a session.

Table IV.4. Focal EBP dosage received and recommended

Focal EBP	Families that did not receive any sessions (percentage)	Total number of sessions received: Median number of sessions actually received (max)	Total number of sessions received: Recommended total	Session length (in minutes): Average actual session length	Session length (in minutes): Recommended session length	Service duration (weeks): Average actual service duration	Service duration (weeks): Recommended service duration	Frequency of services (number of sessions per week): Average actual frequency	Frequency of services (number of sessions per week): Recommended frequency	Cumulative dosage (hours): Average actual cumulative dosage	Cumulative dosage (hours): Recommended cumulative dosage [a]
Curriculum-based family strengthening											
Celebrating Families!	6	16 (61)	12	82	150	23	16	1.0	1	26	30
Nurturing Parenting Programs	3	8 (40)	12–48	87	90	21	12–45	0.7	1	14	18–68
Strengthening Families Program	6	12 (15)	12	117	120	18	14	0.7	1	20	24
Curriculum-based SUD focus											
Hazelden Living in Balance	5	10 (66)	12–34	110	90–120	44	NA	0.6	Multiple	25	18–68
Matrix Model	4	15 (56)	36	121	90	42	12	0.7	3	35	54
Seeking Safety	3	5 (73)	25–30	94	60–90	23	12–24	1.2	1–2	14	25–45
Therapy-based[b]											
Child Parent Psychotherapy	3	4 (57)	52	56	60–90	27	52	0.3	1	11	52–78
Cognitive Behavioral Therapy	0	10 (61)	8–16	65	50	33	8–16	0.3	1	13	7–13
Parent–Child Interaction Therapy	3	6 (40)	10–20	54	60	35	14	0.3	1–2	9	10–20
Trauma-Focused Cognitive Behavioral Therapy	11	12 (15)	12	57	30–45	46	12–18	0.4	1	17	6–9

[a] Calculated based on the recommended total number of sessions and recommended session duration. For EBPs with a recommended range for either element, the recommended cumulative dosage is calculated as the lowest and highest bound, using those ranges.

[b] Therapy-based EBPs include both child–caregiver therapy EBPs and therapy- or counseling-style EBPs.

Note: EBP = evidence-based program or practice; NA = not available; SUD = substance use disorder.

EBPs in the table are listed alphabetically. The estimates are for cases that were closed or had not had a session within 28 days of the end of data collection, to account for cases that might still be receiving services and therefore had not yet received their full dosage of the EBP. The estimates are calculated at the EBP enrollment level. Individual families can enroll in the same EBP multiple times.

Source: RPG Enrollment and Service Log data from January 1, 2014, to July 14, 2017. Recommended number of sessions and service duration and frequency based on publicly available information from program developers and evidence reviews such as the National Registry of Evidence-Based Programs and Practices and the California Evidence-Based Clearinghouse.

Cognitive Behavioral Therapy, and Trauma-Focused Cognitive Behavioral Therapy.[27] For the remaining focal EBPs, fewer than half of families that attended one or more sessions received the number of sessions recommended by the developer. Participants in three EBPs had much lower average numbers of sessions received than the developers' recommendations: Matrix Model, Seeking Safety, and Child–Parent Psychotherapy. Lower dosage than recommended has been observed in previous studies for at least two of these EBPs. For example, in one study using the Matrix Model (Rawson et al., 2004) and two studies using Seeking Safety (Hien, Cohen, Miele, Litt, & Capstick, 2004; Najavits, Weiss, Shaw, & Muenz, 1998), participants with substance use issues attended only about half as many sessions as recommended by developers.[28] In the cross-site evaluation, one of the RPG projects responsible for most of the Child–Parent Psychotherapy enrollments did not intend to deliver the recommended number of sessions but a smaller number.

Session length. The average session length of each focal EBP met or exceeded developers' recommendations, generally lasting 1 to 2 hours. Families receiving two EBPs, Matrix Model and Trauma-Focused Cognitive Behavioral Therapy, on average had sessions that were longer than recommended. Only one EBP (Celebrating Families!) had sessions that on average were shorter than recommended.

Service duration. In general, the duration of EBP services met or exceeded the recommended duration of services. The average time spent in focal EBPs ranged from 18 to 46 weeks. The three curriculum-based family-strengthening programs had the shortest enrollment periods (18 to 23 weeks on average). Families enrolled in curriculum-based SUD focal EBPs and therapy-based focal EBPs generally were enrolled in services for a longer period, averaging 23 to 46 weeks.

The exception was Child–Parent Psychotherapy, designed to last 52 weeks. RPG projects provided Child–Parent Psychotherapy for 27 weeks on average, half of the recommended length. One project responsible for most of the families enrolled in Child–Parent Psychotherapy reported that families were often pulled away from Child–Parent Psychotherapy by the mandated requirements of the family court system (Child–Parent Psychotherapy was not a mandated service) or by negative changes in their lives. This project also had trouble arranging for children who were often in out-of-home placements to attend Child–Parent Psychotherapy sessions. Another project responsible for most of the remaining families in Child–Parent Psychotherapy did not attempt to offer the program with fidelity in terms of either length of treatment or involvement of the child in therapy.

Frequency of services. Most families received focal EBPs less frequently than recommended by program developers. Therapy-based EBPs had the lowest frequencies of services received by families, generally receiving one session every 2 weeks, rather than the recommended one or two sessions per week. Most families enrolled in curriculum-based family-strengthening EBPs received the EBP as frequently as recommended by developers. Among the curriculum-based

[27] The cross-evaluation team reports on the median number of sessions, another measure of central tendency, because the means were biased by a small number of families for each focal EBP that received a large number of sessions.

[28] These studies report on the mean number of sessions.

SUD-focused EBPs, families received Seeking Safety with the recommended session frequency. However, most families did not receive Matrix Model or Hazelden Living in Balance as frequently as recommended.

Cumulative dosage. Most families enrolled in a focal EBP did not receive the total cumulative dosage recommended by the developer. The dosage for some EBPs often depended on the context in which the EBP was used. Families enrolled in residential SUD treatment programs, for example, often received a larger dosage of an EBP than those in grantees using the same EBP in outpatient services because residential treatment typically involves much more frequent sessions than outpatient treatment. One grantee provided residential treatment services using Hazelden Living in Balance (among other EBPs). Families served by this project received three times as many sessions as families served by grantees using Living in Balance in outpatient services (about 23 sessions, compared with about 7 sessions in outpatient).

The types of EBPs families enrolled in also contributed to the differences in cumulative dosage across grantees. For example, families served by projects providing curriculum-based SUD-focused EBPs typically received the highest total number of program hours. In contrast, families enrolled in RPG projects providing therapy-based focal EBPs received the lowest dosage of services in general.

3. Focal EBPs were attended mostly by adults

RPG services were targeted primarily at adults and the adult in a family who attended most of the EBP sessions. This is consistent with the fact that all focal EBPs aimed to serve adults either exclusively or with their children. Grantees identified the adult intended to receive services, and for most focal EBPs, this adult attended more than 95 percent of sessions. Table IV.5 shows the percentage of sessions attended by the adult followed for the cross-site evaluation as well as the percentage attended by any child in the family. In only two focal EBPs did the followed adult attend fewer than 95 percent of sessions.

Trauma-Focused Cognitive Behavioral Therapy was the only EBP without high attendance from the adult identified to receive services. For the average family enrolled in Trauma-Focused Cognitive Behavioral Therapy, the focal adult attended 40 percent of sessions. The relatively low rate of adult participation might reflect the fact that it requires separate sessions for parents and their children; therefore, for each family's enrollment into the EBP, the adult and the child each would attend only a portion of the sessions received and would be absent from those they were not expected to attend. A higher proportion of sessions for Trauma-Focused Cognitive Behavioral Therapy, 59 percent, were attended by a child only, without any adult, compared with other EBPs. Only 3 percent of sessions in other EBPs included a child without an adult.

Children's attendance and the number of family members at each session varied with the structure of the EBP. On average, at least one child in a family attended 30 percent of all EBP sessions, but children were more likely to attend Strengthening Families Program and therapy-based EBPs.

Table IV.5. Focal EBP attendance, by family member

Focal EBP	Percentage of sessions attended by		Average number of family members attending each session
	Focal adult	Any child family member	
Curriculum-based family strengthening			
Celebrating Families!	99	16	1
Nurturing Parenting Programs	98	23	1
Strengthening Families Program	97	88	3
Curriculum-based SUD focus			
Hazelden Living in Balance	97	4	1
Matrix Model	100	<1	1
Seeking Safety	98	21	1
Therapy-based[a]			
Child Parent Psychotherapy	96	42	2
Cognitive Behavioral Therapy	96	25	2
Parent-Child Interaction Therapy	85	87	2
Trauma-Focused Cognitive Behavioral Therapy	40	76	1

[a] Therapy-based EBPs include both child–caregiver therapy EBPs and therapy- or counseling-style EBPs.

EBP = evidence-based program or practice; SUD = substance use disorder.

Note: EBPs in the table are listed alphabetically.

Source: RPG Enrollment and Service Log data from January 1, 2014, to July 14, 2017.

Although many EBPs are designed to be implemented with a parent and child (Child–Parent Psychotherapy or Parent-Child Interaction Therapy), or with the full family (Strengthening Families Program or Celebrating Families!), providing services for both the parent and child often posed a challenge for RPG projects. This was especially challenging for projects serving parents who did not have custody of their children. For example, two projects implementing Child–Parent Psychotherapy engaged with the parents alone more often than with the children because the parents did not have care of the children. In other words, the children's involvement in child welfare presented a challenge to implementing the EBP in the planned manner.

4. Session discussions focused on adult-centered topics

The vast majority of EBP sessions covered at least one of the six main topics: adult SUD treatment, adult parenting skills, adult personal development, youth therapy and development, youth substance abuse education, and other adults' education on substance abuse. (Box IV.5 describes the focal EBP session topics.) This suggests that most sessions of the focal EBPs stayed aligned with topics that were relevant to the RPG target population. Only 3 percent of sessions did not discuss any of the six defined topics.

Across the 10 focal EBPs, session discussions focused more heavily on topics discussed with adult family members than with children. Table IV.6 reports the percentage of sessions that included discussions on each of the six topics. About half of all sessions focused on the three adult-centered topics; families discussed youth therapy and development topics in 16 percent of all sessions. This is consistent with the fact that adults were more likely to attend a session of a

focal EBP. Strengthening Families Program, Child–Parent Psychotherapy, and Trauma-Focused Cognitive Behavioral Therapy are the only EBPs to devote substantial sessions to youth development and therapy topics. One family-strengthening EBP, Celebrating Families!, sought to include discussion of youth topics, but the grantee that contributed most of the data for this EBP did not use the child component of the program model in its RPG services.

Occasionally, families discussed topics in sessions that were not typical for the EBP used. These deviations often occurred when key participants for the EBP did not attend the sessions. For example, the two grantees that often implemented Child–Parent Psychotherapy without the child present often discussed topics related to the adult's substance abuse problem, which is not typically part of Child–Parent Psychotherapy, perhaps as a way to provide services to the adult in the child's absence.

Box IV.5. Focal EBP session topics

- Grantees reported on which topics service providers discussed with those in attendance during each session of the focal EBPs. The cross-site evaluation developed possible topic options by identifying common themes from the content of the focal EBPs. These were grouped into six main topics that also were highly relevant to the clients that RPG was designed to serve: adult SUD treatment, adult parenting skills, adult personal development, youth therapy and development, youth substance abuse education, and other adults' education on substance abuse.
- Adult personal development was the most common adult topic of discussion. Common personal development topics included fostering the ability and commitment to make healthy choices; developing life management skills; fostering healthy, safe relationships and boundaries; and learning to identify and express feelings.
- Common parenting topics included strategies to promote positive family interactions, teaching to serve as an emotional base for the child, and fostering the ability to communicate with the child.
- Common SUD topics included identifying and preventing destructive behaviors, fostering honesty and responsibility, and fostering self-help skills.
- Common youth development topics included fostering communication and social skills and learning to identify and express feelings.
- Other adults' education on substance abuse problems captured discussions with adults who were not members of the RPG case but attended sessions of the focal EBP. For example, extended relatives could attend specific sessions of SUD programs to learn about relapse and recovery.

Table IV.6. Main focal EBP session topics

Focal EBP	Main topic (percentage of sessions)					
	Adult SUD treatment	Adult parenting skills	Adult personal develop-ment	Youth therapy and develop-ment	Education of youth on SUDs	Education of other adults on SUDs
Curriculum-based family strengthening						
Celebrating Families!	26	73	27	3	2	1
Nurturing Parenting Programs	41	85	68	<1	0	1
Strengthening Families Program	7	90	45	69	6	1
Curriculum-based SUD focus						
Hazelden Living in Balance	82	15	60	1	0	2
Matrix Model	86	10	45	1	1	8
Seeking Safety	65	12	70	1	<1	1
Therapy based[a]						
Child–Parent Psychotherapy	32	59	67	41	0	2
Cognitive Behavioral Therapy	90	39	80	3	<1	1
Parent–Child Interaction Therapy	1	99	15	10	0	0
Trauma-Focused Cognitive Behavioral Therapy	11	12	17	82	2	0
Average	**52**	**44**	**56**	**16**	**1**	**2**

[a] Therapy-based EBPs include both child–caregiver therapy EBPs and therapy- or counseling-style EBPs.

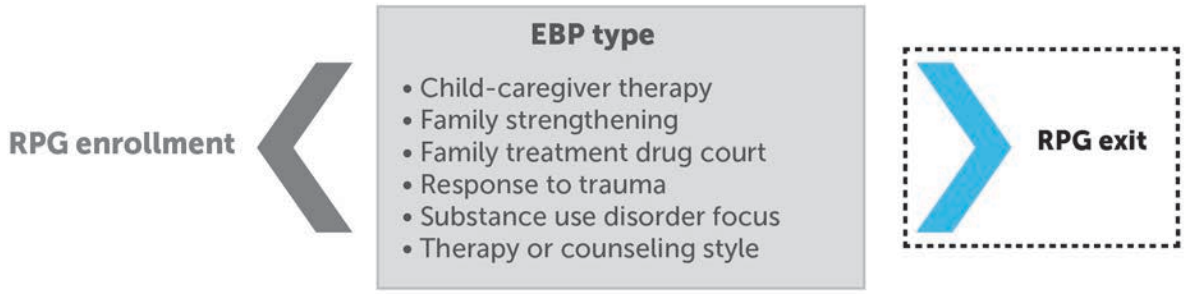
Note: EBP = evidence-based program or practice; SUD = substance use disorder.
EBPs in the table are listed alphabetically.

Source: RPG Enrollment and Service Log data from January 1, 2014, to July 14, 2017.

D. Program completion and exit

As shown in Figure IV.6, families exit RPG typically after they are offered services through one or more types of EBPs, which they either complete or drop out of before completing. As shown in Box IV.6, as the final point of service contact with families, grantees reported the date the family left RPG and the reason they left. These data provide information on the length of RPG enrollment, the proportion of families that completed RPG, and common reasons families did not complete services.

Figure IV.6. RPG program completion and exit



1. Families were enrolled in RPG for 6 months, on average

Examination of closed cases shows that families were enrolled in RPG for about 6 months, on average. Table IV.7 provides the length of RPG enrollment for each RPG project, for all families, and for only those whose case closed before the end of cross-site evaluation data collection. The shortest average family enrollment in a project was 43 days, whereas the longest was almost a year and a half. Of 17 grantees, 10 served families on average for longer than 6 months. There was no required length of RPG project services; thus, the length of enrollment was driven by design and defined by each project's menu of programs and services based on the needs of the target population. For example, one project designed its services to last about 6 weeks, intending to provide intensive family preservation services and Seeking Safety during that time.

Box IV.6. RPG case closure

Each family is a case in an RPG project. Grantees closed a case at the conclusion of RPG services for that case. Grantees defined successful project completion in consultation with their local evaluators and HHS based on their requirements for families in their RPG project. They also were encouraged to adopt a grace period for cases that had lapsed from services to allow cases a set amount of time (for example, 60 days) before they would consider the case closed.

2. Half of RPG families with closed cases had completed RPG

At the end of data collection, RPG projects had closed 78 percent of their cases, ranging from 17 to 97 percent across projects. Cases still open at the end of data collection might have stopped participating but did not have a closure date indicated. Measuring their participation as the length of time from their enrollment in RPG to the end of data collection likely overestimates the length of time they spent actually participating in RPG. Table IV.7 shows the percentage of cases closed for each project. The seven projects that closed less than 75 percent of cases had much longer average enrollment lengths among their open cases, compared with their closed cases. This could indicate that these projects erred on the side of leaving inactive cases open because they hoped or planned to reengage these families at some point. Alternatively, it could be that they had a subset of cases that required a longer duration of services.

Table IV.7. Length of enrollment in RPG

Grantee	Average number of days enrolled in RPG		Percentage of cases closed by grantee	Of closed cases, percentage of families successfully completing RPG
	All cases[a]	Closed cases		
Center Point, Inc., California	171	151	83	45
Georgia State University Research Foundation, Inc.	318	277	56	79
Children's Research Triangle, Illinois	440	528	78	57
Judicial Branch, State of Iowa	202	207	95	32
Northwest Iowa Mental Health Center/Seasons Center	270	129	20	18
Kentucky Department for Community Based Services	614	453	48	59
Families and Children Together, Maine	182	183	94	63
Commonwealth of Massachusetts	178	184	91	57
Preferred Family Healthcare, Missouri	230	224	88	37
The Center for Children and Families, Montana	568	148	17	0
State of Nevada Division of Child and Family Services	257	152	66	47
Summit County Children Services, Ohio	446	345	39	31
Oklahoma Department of Mental Health and Substance Abuse Services	108	108	93	75
Health Federation of Philadelphia, Inc.	375	327	63	28
Helen Ross McNabb Center, Tennessee	143	144	93	51
Tennessee Department of Mental Health and Substance Abuse Services	43	43	97	75
Sentara RMH Community Health, Virginia	248	243	75	18
Average	229	182	78	51

[a] Includes data for 638 cases that did not have a reported closure date at the end of data collection. Length is calculated using the end date of July 14, 2017.

Note: RPG overall averages in the bottom row were calculated by combining all individual cases across grantees, not from the averages for each grantee presented in this table.

Source: RPG Enrollment and Service Log data from January 1, 2014, to July 14, 2017.

For closed cases, grantees indicated whether the case completed the project's RPG program according to project requirements for successful completion (see Box IV.6) or was closed for other reasons. Table IV.7 shows the proportion of closed cases that *completed* each project's RPG program. Among all closed RPG cases, 51 percent completed their RPG programs. The rest of the closed cases were closed for other reasons. The highest percentage of completion across projects was 79 percent. The lowest rate of completion was 0 percent. The latter project closed only 17 percent of all its enrolled cases, none of which completed its RPG program. Eight of 17 projects had rates of completion greater than 50 percent.

The most common reasons for case closure for families that did not complete RPG were missing excessive appointments or not responding to contact attempts (19 percent), declining further participation (11 percent), and inability to locate case members (9 percent). Table IV.8 shows the percentage of families that left RPG for each reason. Less commonly, families moved or transferred to another provider of similar services. These categories are not mutually

exclusive.[29] Thus, a family might have missed excessive appointments and staff could have been unable to locate that family. These reasons generally show that nearly half of the cases served by grantees become unresponsive or unwilling to participate in services.

Table IV.8. Reason for case closure

Reason for case closure	Percentage of closed cases
Successfully completed the RPG program	51
Excessive missed appointments or unresponsive	19
Family declined further participation	11
Unable to locate	9
Family moved from area	5
Transferred to another service provider	4
Death (miscarriage, fetal or child, parent)	1
Other	8

Note: Percentages sum to more than 100 because grantee staff could select more than one reason for case closure. Open cases were excluded from these calculations.

Source: RPG Enrollment and Service Log data from January 1, 2014, to July 14, 2017.

E. Limitations

Two main limitations affect the findings described in this chapter.

1. The analysis does not include services provided in addition to the EBPs. A key goal of the RPG program was to encourage use of EBPs, but projects also provided core services outside of this setting. For example, projects offered case management, wraparound services, and peer recovery supports. For at least one project, these types of services were the main focus of its RPG program and, thus, not reflected in the data collected by the cross-site evaluation. Nevertheless, for most RPG projects, EBPs were the core element of their programs.
2. To limit the reporting burden on grantees, the cross-site evaluation collected detailed service contact data on dosage, attendance, and content for only a subset of 10 focal EBPs. Although care was taken to select focal EBPs that represented the more than 50 models proposed by grantees, the focal EBPs selected might not represent each RPG project's services and dosage offered. In many grantees' projects, families received services in the settings of EBPs that were not selected for detailed analysis in the cross-site evaluation. Thus, although this analysis should provide a reasonable estimate of dosage received in each of the 10 focal EBPs, it does not estimate the total dosage of RPG services a family received or summarize dosage and content of services outside the setting of focal EBPs.

[29] Families that completed RPG did not have any other case closure reasons.

V. PARTICIPANTS' OUTCOMES

Incorporating supports provided by HHS, grantees built partnerships across the child welfare, SUD treatment, and other social service systems; enrolled target populations needing services; and provided EBPs to families. The partnerships succeeded in building a collaborative foundation but struggled to achieve fully integrated service delivery. In general, RPG projects enrolled families with children at risk of an out-of-home placement due to a parent or caretaker's substance abuse, though some projects were better able to enroll this target population than others. Projects offered most enrolled families one or more EBPs to meet their unique needs, in particular targeting SUD treatment, family strengthening, or therapy needs of the adults in the family.

The purpose of the grant, however, was to improve the well-being, permanency, and safety of children who were in or at risk of out-of-home placements as a result of a parent's or caretaker's substance use issues. Although the previous chapters have shown what the projects accomplished in terms of building partnerships, enrolling participants, and providing services, an important question remains: Did participants' outcomes improve?

This chapter answers the remaining cross-site evaluation research question: What were the outcomes of adults and children who received services from the RPG projects?

More specifically, it answers these subquestions about participants' outcomes in five *outcome domains* examined by the cross-site evaluation:

1. **Adult recovery.** Did adult substance use decline in severity after participants enrolled in RPG?
2. **Family functioning.** Did the primary caregiver's mental health and parenting ability improve following enrollment in RPG?
3. **Child safety** and **permanency.** Did maltreatment and removals from the home decline in the year following RPG enrollment?
4. **Child well-being.** Did child well-being outcomes improve following enrollment in RPG?

To understand how individuals change, it is necessary to have data on the outcomes of interest at two points in time. For the RPG cross-site evaluation, grantees were expected to administer standardized instruments to adults at program entry, referred to as *baseline,* and at program exit (successful completion or drop-out), referred to as *follow-up*. As explained in Chapter III, which discussed measures in the five domains at baseline, the standardized instruments collected data about the adults and about the RPG focal children in their care. Grantees also obtained administrative child welfare and SUD treatment data for the year before and the year following RPG enrollment. See Appendix C for information on the data and methods used to summarize outcome data in this chapter.

This chapter first examines adult substance use and treatment outcomes (Section A). Section B describes family functioning outcomes. Both of these adult outcome domains might influence the safety, permanency, and well-being outcomes of children in their families. Section C presents information on the safety and permanency outcomes of focal children enrolled in RPG.

Finally, Section D examines child well-being outcomes and Section E describes two limitations of the analyses.

Box V.1. A summary of key findings about participants' outcomes

- Adult drug and alcohol use and severity decreased from program entry to exit, and adults were more likely to enroll in and complete substance use dependence treatment following entry into the RPG.
- Adult mental health and parenting attitudes improved significantly from program entry to program exit.
- There was a large reduction in rates of both substantiated and unsubstantiated maltreatment following enrollment into the RPG program.
- Removals from the home were less common in the year following RPG enrollment, relative to the year before enrollment, and reunification with the family of origin or other placements were more common.
- The findings for child well-being were mixed across the outcomes assessed. Some outcomes showed improvement over time, several showed no changes, and one outcome looked significantly worse at program exit than at program entry.
- For the most part, the improvements in child welfare outcomes and adult outcomes were consistent across all grantees, though some outcomes worsened over time for some RPG projects.

A. Adult substance use and participation in treatment

Adult substance use outcomes improved following entry into RPG. Severity of drug and alcohol use decreased, and this improvement was coupled with increased enrollment (and completion) of publicly funded SUD treatment.

1. Adult substance use

Adults decreased their reported use of both drugs and alcohol from program entry to program exit. The mean drug use severity score decreased from 0.13 to 0.05, representing a statistically significant improvement, as shown in Table V.1. The percentage of adults categorized by the cross-site evaluation as high-severity drug users (individuals with drug use severity scores higher than the average score among a nationally representative sample of adults enrolled in SUD treatment) decreased by 23 percentage points, from 36 to 14 percent. (Note: the numbers do not align due to rounding.)

These drug use severity scores and the percentages of individuals characterized as high-severity users decreased across

Box V.2. Description of the sample contributing to adult substance use analyses

- About 40 percent of eligible adults completed the standardized instrument used to measure substance use at both baseline and follow-up.
- Adults without the necessary data to examine change in outcomes over time had poorer mental health (more psychiatric problems and frequent trauma symptoms) at program entry, and were less likely to be cohabitating with a focal child's parent or have the focal child in their care at enrollment, than the adults included in this analysis.
- As described in Section E (Limitations), nonresponse weights were applied to the subsequent analyses of standardized instrument data to reduce these differences and improve the generalizability of the findings. These nonresponse weights were not required for the analysis of involvement in publicly funded SUD treatment settings, as those outcomes were based on administrative data and were available for the full eligible population.

all grantees that provided standardized instrument data on adult substance use. Scale scores decreased by 0.01 to 0.14 units across grantees, and the proportion of adults characterized as high-severity drug users decreased by 2 percentage points to 44 percent across grantees.

The decrease in alcohol use severity was also statistically significant, but smaller in magnitude. Alcohol use at program entry was less prevalent than drug use, with only 9 percent of the RPG sample in the high-severity category at program entry. By program exit, 4 percent of adults scored in the high-severity category, and the alcohol use mean score decreased by 0.03. All but one grantee observed improvements in alcohol usage.

The prevalence of *either* high-severity drug or alcohol use also declined significantly over time, and this finding was again apparent across all RPG projects. At program entry, about 41 percent of individuals were categorized as high-severity users of either drugs or alcohol, and this prevalence rate decreased to 16 percent at program exit. Across each individual project, the proportion of adults classified as high-severity drug or alcohol users as defined for the cross-site evaluation decreased from program entry to program exit.

Table V.1. Substance use among adults before and during RPG programming

		At program entry		At program exit		Change from entry to exit	
Substance	N	Mean score (SD)	Percentage in high-severity category	Mean score (SD)	Percentage in high-severity category	Mean change score	Percentage in high-severity category
Drug use	938	0.13 (0.24)	36	0.05 (0.17)	14	-0.08*	-23*
Alcohol use	958	0.06 (0.20)	9	0.03 (0.15)	4	-0.03*	-5*
Use of drugs or alcohol use or both	917	NR	41	NR	16	NR	-25*

*Statistically significant difference between time points at the .05 level.

Note: ASI-SR = Addiction Severity Index, Self-Report Form; NR = not reported; SD = standard deviation. Sample sizes vary by measure due to instrument or item nonresponse. Higher scores on the ASI-SR indicate greater severity of substance use. Change scores could differ from the simple difference in the two time points due to rounding.

Source: Administration of ASI-SR instrument at program entry and program exit, including data submitted through August 2017. Results presented in this table were adjusted using nonresponse weights.

As shown in Table V.2, for all the specific drug types examined by the cross-site evaluation, there were reductions in the prevalence of recent use between program entry and program exit (Table V.2). The largest reduction observed was in prescription opioids used in the past 30 days. At program entry, about 16 percent of adults reported using prescription opioids (an additional 4 percent used each of methadone and heroin), whereas at program exit, only 4 percent of adults reported using these drugs, a reduction of 12 percentage points. Other substances with large decreases in the prevalence of use were cannabis, which was the most commonly used drug at program entry (a reduction of 10 percentage points), amphetamines (a reduction of 10 percentage points), and sedatives (a reduction of 7 percentage points).

Table V.2. Percentage of adults using each type of substance, by time period

Type of substance	At program entry	At program exit	Change across time
Cannabis (marijuana, hashish, pot)	24	14	-10*
Amphetamines (monster, crank, benzedrine, dexedrine, Ritalin, Preludin, methamphetamine, ice, crystal)	17	6	-10*
Prescription opioids/analgesics (morphine; Dilaudid [hydromorphone]; Demerol [meperidine]; Percocet [oxycodone + acetaminophen]; Darvon [propoxyphene]; Talwin; codeine; Tylenol 2,3,4; syrups, Robitussin, Fentanyl)	16	4	-12*
Sedatives/hypnotics/tranquilizers (Valium, Xanax, Librium, Ativan, Serax, Quaaludes, Tranxene, Dalmane, Halcion, Miltown)	10	2	-7*
Methadone	4	4	-1
Heroin	4	2	-2*
Cocaine (cocaine crystal, free-base cocaine, or crack or rock)	3	1	-2*

*Statistically significant difference between time periods at the .05 level.

Note: Records for 961 to 977 adults were examined to obtain these statistics. Sample sizes vary by substance due to instrument or item nonresponse. Change scores could differ from the simple difference in the two time points due to rounding.

Source: Administration of Addiction Severity Index, Self-Report Form (ASI-SR) instrument at program entry and program exit, including data submitted through August 2017. Results presented in this table were adjusted using nonresponse weights.

2. SUD treatment participation

Adults in the RPG program increased their participation in publicly funded SUD programs following entry and were increasingly likely to complete these programs. Before enrolling in RPG, 29 percent of adults had previously enrolled in a publicly funded treatment facility, and 18 percent of them ultimately completed the program during that period (Table V.3). However, in the year following RPG entry, 36 percent of adults enrolled in a program (a statistically significant increase of 7 percentage points), and 28 percent of enrolling adults completed the program during that year (a statistically significant increase of 10 percentage points).

The changes in enrollment in publicly funded SUD treatment was quite variable across grantees, likely reflecting the different designs of each RPG project and their target populations. Increases in enrollment occurred in six RPG projects by an average of 30 percentage points. One project providing SUD treatment services through RPG saw an increase of 66 percentage points in treatment participation, rising from 15 percent enrollment in the year before RPG to 81 percent following RPG entry. On the other hand, eight projects experienced modest decreases in enrollment, averaging 14 percentage points.

Box V.3. Analytic approach for administrative data

- Grantees obtained administrative data for one adult in the family targeted to receive substance use treatment services (often, the primary caregiver of the focal child), and for the focal child.
- Adults or children were eligible for the analysis if they were enrolled in RPG on or before July 14, 2016, one year before the last date by when grantees could submit data for use in the cross-site evaluation. This eligibility criteria ensured that the evaluation team observed all individuals in the analysis for a full 1-year post-enrollment period. Therefore, RPG participants had equivalent windows of opportunity for maltreatment, removals, or enrollment in substance use treatment to occur in both the pre- and post-intervention periods.
- To compare prevalence rates of key variables obtained from these administrative data sets, the pre-enrollment rates were compared with the post-enrollment rates. The statistical significance of the difference was assessed using a paired t-test.
- A paired t-test is an inferential test used to show whether the average change in two outcomes (a baseline and a follow-up assessment measured for an individual) represents a real difference or is likely to be the result of random chance. A chi-square test (an inferential test for assessing the equality of proportions) assessed statistical significance in a handful of instances when different samples were compared (the proportion of children who had been removed in the year before enrollment who achieve permanency, compared with the proportion of children removed in the year following enrollment who achieved permanency).

One of these projects experienced a large decrease, from 33 percent enrolled in treatment in the year before RPG entry, but only 5 percent following the start of RPG, a decline of 28 percentage points. The decline might have been related to the way the grantee agency received referrals to RPG. Initially, the grantee took referrals from external sources, primarily child welfare, and many of those families still needed to participate in SUD treatment services. As the RPG project went on, to increase enrollment, they began taking internal referrals from families who were currently or previously the grantee's clients but not part of RPG. These were families who may have already completed SUD treatment, thus were not enrolled in treatment during their time in RPG.

Table V.3. SUD treatment participation before, during, or after RPG programming

Recovery measure	Baseline year		Intervention year		Change across years
	Total N	Percentage	Total N	Percentage	
Percentage enrolled in at least one SUD treatment setting[a]	1,934	29	1,934	36	7*
Percentage of those enrolled in at least one instance of SUD treatment who completed the program[b]	649	18	713	28	10*

[a] Restricted to adults who had data at both time points.

[b] Restricted to adults who enrolled in SUD treatment in a given period (not necessarily the same adults across periods).

*Statistically significant difference between time periods at the .05 level.

Note: SUD = substance use disorder.

Source: RPG administrative data from state SUD treatment agencies including data submitted through August 2017.

B. Family functioning

Adult substance misuse is understood to be a key risk factor for child maltreatment and involvement in the child welfare system (HHS, 2014a). However, adult substance misuse is not a single problem that exists in isolation among adults. Commonly, substance use, mental health problems, and limitations with parenting skills and attitudes coexist and negatively reinforce one another. The cross-site evaluation measured each of these adult characteristics under the family functioning domain.

All aspects of family functioning measured from program entry to program exit improved. Primary caregivers had fewer symptoms of trauma and reduced stress and depression. They expressed fewer attitudes about parenting that were associated with risks for child maltreatment.

1. Trauma symptoms

Adults described fewer and less frequent symptoms of trauma at program exit, compared with program entry. Among a sample of 934 adults with data at both time points, there was a decrease in the average score from 29.3 at program entry to 21.7 at program exit (Table V.4), indicating that adults had substantially fewer experiences of post-traumatic symptoms at program exit.

Box V.4. Description of sample contributing to family functioning outcomes analysis

- Response rates for the standardized instruments used to assess family functioning at entry and exit ranged from 25 to 44 percent for the outcomes that portray adult mental health and parenting attitudes.
- Adults without exit data had worse symptoms of depression at program entry, and were less likely to be cohabitating with a focal child's parent or having the focal child in their care at enrollment, than the adults included in this analysis.
- As described in Section E (Limitations), nonresponse weights improved the generalizability of these findings that examine how the family functioning outcomes changed over time.

The improvements in trauma scores occurred across all RPG projects that measured adult trauma. The average trauma symptoms score decreased by 7.7 points across projects but ranged from a low of a 3.2-point improvement to a high of a 13.4-point improvement across individual projects.

2. Parenting stress

Parenting stress levels improved among primary caregivers during the period from program entry to exit. The mean stress scale score dropped from 74.1 to 71.9, which was a statistically significant change. However, there was no change in the proportion of adults categorized as having high-severity stress (Table V.4). A 2.2-point reduction in the overall score represents a small improvement in average levels of self-reported stress.

Parenting stress did not improve for all RPG projects though. Adults participating in seven RPG projects showed improvements in stress levels from baseline to follow-up, with scores decreasing by 1.8 to 4.7 points, on average. On the other hand, for three projects, average stress levels increased over time (ranging from an increase of 0.7 to 3.7 points).[30]

Table V.4. Adult well-being at program entry and program exit

		At program entry		At program exit		Change from entry to exit	
Aspect of well-being	N	Mean score (SD)	Percentage in high-severity category	Mean score (SD)	Percentage in high-severity category	Mean change score	Percentage in high-severity category
Childhood/adult trauma symptoms (TSC-40)	934	29.3 (29.8)	NA	21.7 (30.2)	NA	-7.7*	NA
Parenting stress (PSI-SF)	506	74.1 (41.1)	17	71.9 (42.7)	17	-2.2*	0
Depressive symptoms (CES-D)	958	12.4 (12.9)	36	9.2 (12.9)	23	-3.2*	-12*

*Statistically significant difference between time points at the .05 level.

Note: NA = not available; SD = standard deviation.

Sample sizes vary by measure due to instrument nonresponse, and the change scores might not. Parenting stress was assessed using the Parenting Stress Index-Short Form (PSI-SF); depressive symptoms were assessed using the Center for Epidemiologic Studies Depression Scale-Short Form (CES-D), and childhood/adult trauma symptoms were assessed using the Trauma Symptoms Checklist (TSC-40). Higher scores on these measures represent worse mental health outcomes. Change scores could differ from the simple difference in the two time points due to rounding.

Source: Administration of the standardized instruments at baseline and exit, including data submitted to cross-site evaluation through August 2017. Results presented in this table were adjusted using nonresponse weights.

3. Depression

Adults reported fewer symptoms of depression at the end of the RPG program than at program entry. The average score on the depression instrument decreased from 12.4 to 9.2, a statistically

[30] Samples from seven projects were too small to be included in this comparison.

significant decrease, shown in Table V.4. These changes represented a large improvement of primary caregivers' mental health. In addition to the reduction of symptoms, at program exit, 12-percent fewer adults scored in the high-severity category for depression. The improvement of average depression scores was apparent across each of the individual projects providing data for this instrument.

4. Parenting attitudes and skills

There were statistically significant improvements in all five parenting attitudes examined among primary caregivers, indicating a reduced risk for maltreatment for their children following participation in RPG (Table V.5). The scores for "values corporal punishment" and "treats children like adults" were, in fact, lower than the average among the general U.S. population at follow-up, at 5.5 and 4.9, respectively, compared with the national average of 5.5 for both attitudes. In addition, significantly fewer adults were characterized as at high risk for maltreatment at follow-up than at program entry for "lack of empathy for child" and "treats child like an adult."

Table V.5. Caregivers' parenting attitudes at program entry and exit

		At program entry		At program exit		Change from entry to exit	
Aspect of parenting	N	Mean score (SD)	Percentage in high-severity category	Mean score (SD)	Percentage in high-severity category	Mean score (SD)	Percentage in high-severity category
Inappropriate expectations for child	911	6.1 (2.7)	18	5.8 (2.9)	16	-0.3*	-1
Lack of empathy for child	911	6.2 (3.2)	26	5.7 (3.6)	20	-0.5*	-6*
Values corporal punishment	911	5.6 (2.9)	12	5.5 (2.8)	12	-0.1*	0
Treats child like an adult peer, not a child	911	5.4 (3.3)	14	4.9 (3.3)	10	-0.5*	-4*
Oppresses child's independence	911	5.9 (3.5)	25	5.7 (3.6)	23	-0.2*	-1

*Statistically significant difference between time periods at the .05 level.

Note: SD = standard deviation.

These scales are transformed so that higher scores indicate a negative parenting attitude. Change scores could differ from the simple difference in the two time points due to rounding.

Source: RPG administration of the Adult-Adolescent Parenting Inventory-2 (AAPI-2) at baseline and exit, including data submitted through August 2017. Results presented in this table were adjusted using nonresponse weights.

5. Profile of opioid users over time

As mentioned in Chapter IV, the cross-site evaluation examined outcomes for the subset of adults who indicated that they had used heroin, methadone, or other opioids or analgesics at program entry. In general, opioid users appeared to be more frequent drug users than other adults followed for the cross-site evaluation at program entry. Notably, this sample had

particularly large improvements in recovery outcomes over time. On the other hand, opioid users appeared to be relatively comparable to the broader RPG population in terms of family functioning outcomes, whose changes mirrored the positive changes observed for RPG adults generally.[31]

- Opioid use decreased significantly over time among this sample. Prevalence of prescription opioid use dropped from 79 percent at program entry to 14 percent at exit. From program entry to exit, the prevalence of methadone use decreased from 21 to 11 percent and heroin use dropped from 20 to 8 percent.
- The prevalence of recent use of other commonly used drugs also showed large improvement. Sedative prevalence dropped from 29 percent at program entry to 4 percent at program exit. Amphetamine prevalence dropped from 36 to 14 percent, and cannabis prevalence dropped from 36 to 16 percent. Twenty-one percent of opioid users had used methadone in the past 30 days at entry, 11 percent at exit. Data available did not allow the cross-site evaluation to determine whether methadone was being used as part of medication-assisted treatment.
- Most aspects of family functioning looked comparable among opioid users relative to the broad sample of adults served by RPG, and the improvements in outcomes were largely consistent with the improvements observed in the broader adult sample. One notable difference was in terms of depression levels: more opioid users had severe depressive symptoms at program entry (48 percent) than the broad RPG adult sample, and this improved significantly at program exit (only 28 percent had severe depressive symptoms).

6. Summary of changes in adult outcomes across the recovery and family functioning domains

The improvements shown in the recovery and family functioning domains appear to align with the EBPs that the RPG projects selected to serve the needs of their target populations. As presented in Chapter IV, most EBPs offered by projects were primarily SUD treatment programs, family-strengthening programs, or therapy-focused interventions. Notably, these programs intervened primarily with adult populations.

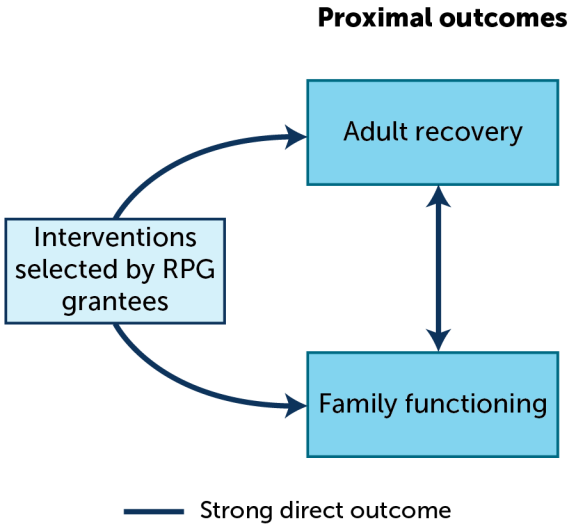
Given the focus of these types of interventions, it is not surprising to see improvements in adult recovery and family functioning outcomes. These were the outcomes most proximal to the intervention focus and, thus, most susceptible to change. In addition to these outcome domains being most likely to change as a result of the intervention, these are two outcome domains that mutually influence each other. Improvements in one outcome domain are likely to have spillover effects into the other domain or, as recovery improves, family functioning improves (and vice versa).

Figure V.1 shows an illustrative framework for these findings. The interventions (EBPs and other services) selected by RPG grantees and their partners appeared to have had a strong

[31] The descriptive statistics for the opioid user population differ slightly from the statistics presented in Chapter IV because this analysis focuses on the subset of individuals with both baseline and follow-up data, rather than the entire population with baseline data described in Chapter IV.

influence on the outcome domains of adult recovery and family functioning. This relationship is shown as a heavy, solid arrow between the intervention and outcome boxes. Because these outcomes related directly or most directly to the interventions operated by the projects, Figure V.1 refers to them as proximal outcomes (World Health Organization, 2002). Furthermore, it can be hypothesized that the two outcome domains mutually influence each other, as shown by the heavy, solid, bidirectional arrow. For example, reductions in drug use could directly improve mental health; conversely improvements in mental health could lead to reduced drug use.

Figure V.1. Framework illustrating relationship between RPG project interventions and proximal adult outcomes



C. Child permanency and safety

In authorizing RPG, Congress had a primary interest in ensuring the safety (reduced maltreatment) and permanency (reunification or other permanent placement) of children who experienced, or were at risk of experiencing, maltreatment due to adult substance use issues. The cross-site evaluation used child welfare administrative data, obtained by grantees and submitted to the cross-site evaluation contractor, to measure outcomes in the study domains of permanency and safety.

There were statistically significant reductions in both rates of maltreatment and removals from the home following enrollment into RPG. However, some children still experienced multiple incidents of maltreatment after RPG entry, and the rates of removal from the home following RPG enrollment were still markedly higher than the national rate of placement into foster care.

1. Permanency

There were statistically significant reductions in removals from the home from the year before RPG enrollment and the intervention year. A total of 664 eligible focal children, or 29 percent, experienced a removal in the year before RPG enrollment (Table V.6). This number decreased to just 112 individuals, or 6 percent in the following year, a decrease of 24 percentage points. This decrease is not solely attributable to children removed from the home prior to RPG

enrollment remaining in out-of-home placements. If children who experienced an earlier removal are excluded from the analysis (that is, they are assumed to still be in out-of-home care), the revised rate of removal following RPG entry is just 8 percent, still markedly lower than the baseline rate of 29 percent.

Rates of removals fell among most RPG projects. The project with the highest rate of removal before program entry (77 percent of focal children) ended up with only 1 percent of children with a removal in the year following program entry. This was the largest reduction observed across all RPG projects. Two other projects with very low rates of removals compared with other projects during the year before enrollment (2 and 8 percent of focal children, respectively) showed increased rates of removals in the year following enrollment (10 and 13 percent, respectively). All other RPG projects saw a reduction in focal children's rates of removals in the year following RPG entry.

Although this reduction in rates of removal represented a marked improvement, the 6 percent of children removed from home was still higher than recent national averages. Fewer than 0.5 percent of children nationwide entered foster care in 2015 (HHS, 2016b, 2017b). Therefore, even after enrollment, the RPG children were still being removed from their homes at a high rate (albeit, markedly less frequently than what occurred before RPG), perhaps because RPG children came from a higher-risk population compared with the general population, as intended by the legislation establishing RPG and by the grantees and their partners.

Table V.6. Percentage of focal children in out-of-home placements before and during RPG programming

Removal or placement	Year before RPG enrollment		Intervention year		Change across years
	N	Percentage	N	Percentage	
Removed from home	1,954	29	1,954	6	-24*
Placed in permanent setting in a given year among children who were removed from home	664	6	112	13	7*
Reunified with family in a given year among children who were removed from home	664	5	112	13	8*[a]

*Statistically significant difference between time periods at the .05 level.

Note: Change scores could differ from the simple difference in the two time points due to rounding.

Source: Administrative records in the years before and after RPG enrollment from state or county child welfare agencies obtained by grantees and submitted to the cross-site evaluation in August 2017.

A higher proportion of children was either reunified with their families or achieved another permanent placement in the year following RPG entry, compared with the year before enrollment. In the year before RPG enrollment, 664 children experienced a removal and 37 of them, or 6 percent, were placed into a permanent setting (reunification, adoption, or guardianship) by the time of RPG enrollment during the same year. As noted earlier, there were 112 children with removals in the year after RPG enrollment and 14 of them, or 13 percent, were subsequently placed into a permanent setting during the year observed, a statistically significant improvement of 7 percentage points. Similarly, the rate of children reunifying with families

increased from 5 percent in the year before enrollment to 13 percent in the intervention year, and this increase was significantly different from zero.[32]

Although the rates of reunification and permanency were greater following entry into RPG than in the year before RPG enrollment, these positive outcomes following a removal from the home were still relatively rare. In the year following RPG enrollment, most children (88 percent of children removed during this period) had *not* achieved a permanent placement (reunification, adoption, or guardianship).

2. Safety

Maltreatment rates (based on both substantiated and unsubstantiated reports) decreased in the year following RPG entry, relative to the year before enrollment. The incidence of reported maltreatment decreased from 56 percent in the year before RPG enrollment to 20 percent in the 1-year period following RPG enrollment among a sample of 1,954 focal children (Table V.7). This change represents a statistically significant 36-percentage-point decrease in rates of reported maltreatment, relative to the prevalence in the year before program entry. Rates of reported neglect and abuse dropped substantially between these two periods as well.

Rates of reported maltreatment between these two periods declined across all RPG projects, except one. For one project, reported maltreatment was a rare occurrence in the year before program entry (only 4 percent of enrolled children had a prior report of maltreatment), and the rate increased to 7 percent in the year following program entry. For all other projects, reductions in the incidence of reported maltreatment ranged from 13 percentage points (from 42 percent before program entry to 29 percent in the year following enrollment) to nearly 60 percentage points (from a 74-percent prevalence rate at entry to a 15-percent prevalence rate in the year following enrollment).

Table V.7. Rates of reported maltreatment in the years before and after enrollment in RPG

Variable	N	In year before RPG enrollment	In year after RPG enrollment	Percentage change
Reported maltreatment (both unsubstantiated and substantiated)	1,954	56	20	-36*
Reported neglect	1,954	34	10	-24*
Reported abuse	1,954	17	6	-12*

*Statistically significant difference between time periods at the .05 level.

Note: Change scores could differ from the simple difference in the two time points due to rounding.

Source: Administrative records in the years before and after RPG enrollment from state or county child welfare agencies obtained by grantees and submitted to the cross-site evaluation in August 2017.

Reductions in substantiated reports of maltreatment in the year following RPG enrollment are greater than reductions in unsubstantiated reports. Substantiated maltreatment rates (claims that

[32] The cross-site evaluation does not compare the amount of time in out-of-home placements between these two periods due to the small numbers of individuals experiencing permanency or reunification.

an incident of abuse or neglect, as defined by state law, is believed to have occurred) (Child Welfare Information Gateway, 2013) decreased by 29 percentage points from the year before RPG enrollment to the intervention year, whereas unsubstantiated maltreatment rates decreased by only 12 percentage points (Table V.8).

Table V.8. Rates of reported maltreatment in the years before and during RPG programming

		Year before RPG enrollment		Intervention year		Change across years	
Type of maltreatment	N	Sub-stantiated	Un-substantiated	Sub-stantiated	Un-substantiated	Sub-stantiated	Un-substantiated
Maltreatment: abuse, neglect, and other types	1,954	36	27	7	15	-29*	-12*
Abuse	1,954	9	9	2	5	-7*	-5*
Neglect	1,954	26	10	4	6	-22*	-4*

*Statistically significant difference between time periods at the .05 level.

Note: Percentages were rounded to the nearest whole number. Change scores could differ from the simple difference in the two time points due to rounding.

Source: Administrative records in the years before and after RPG enrollment from state or county child welfare agencies obtained by grantees and submitted to the cross-site evaluation in August 2017.

Although the incidence of reported maltreatment decreased substantially among children in RPG, a subset of children was the subject of continued and subsequent reports of maltreatment in the year following enrollment. Of the 1,094 children with maltreatment reports (substantiated or unsubstantiated) in the year before enrollment, 256 (23 percent) experienced one or more subsequent reports of maltreatment in the year following enrollment. One project enrolled a population in which 90 percent of the focal children had experienced reported maltreatment in the year before RPG entry, and 41 percent of the focal children experienced at least one additional episode of reported maltreatment following entry.

This recurrence of reported maltreatment among RPG children represents a slightly higher rate of recurrence than other studies using national prevalence rates have found. One report published in 2005 found that, of all children experiencing substantiated and unsubstantiated maltreatment nationally, only 16.4 percent experienced a second report of maltreatment within 12 months (Fluke, Shusterman, Hollinshead, & Yuan, 2005). Another study (Fluke, Yuan, & Edwards, 1999) found recurrence rates for substantiated maltreatment of 14.7 percent after 6 months and 22.6 percent after 18 months. A more recent Report to Congress reported a 5-percent recurrence rate for substantiated maltreatment within a 6-month period (ACF, 2017c).

3. Role of removals in improving outcomes

Removing children from a potentially unsafe home environment and placing them in a safer environment is an obvious way to reduce the threat of future maltreatment. However, the data suggest that removals were *not* the sole factor influencing the reduction in substantiated maltreatment over time among children enrolled in RPG. The data show that there was still a marked decrease in substantiated maltreatment among children who did *not* experience removals.

As mentioned previously in Table V.6, approximately 29 percent of children were removed from their home in the year prior to RPG. Among those children who experienced a removal:

- 64 percent experienced substantiated maltreatment in that same year prior to RPG enrollment, and
- 4 percent experienced substantiated maltreatment in the year following RPG entry.

This finding supports the argument that removing children from the home is one way to reduce future maltreatment. However, the majority of children remained in their homes (71 percent of children did not experience a removal in the year prior to RPG). Among those children who did not experience a removal:

- 25 percent experienced substantiated maltreatment in that same year prior to RPG enrollment, and
- 8 percent experienced substantiated maltreatment in the year following RPG entry.

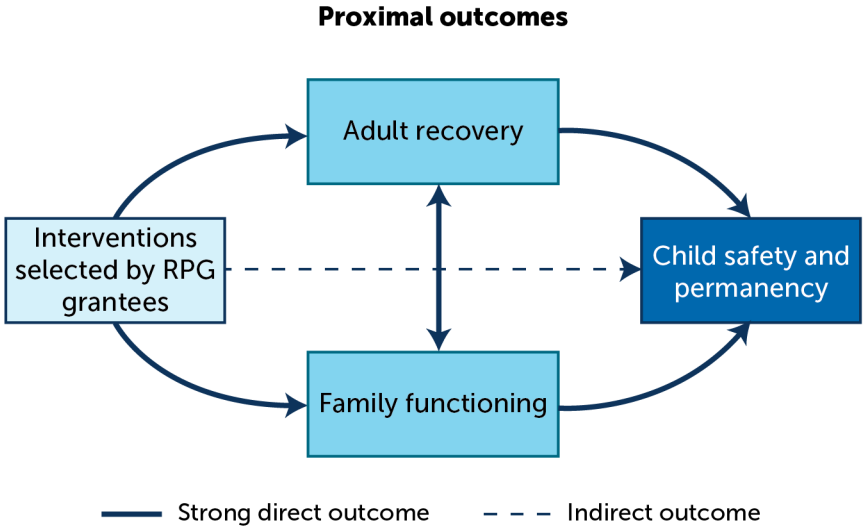
Therefore, even among the children who had not been removed from the home, there was still a marked reduction in substantiated maltreatment rates. That is, even after ignoring the 29 percent of children who experienced a removal, the data still show a substantial reduction in rates of maltreatment after entry into RPG and, thus, that removing children from the home is not the sole explanation of improvement in child safety. The reductions in adult substance use severity, trauma symptoms, depression, and parenting stress, and improved parenting attitudes, are the more likely explanation for this improvement in child safety.

4. Summary of changes in child safety and permanency outcomes

The improvements in child safety and permanency outcomes can be added to the framework presented earlier. As discussed in Chapter IV, RPG services were targeted primarily at adults, with session discussions focusing on adult-centered topics. Yet improvements in child safety and permanency were also observed. Several studies have shown that improvements in the adult outcomes measured for the study can affect child safety and permanency (Berger, 2004; Chaffin, Kelleher, & Hollenberg, 1996; Shay & Knutson, 2008; Staton-Tindall, Sprang, Clark, Walker, & Craig, 2013; Testa & Smith, 2009).

Figure V.2 extends the previous conceptual framework to include the linkage of child safety and permanency to the proximal adult outcomes already in the framework. Improvements in adult outcomes directly influence safety and permanency, based on extant literature. The bold solid arrow indicates this. The dotted line shows the weaker link from the RPG project interventions, which focused mostly on adults.

Figure V.2. Extended framework illustrating relationship between RPG program and proximal child outcomes



D. Child well-being

The RPG program sought to both ensure the safety and permanency of children and to improve their well-being. It is well established that the experience of maltreatment has comprehensive and long-lasting implications for children (Institute of Medicine and National Research Council, 2014). For instance, studies have associated maltreatment with diminished academic and cognitive performance (Crozier & Barth, 2005; Jaffee & Maikovich-Fong, 2011; Mills et al., 2011), poor social-emotional and behavioral adjustment (English et al., 2005; Font & Berger, 2015), and increased risky behaviors and depression (Arata, Langhinrichsen-Rohling, Bowers, & O'Farrill-Swails, 2005).

Although child well-being was an additional target of the grant program, Chapter IV showed that most grantees selected interventions in which the primary focus was on reducing adult substance use and improving parental well-being. Few grantees implemented EBPs designed to directly address child well-being. As a result, potential improvements in child well-being outcomes would likely occur indirectly, through improvements in adult outcomes.

In fact, child well-being outcomes were mixed. Some improved over time, some showed no changes, and one outcome looked significantly worse at program exit compared with program entry.[33]

[33] The sample sizes for each project were too small to allow for a credible exploration of variation in outcomes across projects. As a result, this section focuses solely on cross-grantee changes in child well-being outcomes.

Box V.5. Description of sample contributing to child well-being analysis

The analytic sample of individuals with baseline and follow-up assessments on these child well-being instruments (16 to 33 percent of all eligible respondents for a given instrument) looked different from the sample without both assessments.

Children in the analytic sample tended to have lower baseline risk profiles in terms of executive functioning, emotional and behavioral problems, and trauma symptoms, relative to the subset of children with only baseline assessments. The analysis used nonresponse weights to attempt to mitigate these differences in the observed sample and improve the generalizability of the findings that document changes in child well-being outcomes over time.

1. Emotional and behavioral problems

The emotional and behavioral problems of focal children declined significantly from program entry to exit. Both the total problem scores and subscale scores of emotional and behavioral problems were above the national average score of 50 at program entry (Table V.9). By program exit, all these scores were below or near the national average, which ranged from 49.6 to 50.5. These changes in emotional and behavior problem scale scores were statistically significant. However, the proportion of children characterized as high risk on the instrument, according to the scoring rules provided by the publisher of the instrument used to measure this outcome did not change significantly over time.

Table V.9. Change in child well-being from RPG program entry to exit

Well-being measure	N	At program entry: Mean score (SD)	At program entry: Percentage in high-risk category	At program exit: Mean score (SD)	At program exit: Percentage in high-risk category	Change over time: Change in mean score	Change over time: Change in percentage in high-risk category
Emotional and behavioral problems (1.5–18.0 years)							
Emotional problems	494	51.2 (19.6)	14	49.6 (20.7)	13	-1.6*	-1
Behavioral problems	492	51.7 (20.6)	13	50.5 (22.0)	13	-1.2*	0
Total problems	492	51.5 (20.8)	15	49.9 (23.2)	16	-1.6*	1
Socialization skills (all ages)	370	100.7 (57.8)	10	103.7 (62.1)	9	3.0*	-2
Sensory processing (birth–36 months)	285	n.a.	29	n.a.	36	n.a.	8*
Executive functioning (2–18 years)	452	52.9 (23.3)	18	53.3 (24.7)	21	0.4	3

*Statistically significant difference between time points at the .05 level. Emotional and behavioral problems were assessed using the Child Behavior Checklist (CBCL), socialization skills were assessed using the Vineland Adaptive Behavior Scales, sensory processing was assessed using the Infant-Toddler Sensory Profile (ITSP), and executive functioning was assessed using the Behavior Rating of Executive Function (BRIEF).

Note: n.a. = not applicable; SD = standard deviation.

Higher scores on the socialization skills outcome represent stronger levels of socialization skills in children; higher scores on the remaining measures in the table represent more negative child outcomes. For the sensory processing instrument, it is not meaningful to compare the scale score changes, given how the instrument's scores are interpreted: scores below zero represent children who are under-responsive to stimuli, and scores above zero represent children who are over-responsive to stimuli. As a result, the direction (positive or negative) of the change in socialization scores does not represent an improvement or worsening in terms of sensory processing and, therefore, is not reported here. Change scores could differ from the simple difference in the two time points due to rounding.

Source: Administration of standardized instruments at program entry and program exit, including data submitted to the cross-site evaluation through August 2017. Results presented in this table were adjusted using nonresponse weights.

2. Socialization skills

Focal children's socialization skills improved significantly from program entry to exit. Before receiving RPG services at program entry, focal children scored right at the national average of 100 on socialization skills (the mean was 100.7, as shown in Table V.9). At program exit, the mean score exceeded the national average by a statistically significant amount (the follow-up mean was 103.7), demonstrating improvement in child socialization over time. However, the proportion of children characterized as high risk did not decrease significantly over time.

3. Sensory processing

There were more children with an atypical sensory processing assessment at program exit than program entry, a statistically significant adverse outcome. Research has shown that prenatal exposure to substances (drug and alcohol) can adversely affect sensory processing (Franklin, Deitz, Jirikowic, & Astley, 2008; Telford, 2012). Among young focal children (ages birth to

3 years) assessed by grantees as part of the cross-site evaluation, more children were characterized as either being under-responsive to stimuli (for example, they did not register audio, visual, or tactile stimulation) or over-responsive to stimuli at program exit (36 percent) than at program entry (29 percent) (Table V.9). It is possible that these measures did not worsen; rather sensory processing difficulties might not have fully manifested themselves by the time children had enrolled in RPG.

4. Executive functioning

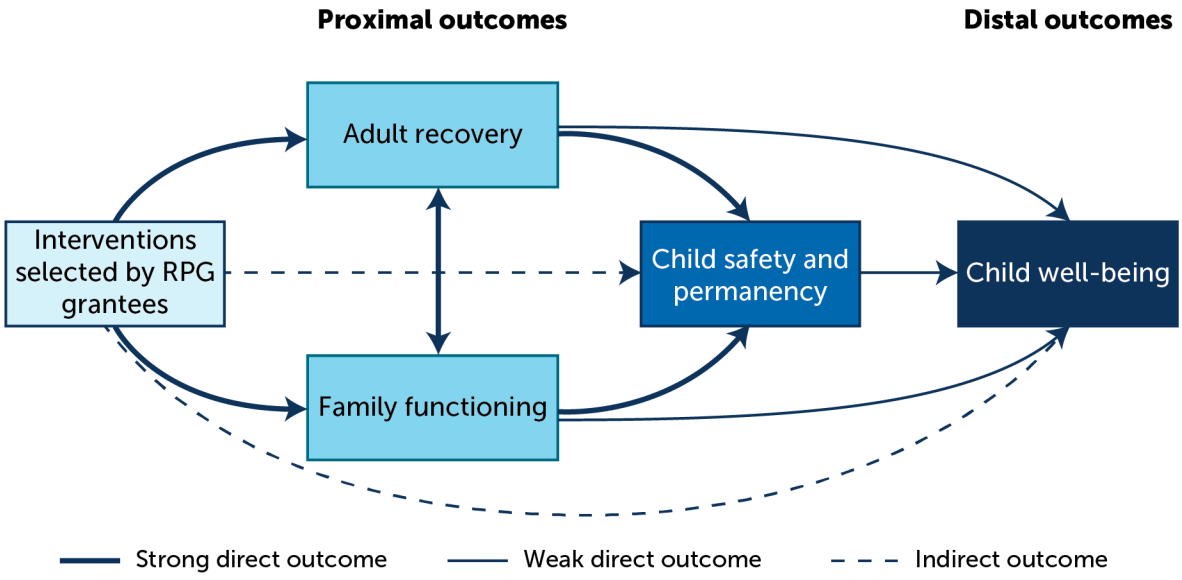
There were no statistically significant changes in executive functioning among children in RPG from program entry to exit. Although both the scale scores and the percentage of children characterized as high risk increased (worsened) from program entry to exit, the differences were not significantly different from zero (Table V.9).

5. Summary of changes in child well-being outcomes

Child well-being outcome results were more mixed than the outcomes examined by the cross-site evaluation in other domains. Some child well-being outcomes improved, but several were unchanged, and one outcome was significantly worse at program exit. Given the findings from Chapter IV that showed that the needs of the adults (in particular, their substance abuse and parenting needs) were the primary target of the EBPs provided by RPG projects, it makes sense that child well-being might not have improved as much as other outcomes examined in the cross-site evaluation. That is, several of the interventions were not explicitly designed to directly influence these child well-being outcomes; thus, any improvements in child well-being would have occurred only as a result of improvements in the characteristics of the adult or adults in the family.

The final version of the outcomes framework is shown below. It adds child well-being as a distal outcome domain (Figure V.3). The child well-being outcome domain is presented as only indirectly affected by the RPG interventions, as represented by the dotted line. However, literature shows that the proximal outcomes of adult recovery more directly affects child well-being (Hussong et al., 2007; Hussong, Flora, Curran, Chassin, & Zucker, 2008; Solis, Shadur, Burns, & Hussong, 2013), as does family functioning (Masten & Obradović, 2006, 2011; Neece et al., 2012), as well as improvements in child safety and permanency (Becker-Weidman, 2009; Viezel et al., 2014); thus, the lines from these outcome domains to the child well-being domain are solid.

Figure V.3. Final framework illustrating relationship between the RPG program and all outcome domains



E. Limitations

Most outcomes improved from program entry to exit, but there are three main limitations to these findings.

1. The cross-site evaluation is a descriptive analysis assessing individual change over time without a counterfactual (that is, this is not an experimental evaluation of the RPG program). Therefore, the analysis cannot show whether the RPG grant program or individual projects caused positive or negative changes. For example, people who entered RPG might have done so because they were ready to take action to improve their situations and they might have done so without RPG specifically. Without a counterfactual condition of comparable families ready to take action to improve their situations but who did not experience RPG, it is not possible to make a causal conclusion that the RPG program was solely responsible for the improvements in outcomes presented in this chapter.
2. Unlike the administrative data, in which there were comprehensive baseline and follow-up assessments for all eligible individuals, a substantial proportion of the eligible sample did not have both baseline and follow-up standardized instrument data used to show how child well-being, adult substance use issues, and adult mental health outcomes changed from program entry to exit. The proportion of the eligible sample that contributed to the analysis of how standardized instrument outcomes changed over time ranged from a low of 16 percent to a high of 44 percent across the instruments.

   To understand the sample contributing to the analyses of how standardized instrument outcomes changed from program entry to exit, the cross-site evaluation first compared the sample with and without follow-up measures to identify factors that differed across these samples. Because the subset of individuals with both baseline and follow-up data differed

from the sample without data at both time points, the former group cannot provide information that is representative of the full population of families served by RPG.

To address this concern, the cross-site evaluation estimated nonresponse weights to improve the representativeness of the data given differences between the groups (Little & Rubin, 2002; Rubin, 1976, 1987). The cross-site evaluation used these nonresponse weights to estimate all descriptive statistics (means and standard deviations and the proportion of individuals characterized as high risk by the instrument as described in Chapter III) as well as inferential tests of the differences in the outcomes over time.

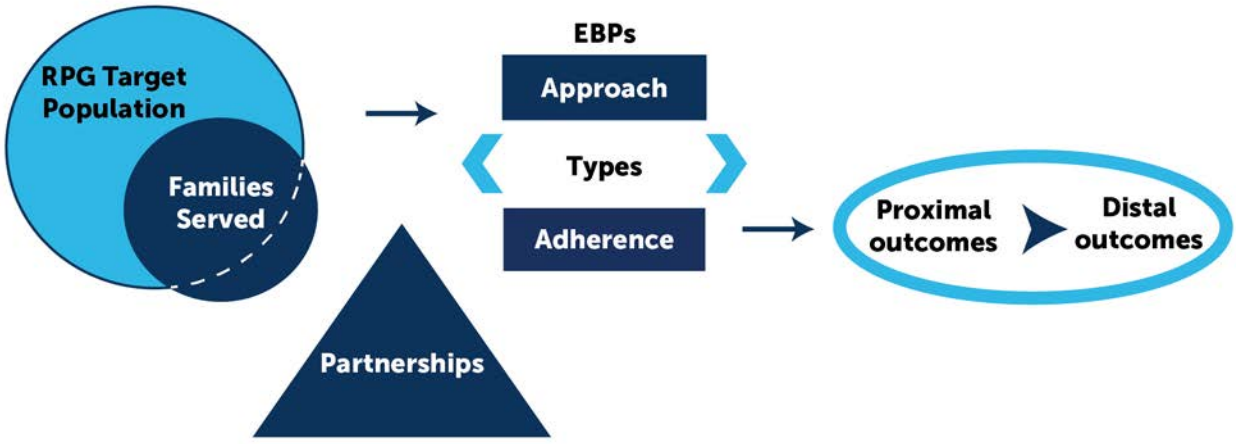
Weighting does not fully ensure the representativeness of the findings. Although a variety of sensitivity analyses showed that that the findings were largely consistent across a number of different defensible analytic approaches (including one that ignored the nonresponse weights), it might be the case that other, alternate approaches could have produced a different set of findings for this analysis, with substantively different interpretations.

3. The cross-site evaluation examined how families enrolled in RPG changed over time by comparing assessments at program entry with assessments at program exit. A limitation of this approach is that some outcomes, in particular, child well-being outcomes, might not have been substantively affected immediately following RPG program exit. As shown in the framework, this outcome domain is expected to be influenced at a more distal point in time than the proximal outcomes. That is, it may be that additional time is necessary for the improvements in adult recovery, family functioning, and safety/permanency to substantively improve child well-being outcomes. Therefore, if child well-being could have been assessed 6 to 12 months following program exit, improvement may have been more likely to occur.

VI. SUMMARY

Although there is no single model of an RPG project, the goals and structure of the RPG program, as stated in the funding opportunity announcement (ACF, 2012a) and documented by the cross-site evaluation, suggest an implicit theory as to how the grants would lead to results. This is sometimes referred to as a theory of change (Figure VI.1).

Figure VI.1. RPG cross-site evaluation theory of change



Note: EBPs = evidence-based program or practices.

The stated outcome goals for the RPG program are to improve child safety, permanency, and well-being; adult functioning; and family stability. Families targeted for services under the grants (represented by the circles in the upper left corner of Figure VI.1) were those experiencing adult substance misuse and actual or potential child maltreatment. Thus, the families were likely to be or become involved with both the child welfare and SUD treatment systems. Therefore, applicants were required to obtain participation by organizations in at least these two systems. Grantees were permitted or encouraged to include partners from other systems as well, either because families might be required to be involved with them (such as family courts, if a child was removed from the home) or might benefit from services from them (such as mental health providers). The triangle in Figure VI.1 represents these partnerships.

Together, the partners would define a specific target population and enroll families to serve, as represented by the circles in Figure VI,1, and provide services such as programs and practices with some level of evidence indicating that they could achieve the desired RPG outcomes, which are represented by the square with intake and exit arrows. It was anticipated that these EBPs would lead to some outcomes that were proximal (outcomes directly tied to the intervention's theory of change, and thus likely to be realized within the duration of the family's participation in RPG), and others that would be more distal (not directly affected by the projects, or realized after families left RPG), as shown by the oval.

This final evaluation report has used data provided by grantees and collected directly by the cross-site evaluation contractor to examine each of the elements in the theory of change in some detail. The report builds on the theory of change by examining the quality of the partnerships,

the characteristics of families targeted and actually served, the structure and content of EBPs offered and in which families enrolled, and family outcomes. It has used more detailed versions of the elements in Figure VI.1 to walk the reader through the report findings, thus gradually building up the RPG theory of change. This chapter summarizes the findings described in the preceding pages (Section A) and concludes by addressing the topic of how the grantees, individually and as a cohort, performed with regard to the performance expectations outlined in the legislation and by HHS (Section B).

A. Findings

1. Grantees worked with 3 to 24 partner organizations and achieved mixed progress toward service integration

Building cross-system alignment and interagency collaboration is necessary to achieve the primary goal of the RPG program, which is improving the well-being, permanency, and safety outcomes of children who were in, or at risk of, out-of-home placement as a result of a parent's or caregiver's substance use issue. Partnerships across systems can improve the efficiency with which providers serve families involved with multiple systems and promote effectiveness (Blakey, 2014; Semidei et al., 2001; Smith & Mogro-Wilson, 2008). However, building collaborations is difficult. It can be hard to move from basic exchanges, such as shared goals and joint meetings, to coordinating referrals across systems and interweaving of services provided by different organizations.

All 17 partnerships attained a shared vision and goals. Some partnerships made progress aligning operational processes, such as coordinating across SUD treatment and child welfare agencies to provide cross-agency assessments. However, fewer partnerships were able to integrate their services, such as referrals or screening, or align timelines for recovery from SUDs and achieving child permanency. The latter point is worth emphasizing. According to the National Institute on Drug Abuse (2018), "Patients typically require long-term or repeated episodes of care to achieve the ultimate goal of sustained abstinence and recovery of their lives." Yet, the Adoption and Safe Families Act (Pub. L. 105-89), which governs many aspects of the child welfare system, sets a 15-month timeline for terminating parental rights when a child is removed from the home. The discrepancy between the long-term nature of recovery and the act's provisions to move children promptly to permanent families might be one that local RPG partnerships cannot resolve on their own.

Most partnerships reported successes in four key areas: (1) improving communication among partner organizations, (2) increasing abilities to collaborate among partner organizations, (3) sharing a common goal within the partnership, and (4) building trust and relationships. Building on this foundation, partnerships enrolled families whose needs they planned to address.

The most connected partnerships, as measured for the cross-site evaluation, were those that had relatively few members, built on existing relationships in place before RPG2, and, during the grant period, experienced challenges related only to factors under their control, such as intra-organizational operations. Conversely, the least-connected partnerships had 18 or more members, were building new relationships among the partners, and ran up against external challenges, such as state or federal policy changes, which the partnerships themselves could not resolve. These findings suggest that smaller partnerships with a history of collaboration might

have a head start in achieving RPG collaboration goals. However, there was also an element of luck that enabled some partnerships to achieve a higher level of collaboration: They were not exposed to external shocks in their environments that might have limited their ability to stay connected.

2. Grantees and their partners enrolled a target population that aligned with the intent of the RPG program

Each RPG grantee defined a specific, local, target population aligned with the target population of the RPG program and selected one or more EBPs or other services to provide to that target population. Although the intended target populations of children and adults varied somewhat across projects, *all RPG partnerships* indicated a plan to provide services to adult caregivers with substance use issues. *Nearly all projects* (15 of 17) explicitly intended to enroll children in or at risk of an out-of-home placement. And *most projects* (11 of 17) indicated an age-inclusion criteria for children; most that did so planned to enroll young children.

The cross-site evaluation used project enrollment totals from grantees' semiannual progress reports and data on the cross-site evaluation sample of 3,772 adults and 4,854 children in 2,887 families to examine the actual population enrolled into the RPG program.

From October 2012 to April 2017, the RPG2 projects enrolled 11,416 people, 55 percent of whom were children, in their RPG programs.[34] Most children the projects enrolled were younger than 5 years. Children were at higher risk than the general population in several areas measured by the cross-site evaluation, including sensory processing, executive functioning, emotional and behavioral problems, and socialization skills.

The adult population that the RPG2 projects enrolled had a substance use severity and frequency profile similar to that of a national sample of people in SUD treatment settings. In addition, 27 percent of adults had previously enrolled in state-funded SUD treatment before enrolling in RPG. Adults also had higher levels of parenting stress than a normative sample of adults, more depressive symptoms than a nationally representative sample of low-income parents (36 percent of RPG versus 6 percent of the normative sample were severely depressed), and parenting attitudes that placed children in their care at risk of maltreatment.

Most children (62 percent) in RPG2 had some involvement in the child welfare system in the year before RPG, via a report of maltreatment, removal from the home, or both. Thus RPG partnerships served populations that largely aligned with the target population described in the legislation that authorized the RPG program. Nine projects enrolled populations in which majorities of both adults *and* children met the RPG target criteria.

Moreover, based on the ages of children projects enrolled, the 17 partnerships served groups that also met their individually defined target populations, with a few exceptions. Three RPG partnerships enrolled less than half of adults with a substance use issue and less than half of focal children with child welfare involvement. These three projects did not have clear protocols for identifying substance use issues, lacked referral pathways from child welfare agencies into RPG,

[34] This includes individuals enrolled in RPG programs before OMB clearance, after which the cross-site evaluation collected more detailed information on participants.

or enrolled a large proportion of pregnant mothers (hence with unborn focal children who could not yet have child welfare experience).

Implicitly, RPG2 partnerships also sought to serve families in which adults or children might exhibit symptoms of trauma. On average, RPG adults reported experiencing nearly one-quarter of the 40 symptoms of post-traumatic stress disorder. This amounts to fewer frequent trauma symptoms than comparable samples of adults with substance use issues. On average, caregivers who completed the TSCYC rated children in RPG as having more trauma symptoms than children in the general population. More than one-quarter of children in RPG were classified as being at high risk with elevated symptoms of post-traumatic stress disorder.

In sum, grantees and their partners generally succeeded in enrolling a population of children and adults who aligned with the intent of the RPG program.

3. Opioid users at program entry tended to have greater needs than other, non-opioid using adults in RPG and experienced marked improvement at program exit

Neither the RPG grant program nor individual projects targeted opioid users. Just as earlier rounds of RPG targeted methamphetamine users, current or future partnerships might have to address this segment of the overall RPG target population. Therefore, findings on opioid users who participated in RPG2 might provide useful information for future efforts. About 20 percent of adults in RPG2 indicated at program entry that they had used opioids (heroin, methadone, or prescription opioids) at some point within the past 30 days. Of the opioid users, most (62 percent) solely used prescription opioids. Only 15 percent of opioid users used multiple forms of opioids; most commonly, they used prescription opioids and either heroin or methadone, but not both. Data available did not allow the cross-site evaluation to determine whether methadone was being used as part of medication-assisted treatment.

Compared with all other adults in RPG2, opioid users:

- **Were more frequent users of other drugs.** More than one-third (36 percent) of opioid users versus 23 percent of all adults reported using cannabis or marijuana; 26 percent of opioid users versus 13 percent of all adults reported using amphetamines; and 27 percent of opioid users versus 9 percent of all adults reported using sedatives.
- **Had greater mental health problems.** Opioid users reported more depressive symptoms (49 percent of opioid users versus 36 percent of all adults were severely depressed) and had about 17 percent more trauma symptoms than the broader sample of RPG adults.
- **Expressed more high-risk parenting attitudes that placed children at risk for maltreatment.** Almost one-quarter (23 percent) of opioid users versus 20 percent of all RPG adults had high-risk parenting attitudes that placed their children at risk of maltreatment.

Among all drug types that the adults in RPG reported using, prescription opioid use dropped the most from RPG entry to exit. About 16 percent of adults were recent prescription opioid users at program entry, and only 4 percent of adults indicated at program exit that they were recent prescription opioid users.

Focusing specifically on people who indicated they were opioid users at program entry (recent users of prescription opioids, heroin, or methadone), there were marked reductions in the use of each type of opioid or other drugs by the end of RPG.

- Among these opioid users, the prevalence of prescription opioid use dropped from 79 percent at program entry to 14 percent at program exit. Methadone use decreased from 21 percent at program entry to 11 percent at program exit, and heroin use dropped from 20 percent at program entry to 8 percent at program exit.
- There were large improvements in recent use of other commonly used drugs as well. Sedative use dropped from 29 percent at program entry to 4 percent at program exit, amphetamine use dropped from 36 to 14 percent, and cannabis use dropped from 36 to 16 percent.

The improvements in mental health outcomes observed for the broader adult population were comparable for the subset of adults who were opioid users. One notable difference was in terms of depression levels, with nearly 50 percent of opioid users having severe depressive symptoms at program entry. This was markedly higher than what was observed among the broader sample of adults in RPG. However, the prevalence of depressive symptoms for opioid users improved significantly by program exit. Only 28 percent of those originally classified as opioid users had severe depressive symptoms at exit.

4. RPG projects offered EBPs to families, often targeting the needs of adults in the family

Applicants had wide latitude in designing their RPG project model. In the funding opportunity announcement, HHS emphasized the use of evidence-based or evidence-informed programs and practices. Knowing what participants actually received is crucial for assessing performance and understanding participants' outcomes. In total, grantees offered more than 50 programs and practices with varying levels of evidence of effectiveness. Some grantees offered just one or two EBPs, but many RPG projects aimed to provide a menu or package of EBPs. Despite this, data show that most RPG2 families received only one EBP.

The RPG2 projects offered EBPs intended to meet the needs of the families they served. The most common types of EBPs projects offered were: (1) family-strengthening programs, (2) therapy or counseling programs, and (3) SUD treatment programs. Most families who received RPG programming received some sort of SUD treatment intervention either as part of RPG or through participating in other publicly funded treatment. The majority of the EBPs RPG projects offered and into which families enrolled were intended for adults; few projects offered EBPs intended for delivery directly to children.

Adherence to the requirements and specifications of evidence-based program and practice models is thought necessary to achieve their intended outcomes. Studies of adherence (fidelity) examine measures such as dosage, frequency, and duration. On average, families were enrolled in RPG for about 6 months and received less than the recommended dosage of the EBP(s) in which they were enrolled. Other studies of EBPs implemented with child welfare populations have documented similar shortfalls. For instance, achieving EBP model guidelines for dosage and duration proved challenging for agencies implementing home-visiting programs to reduce child maltreatment (Daro, Boller, & Hart, 2014). However, the potential effect of lower-than-

recommended dosage is unclear because research in the field of early childhood interventions and other social services has not yet demonstrated how and in what ways dosage is important to the achievement of targeted outcomes (Wasik et al., 2013).

5. Many adult and child outcomes improved significantly following entry into RPG

The overriding purpose of RPG is to improve child safety, permanency, and well-being in families with adult substance use problems. By comparing measures of child and family outcomes at baseline (enrollment) and follow-up (exit), the cross-site evaluation addressed the remaining evaluation question: What were the outcomes of adults and children who received services from the RPG projects?

Box VI.1. A summary of family outcomes

- Adult drug and alcohol use and severity decreased significantly from program entry to exit. Forty-one percent of adults were classified as high-severity drug or alcohol users at program entry, and only 16 percent were classified as high-severity users at program exit.
- Adult mental health and parenting attitudes improved significantly from program entry to exit. Adults reported significantly fewer symptoms of trauma, depression, and stress after enrolling in RPG and expressed significantly fewer attitudes about parenting that placed their children at risk of maltreatment.
- Rates of substantiated maltreatment declined significantly after enrollment in the RPG program. More than one-third (36 percent) of children in RPG had an instance of substantiated maltreatment in the year before RPG, and this decreased to only 7 percent of children in the year after RPG enrollment. Data show that this reduction in maltreatment was not only attributable to removals of children from their homes and placement in safer environments, but also to improvements among children never removed from their homes before or during RPG enrollment.
- Removals from the home were less common in the year after RPG enrollment than in the year before. Twenty-nine percent of children experienced a removal in the year before RPG enrollment, and only 6 percent of children were removed from the home after entering RPG. Reunifications with the family of origin or other permanent placements were also more common in the year after RPG entry than in the year before RPG entry.
- Results for child well-being outcomes were mixed. Some outcomes showed improvement over time, several showed no changes, and one outcome was significantly worse at program exit than at entry.

RPG projects that focused their EBPs on adults were not necessarily ignoring child outcomes, including child well-being. Rather they expected that addressing (and improving) adults' outcomes—by providing SUD treatment, family-strengthening programs and other EBPs and services—would lead to improvements in child outcomes, including well-being. That is, they expected their RPG project to operate as described in the hypothetical framework in Figure V.3, with adult outcomes serving as mediators for child outcomes. The cross-site evaluation analysis suggests this might be true for child safety and permanency. The analysis cannot say whether, if adult outcomes are sustained, child well-being will also, eventually, improve.

To improve child well-being, RPG grantees and HHS might want to emphasize the importance of also implementing EBPs designed to directly address child well-being outcomes. However,

the finding that most families received only a single EBP—despite the fact that most grantees included more than one in a menu or package of services strategy—shows the difficulty of engaging RPG families in multiple EBPs. Dropping adult-focused EBPs in favor of a single child-focused EBP might have unintended consequences, such as engaging fewer adults in SUD treatment or sacrificing improvements in parenting stress or attitudes that protect children from maltreatment or enhance the family's chances for achieving reunification. To increase the probability of improving child well-being, HHS could consider emphasizing the development and testing of two-generation approaches as part of RPG. Two-generation approaches "focus on creating opportunities for and addressing needs of both children and the adults in their lives together" (Aspen Institute, n.d.). For example, a recent report examined programs that deliberately combine services that are intended to support both child development and parental economic security (Sama-Miller et al., 2017). RPG projects could look at ways to implement more full-family services using a similar model.

Box VI.2. Reconceptualizing proximal and distal outcomes

In their grant applications, RPG partnerships identified proximal and distal goals for achieving adult and child well-being outcomes. All 17 projects included at least one proximal adult well-being outcome and distal outcomes focused on improved permanency and enhanced safety for children (Del Grosso, Francis, Angus, Esposito, & Strong, 2013). Fourteen projects included both proximal and distal child well-being outcomes.

In contrast to what projects planned, the cross-site evaluation documented the observed RPG implementation and outcomes. Based on the adult focus of most of the EBPs in which RPG participants enrolled, and changes in outcomes measured from enrollment to exit (baseline to follow-up), the cross-site evaluation identified proximal outcomes for RPG, defined as those directly addressed by interventions and occurring within one follow-up data collection period (Figure V.3). Proximal outcomes were in the adult recovery and family functioning domains, and also included child safety and permanency. The evaluation identified distal outcomes as those desired outcomes not directly addressed by interventions. These were child well-being outcomes that ultimately showed more mixed results within the single follow-up period.

B. Grantees' performance

The RPG authorizing legislation requires HHS to report whether the RPG partnerships achieved the goals and outcomes with respect to the performance indicators established for the program. The cross-site evaluation sought to examine the performance of projects individually and as a group—rather than requiring grantees to contribute separate performance indicators in addition to evaluation data (Strong et al., 2014). As described earlier, data provided by grantees and gathered by the cross-site evaluation through surveys and site visits showed that the second cohort of RPG grantees achieved key goals of the program as outlined in the authorizing legislation:

- The RPG program and RPG projects successfully formed partnerships and established solid foundations for collaboration, even though only some integrated services—a higher bar.
- With few exceptions, the funded partnerships served the intended RPG target population and their own specific target populations.
- As intended by HHS, the projects implemented EBPs and enrolled nearly all participants in one or more EBP. Similar to earlier grantees serving families with children at risk of

maltreatment—and other social service program models across other fields—the partnerships struggled somewhat to retain participants and deliver the full dosage and duration intended by developers of their EBPs. Evidence is still needed to assess whether and to what extent this influenced the effectiveness of the EBPs. Even though improvements in these areas by future grantees are desirable, earlier Reports to Congress show there is no evidence that RPG2 grantees made insufficient efforts to recruit, engage, and retain families (HHS 2013, 2018).

- RPG programs achieved positive participant outcomes in all five outcome domains emphasized by the RPG authorizing legislation: adult recovery from substance use issues; family functioning; and child safety, permanency, and well-being. Although the child well-being outcomes were mixed, this appears to be a result of the strategies and approaches partnerships selected to ensure adult substance use issues and factors that affected child safety and permanency were sufficiently addressed.
- Notably, despite burdens and challenges associated with administering standardized instruments to adult participants, obtaining administrative data from state child welfare and substance use treatment agencies, and providing real-time enrollment and services data over the course of several years, the partnerships supported the first cross-site evaluation attempted of the RPG program. These data have provided detailed information on partnerships, target population characteristics and needs, services provided, and outcomes across five different domains. The evaluation, and this report, complete HHS's significant responsibilities under the legislation.

These accomplishments, it is hoped, will set the stage for more rigorous local and cross-site evaluation of future cohorts. Such evaluations might help HHS identify which of the many models and approaches grantees have implemented most effectively meet the needs of families involved in SUD treatment and child welfare system services and how to reconcile the underlying values and goals of each system to benefit children at risk of out-of-home placements due to adult substance use issues.

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APPENDICES

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Introduction

News of the increasing toll substance abuse is taking on families, children, and health systems across the country has policymakers, service providers, and individuals struggling to find solutions. One major concern is the impact on child welfare. Although not all of the estimated 2.1 million children living with a parent who misuses drugs or alcohol will experience maltreatment, they are at increased risk for neglect and entering the child welfare system. The Regional Partnership Grants (RPG) program, established in 2011, funds partnerships between child welfare agencies and organizations in substance use disorder (SUD) treatment and other social service systems to improve the well-being, permanency, and safety outcomes of children who are in, or are at risk of, out-of-home placement as a result of a parent's or caregiver's SUD.

The Child and Family Services Improvement and Innovation Act of 2011 (Pub. L. 112-34) reauthorized the RPG program and appropriated $100 million of funding for new grants. In September 2012, U.S. Department of Health and Human Services (HHS) awarded new RPG grants to 17 organizations in 15 states. HHS contracted with Mathematica Policy Research to design and conduct a national cross-site evaluation reflecting the goals of the legislation and assessing program effectiveness. In the Fifth Report to Congress, HHS provides the findings of the cross-site evaluation (forthcoming).

This document provides information on the data and analytic methods used in two components of the cross-site evaluation: the partnership study, described in Chapter II of that report, and the outcomes study, described in Chapter V.

- Appendix A is the partnership study survey instrument. The survey was administered to grantee agencies and their partner organizations to gather information on the organizations, their role in RPG, their relationships, and the quality of their collaboration.
- Appendix B describes the survey and the analytic methods, including social network analysis, used to examine the RPG partnerships and the quality of their collaboration.
- Appendix C discusses the data and analytic methods used to examine the outcomes of families that enrolled in RPG. Outcomes were measured as the difference between enrollment and program exit in a variety of measures in five cross-site evaluation outcome domains: (1) adult recovery from SUD, (2) family functioning, (3) child safety, (4) child permanency, and (5) child well-being.
- Appendix D is a table listing all EBPs offered by grantees in RPG ordered by the type of EBP. The table provides the numbers of grantees offering and enrolling families in each EBP and the numbers of families enrolled for those EBPs that had enrollments.

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APPENDIX A

PARTNERSHIP SURVEY

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OMB No.: 0970-0444
Expiration Date: 03/31/2017

Partner Survey
Regional Partnership Grants National Cross-Site Evaluation

INTRODUCTION

The Regional Partnership Grants (RPG) program supports interagency collaborations and program integration designed to increase the well-being, improve the permanency, and enhance the safety of children who are in, or at risk of, out-of-home placements as a result of a parent or caretaker's substance abuse. The Children's Bureau within the U.S. Department of Health and Human Services, Administration for Children and Families (ACF) has contracted with Mathematica Policy Research to complete the national cross-site evaluation of the program. The evaluation will describe the interventions that were implemented, the nature of the partnerships, the types of services provided, and their impacts.

You are being asked to complete this survey because you were identified as a representative of a partner organization working with the RPG grantee, [RPG GRANTEE]. Representatives from partner organizations are asked to complete this survey to provide information about their own organizations, relationships with the grantee and other collaborating organizations, and program implementation. The length of this survey is different for different people, but on average it should take about 20 minutes.

Your participation in this survey is important and will help us understand more about the partnerships implementing RPG-funded programs. Please provide responses for your organization, [ORGANIZATION]. If you represent a specific branch or program within your organization that is engaged with the RPG partnership, rather than the organization as a whole, please provide information about that branch or program rather than the organization as a whole. If you are unsure of how to answer a question, please give the best answer you can rather than leaving it blank.

Your responses will be kept private and used only for research purposes. They will be combined with the responses of other staff and reported in the aggregate; and no individual names will be reported. Participation in the survey is completely voluntary and you may choose to skip any question. Nothing reported in this survey will affect your future role with regard to RPG or your employment.

If you have any questions about the survey, please contact the team at Mathematica by emailing RPGData@mathematica-mpr.com or calling 855-558-5528 (toll-free). If you have any questions about your rights as a research participant, please contact the New England Institutional Review Board (IRB) at (800) 232 – 9570.

Please read and answer the statement below and then click the "Next" button in the lower right-hand corner to begin the survey.

i1. I have read the introduction and understand that the information I provide will be kept private and used only for research purposes. My responses will be combined with the responses of other staff and no individual names will be reported.

1 ☐ I agree with the above statement and will complete the survey

0 ☐ I do not agree with the above statement and will not complete the survey → **GO TO END**

A. YOUR ORGANIZATION

The first questions are about your organization, [ORGANIZATION].

1. Which of the following best describes your organization?

MARK ONE ONLY

1 ☐ Child welfare services provider
2 ☐ Substance abuse treatment provider
3 ☐ Mental health services provider
4 ☐ School district, school, or early childhood education or services provider
5 ☐ Housing/homeless services provider
6 ☐ Medical or dental services provider
7 ☐ University
8 ☐ Court/judicial agency
9 ☐ Corrections or law enforcement agency
10 ☐ Home visiting services provider
11 ☐ Department in state or tribal government
12 ☐ Department in local government
13 ☐ Foundation
14 ☐ Research/evaluation organization
15 ☐ Other *(Describe)*

_____

2. What are the main activities your organization conducts <u>in general</u>?

MARK ALL THAT APPLY

1 ☐ Regulation and oversight
2 ☐ Child welfare services
3 ☐ Substance abuse treatment
4 ☐ Family therapy
5 ☐ Medical or dental services
6 ☐ Education or early childhood intervention
7 ☐ Legal processes
8 ☐ Law enforcement
9 ☐ Home visiting
10 ☐ Funding
11 ☐ Evaluation
12 ☐ Program planning and policy development
13 ☐ Advocacy
14 ☐ Other *(Describe)*

_____

3. Does your organization currently provide program or other services or plan to serve RPG program clients?

MARK ONE ONLY

1 ☐ Currently provides services to RPG clients
2 ☐ Plans to provide services to RPG clients
3 ☐ No → **GO TO Q.6**

4. Approximately how many RPG program clients does your organization currently serve or plan to serve each year?

Your best estimate is fine.

|__|__|__| , |__|__|__| CLIENTS

5. Which of the following programs does your organization provide or plan to provide <u>to RPG program clients</u>?

MARK ALL THAT APPLY

1 ☐ 24/7 Dad
2 ☐ Alternatives for Families-Cognitive Behavioral
3 ☐ Attachment, Self-Regulation, and Competence (ARC)
4 ☐ Celebrating Families!
5 ☐ Centering Pregnancy
6 ☐ Child-Parent Psychotherapy (CPP)
7 ☐ Cognitive Behavior Therapy (CBT)
8 ☐ Dialectical Behavior Therapy (DBT)
9 ☐ Family Behavior Therapy (FBT)
10 ☐ Family Group Conferencing
11 ☐ Family Treatment Drug Court (FTDC)
12 ☐ Guiding Good Choices (GGC)
13 ☐ Hazelden Co-Occurring Disorders Program
14 ☐ Hazelden Living Balance Programs
15 ☐ Helping Men Recover
16 ☐ Head Start
17 ☐ Healthy Families
18 ☐ Homebuilders Intensive Family Preservation Services
19 ☐ Incredible Years Parenting Class
20 ☐ Kelly Bear
21 ☐ Keys for Interactive Parenting (KIPS)
22 ☐ Lifespan Integration
23 ☐ Matrix Model Program
24 ☐ MindUP
25 ☐ Modified Therapeutic Community (MTC)
26 ☐ Moral Reconation Therapy
27 ☐ Motivational Enhancement Therapy
28 ☐ Motivational Interviewing
29 ☐ Multisystemic Family Therapy (MST)

MARK ALL THAT APPLY

30 ☐ My Baby and Me (Ages 0-3)
31 ☐ Nurse-Family Partnership (NFP)
32 ☐ Nurturing Parenting Programs
33 ☐ Parent and Child Interactive Therapy
34 ☐ Parent Child Assistance Program (PCAP)
35 ☐ Parents and Children Together (PACT)
36 ☐ Parents as Teachers Curriculum
37 ☐ Partners in Parenting
38 ☐ Prolonged Exposure
39 ☐ Recovery Coach
40 ☐ Relapse Prevention Therapy (RPT)
41 ☐ Resource Mothers
42 ☐ SafeCare
43 ☐ Sanctuary Model
44 ☐ Screening, Brief Intervention, and Referral to Treatment (SBIRT)
45 ☐ Seeking Safety
46 ☐ Solution Focused Brief Therapy (SFBT)
47 ☐ Staying Connected with Your Teen
48 ☐ Strengthening Families
49 ☐ Strong Kids
50 ☐ Structured Psychotherapy for Adolescents Responding to Chronic Stress (SPARCS)
51 ☐ Supportive Education for Children of Addicted Parents
52 ☐ Trauma Focused Cognitive Behavioral Therapy (TF-CBT)
53 ☐ Untangling Relationships
54 ☐ Other *(Describe)*

_____

55 ☐ None of these

6. Approximately how much funding from the Regional Partnership Grants program did your organization receive this fiscal year, if any? ***If your organization did not receive RPG funding this fiscal year, please answer $0.00.***

$ |___|___|___|**,**|___|___|___|**.**00 AMOUNT OF FUNDING RECEIVED FROM RPG PROGRAM

d ☐ Don't know

7. Which of the following in-kind resources is your organization is contributing to the RPG program this fiscal year?

MARK ALL THAT APPLY

1 ☐ Staff time

2 ☐ Office space

3 ☐ Volunteers

4 ☐ Office supplies

5 ☐ RPG program materials

6 ☐ Computer/Internet, telephone, or fax service

7 ☐ Other *(Describe)*

_____

8 ☐ None of these

B. PERSPECTIVES ON GOALS AND RELATIONSHIPS IN THE PARTNERSHIP

Partner Goals

8. In your own words, what are the main goals of the RPG partnership?

_____

_____

_____

Relationships/Communication Systems

9. Do you currently serve on a steering, implementation, governance, or some other committee for the RPG grant?

1 ☐ Yes

0 ☐ No

10. Other than formal RPG partnership meetings, how frequently does your organization communicate about RPG with the organizations listed below?

First, please indicate if you were previously working with a member of the RPG partnership prior to the beginning the RPG grant in 2012. Next, please indicate if you do not communicate at all, if you communicate infrequently (a few times each month), or if you communicate regularly (every day or nearly every day) with that partner. Please choose the answer that best represents the frequency of communication. *Please ignore the row that contains your organization.*

Organization	Were you previously working with this partner prior to receiving the RPG grant funds? (MARK IF YES)		We do not communicate at all outside of RPG partnership meetings	We communicate infrequently (a few times each month) outside of RPG partnership meetings	We communicate regularly (every day or nearly every day) outside of RPG partnership meetings
	Yes	No			
[ROSTER OF ORGANIZATIONS]	1 ☐	0 ☐	1 ☐	2 ☐	3 ☐
_____	1 ☐	0 ☐	1 ☐	2 ☐	3 ☐
_____	1 ☐	0 ☐	1 ☐	2 ☐	3 ☐
_____	1 ☐	0 ☐	1 ☐	2 ☐	3 ☐

_____	1 ☐	0 ☐	1 ☐	2 ☐	3 ☐
_____	1 ☐	0 ☐	1 ☐	2 ☐	3 ☐
_____	1 ☐	0 ☐	1 ☐	2 ☐	3 ☐

11. To what extent do you disagree or agree with each of the following statements about the current status of the collaboration among RPG partner organizations?

	Strongly Disagree	Disagree	Agree	Strongly Agree
a. Our collaborative effort was started because we wanted to do something about an important problem	1 ☐	2 ☐	3 ☐	4 ☐
b. Our RPG program's top priority was having a concrete impact on the real problem	1 ☐	2 ☐	3 ☐	4 ☐
c. The organizations involved in our RPG program included those organizations affected by the issue	1 ☐	2 ☐	3 ☐	4 ☐
d. Participation was not dominated by any one group or sector	1 ☐	2 ☐	3 ☐	4 ☐
e. Our partner organizations have access to credible information that supports problem solving and decision making	1 ☐	2 ☐	3 ☐	4 ☐
f. RPG partner organizations agree on what decisions will be made by the group	1 ☐	2 ☐	3 ☐	4 ☐
g. Partner organizations agree to work together on this issue	1 ☐	2 ☐	3 ☐	4 ☐
h. Organizations involved in our RPG program have set ground rules and norms about how we will work	1 ☐	2 ☐	3 ☐	4 ☐
i. We have a method for communicating the activities and decisions of the group to all partner organizations	1 ☐	2 ☐	3 ☐	4 ☐
j. There are clearly defined roles for RPG partner organizations	1 ☐	2 ☐	3 ☐	4 ☐
k. Partner organizations are more interested in getting a good decision for the RPG program than improving the position of their own organization	1 ☐	2 ☐	3 ☐	4 ☐

l. Staff who participate in RPG program meetings are effective liaisons between their home organizations and the group	1 ☐	2 ☐	3 ☐	4 ☐
m. Partner organizations trust each other sufficiently to honestly and accurately share information, perceptions, and feedback	1 ☐	2 ☐	3 ☐	4 ☐
n. Partner organizations are willing to let go of an idea for one that appears to have more merit	1 ☐	2 ☐	3 ☐	4 ☐
o. Partner organizations are willing to devote whatever effort is necessary to achieve the goals	1 ☐	2 ☐	3 ☐	4 ☐
p. Divergent opinions are expressed and listened to	1 ☐	2 ☐	3 ☐	4 ☐
q. The openness and credibility of the process helps partner organizations set aside doubts and skepticism	1 ☐	2 ☐	3 ☐	4 ☐
r. Our group sets aside vested interests to achieve our common goal	1 ☐	2 ☐	3 ☐	4 ☐
s. Our group has an effective decision making process	1 ☐	2 ☐	3 ☐	4 ☐
t. Our group is effective in obtaining the resources it needs to accomplish its objectives	1 ☐	2 ☐	3 ☐	4 ☐
u. The time and effort of the collaboration is directed at achieving our goals rather than keeping the collaboration in business	1 ☐	2 ☐	3 ☐	4 ☐

12. Using the two columns below, please indicate the organizational levels at which collaboration <u>most often</u> occurs among all of the organizations in the partnership to fill in the following statement: <u>Generally speaking</u>, collaboration among organizations in the partnership typically occurs at the following levels: (<u>column A</u>) to (<u>column B</u>).

MARK ONE ONLY IN COLUMN A

1 ☐ Administrators/organization leaders

2 ☐ Front-line staff/mid-level supervisors

MARK ONE ONLY IN COLUMN B

1 ☐ Administrators/organization leaders

2 ☐ Front-line staff/mid-level supervisors

13. Indicate the degree to which you disagree or agree with each of the following statements about RPG programming:

	Strongly Disagree	Disagree	Agree	Strongly Agree	Does not apply/ Don't know
a. We developed strategies to recruit community participation	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
b. Community members are included in program planning and development	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
c. We developed formal mechanisms to solicit support and input from community members and consumers	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
d. Front-line staff have up-to-date resource directories for family support centers and resources	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
e. Community-wide accountability systems are used to monitor substance abuse and child welfare issues	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
f. Consumers, patients in recovery, and program graduates have active roles in planning, developing, implementing, and monitoring services	1 ☐	2 ☐	3 ☐	4 ☐	d ☐

C. PARTNERSHIP OUTPUTS

14. Indicate the degree to which you disagree or agree with each of the following statements about clients receiving RPG programming:

	Strongly Disagree	Disagree	Agree	Strongly Agree	Does not apply/ Don't know
a. Services provided to families are coordinated across multiple partners	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
b. Case management is coordinated across both substance abuse treatment providers and child welfare agencies	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
c. Families receiving joint case management receive regular cross-agency assessments	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
d. Staff from both substance abuse treatment providers and child welfare agencies participate in joint case management activities such as family team conferences, case plan reviews, or intake or permanency staffings	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
e. Judicial officers and attorneys are viewed as partners in developing new approaches to serve families with substance use disorders in the child welfare system	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
f. Substance abuse and child welfare agencies and the courts have negotiated shared principles or goal statements	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
g. Region/partnership developed responses to conflicting time frames associated with child welfare services, substance abuse treatment, Temporary Assistance for Needy Families, and child development	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
h. Substance abuse treatment and child protective service case plans are coordinated	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
i. Formal working agreements have been developed on how courts, child welfare, and treatment agencies will share client	1 ☐	2 ☐	3 ☐	4 ☐	d ☐

	information					
j.	Data tracking child welfare and substance abuse clients across systems is used to monitor outcomes	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
k.	Substance abuse agencies, child welfare agencies, and court systems have developed shared outcomes for families and agree on how to use information on outcomes with families	1 ☐	2 ☐	3 ☐	4 ☐	d ☐
l.	Joint training programs for the three main systems staff have been developed to help staff and providers work together effectively	1 ☐	2 ☐	3 ☐	4 ☐	d ☐

15. Below is a list of organizations identified as part of your RPG partnership. Which RPG-related services does your organization coordinate with or collaborate on with each organization? If you do not coordinate or collaborate with the organization on any of the listed activities, leave the row blank. ***Please ignore the row that contains your organization.***

Organization	Screening and/or Assessment	RPG Program Referrals	Case Manage-ment or Coordina-tion	Substance Abuse Treatment	Mental Health / Trauma Services	Other Social or Family Services
[ROSTER OF ORGANIZATIONS]	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
________________________	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
________________________	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
________________________	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
________________________	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
________________________	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
________________________	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
________________________	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
________________________	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐

END OF SURVEY

16. Thank you for your participation in this survey. If there is anything else that you would like to tell us about your work on the RPG program or about the partnership as a whole, please share it here.

_____

_____

_____

_____

(End of survey for those who opt out in the first screen)

Thank you for considering participation in this survey. Please click the "Submit survey" button in the lower right hand corner so that we have a record of your desire NOT to participate. This will result in your removal from our contact list.

(End of survey for respondents)

Thank you for completing the Regional Partnership Grant Partner Survey!

Please click the "Submit survey" button in the lower right hand corner to submit your completed survey.

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APPENDIX B

PARTNERSHIP DATA AND METHODS

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This appendix provides a technical summary of the data and methods used to develop the Regional Partnership Grants (RPG) partnership study framework presented in Chapter II of the Report to Congress. The appendix has four sections: Section A describes the partner survey data. Section B describes two standard measures of collaboration and coordination collected as part of the survey and explains how the evaluation contractor analyzed the measures. Section C describes the social network analysis of partners' communication and service coordination. Finally, Section D describes how each level of the partnership puts the framework into practice using the collaboration measures and the social network data obtained from the partner survey (Chapter II, Figure II.5).

A. Partner survey data

The grantee and all of the grantee's partners responded to the partner survey in spring 2015, at the time of full program implementation when sites were in operation for 3 years. One representative from each organization (either the grantee or a partner) identified as most knowledgeable about their RPG project received a survey. Of 205 invited respondents, 163 completed the survey, for an 80 percent response rate.

The partner survey included questions used to operationalize three categories of information: (1) the characteristics of the respondent organization; (2) general descriptions of collaboration and coordination, based on two established measures in the literature; and (3) more specific social network data about the communication and service coordination relationships existing among organizations in given grantee partnerships.

Characteristics of respondent organizations

The partner survey collected information about partners' characteristics and goals for RPG. The information collected included: (1) the organization type, such as a child welfare or substance use disorder (SUD) provider; (2) primary organizational activities performed, such as therapy or evaluation; (3) the number and type of evidence-based practices implemented; (4) the number of RPG program clients the organization served or planned to serve each year; (5) the funding received by the partner organization from the RPG grant each year; (6) the in-kind resources the partner organization contributed to the partnership, such as staff time or office space; and (7) the partner's perceived main goals of the RPG partnership.

Measures of collaboration

Two established measures—the Working Together Survey (WTS) (Chrislip & Larson, 1994) and Collaborative Capacity Instrument (CCI) (National Center on Substance Abuse and Child Welfare, 2017)—were collected as part of the partner survey.

Working Together Survey. The WTS includes five scales, or constructs, of collaboration: (1) context of the collaboration, (2) results of the collaboration, (3) structure of the collaboration, (4) collaboration process, and (5) collaboration members.

- The **context of the collaboration** is the extent to which the partnership perceives it is working on an important topic. It asks respondents to indicate their agreement or disagreement with items such as "Our program's top priority was having a concrete impact on the real problem."

- The **results of the collaboration** indicate the extent to which the partnership has goals in place and the resources to meet these goals. This category includes two items, one of which is "Our group is effective in obtaining the resources it needs to accomplish its objectives."
- The **structure of the collaboration** is the extent to which the partnership has shared communication norms and understood roles for participants and has ground rules for conducting its work and the ability to share information. The structure of the collaboration construct includes eight items, such as "Organizations involved in our program have set ground rules and norms about how we will work."
- The **collaboration process** is the extent to which the partnerships listen to others' opinions and have a credible system for making decisions. This category includes four items such as, "The openness and credibility of the process helps partners set aside doubts and skepticism" and "Our group has an effective decision-making process."
- The **collaboration members** construct is the extent to which members can work together across partnership organizations. This category includes five items such as, "Partners are willing to devote whatever effort is necessary to achieve the goals" and "Staff who participate in program meetings are effective liaisons between their home organizations and the group."

Collaborative Capacity Instrument. The CCI includes five scales of service coordination: (1) daily practice in service coordination; (2) daily practice in screening and assessment; (3) shared principles, approaches, and time frames; (4) joint staff training across organizations; and (5) tracking and sharing information across organizations.

- **Daily practice in service coordination** represents the extent to which the partnerships had capacity to coordinate client services through case management, intake, and family team conferences. This category asks respondents to indicate their agreement or disagreement with items such as, "Staff from both [SUD] treatment providers and child welfare agencies participate in joint case management activities such as family team conferences, case plan reviews, or intake or permanency staffings."
- **Daily practice of screening and assessment** shows the extent to which the partnership had the capacity to coordinate across [SUD] treatment and child welfare agencies to provide cross-agency assessments. This category has two items, one for SUD and one for child protective services.
- **Shared principles, approaches, and time frames** represents the extent to which the partnership developed a collaborative relationship by sharing principles, values, approaches, and time frames. This category includes three items: "Region/partnership developed responses to conflicting time frames associated with child welfare services and [SUD] treatment, Temporary Assistance for Needy Families, and child development."
- **Joint staff training across organizations** shows the extent to which the partnership had developed training sessions for organizations spanning different systems. The item is "Joint training programs for the three main systems staff have been developed to help staff and providers work together effectively."

- **Tracking and sharing information across organizations** represents the extent to which the partnership had the capacity to track and share clients' information across partners. This category asked respondents to indicate their agreement with three items, such as "Formal working agreements have been developed on how courts, child welfare, and treatment agencies will share client information."

Social network data. The partner survey also measured eight different aspects of communication and service coordination among partners. Specifically, it measured whether a respondent: (1) worked together with another organization before the RPG grant; (2) communicated with another organization outside of formal RPG meetings; (3) coordinated with another organization on screening and assessment; (4) coordinated with another organization on RPG program referrals; (5) coordinated on cases or case management with another organization; (6) coordinated with another organization to provide SUD treatment; (7) coordinated with another organization to provide mental health and trauma services; and (8) coordinated with another organization to provide other social and family services. In the survey, each respondent provided information about his or her relationships with all other organizations within the respondent's RPG partnership. For example, if an RPG partnership consisted of 10 organizations, each respondent to the survey would talk about specific relationships with the other 9 organizations in the partnership. These responses about connections (or the lack thereof) among all organizations within a partnership enable the social network of the relationships to be operationalized.

B. Analysis of standard measures of collaboration and coordination

The analysis combined the survey responses for the two established measures, the WTS and CCI, to produce reliable assessments of well-understood constructs in the literature. Using confirmatory factor analysis (CFA), five factors or scales were confirmed to be appropriate for the WTS and CCI measures respectively, based on the RPG respondents' data. CFA is a statistical procedure that tests how well the measured (or observed) variables represent a set number of underlying constructs, for a given set of data. For the CFAs conducted on the WTS and CCI, the combination of individual item responses described in the literature was confirmed to be appropriate for the RPG data. For example, in the WTS, the two individual items on the survey—"Our collaborative effort was started because we wanted to do something about an important problem" and "Our RPG program's top priority was having a concrete impact on the real problem"—were tested to represent one underlying construct (or scale) called context of the collaboration, and the RPG data confirmed that these items should be combined.

One way to examine how well the individual items represent the latent construct is by examining the internal consistency statistic called Cronbach's alpha. It measures the extent to which all the items on a scale measure the same construct or idea. Values closer to 1 indicate higher concurrence among items. Table B.1 for the WTS and Table B.2 for the CCI present the alphas for each individual scale, based on the RPG data. In general, both WTS and CCI measures represent internally consistent and reliable assessments of the underlying constructs of interest.

Next, means were calculated for each scale by first averaging scores from each organization within a partnership for that construct. Each individual item was scored on a scale of strongly disagree (a score of 1) to strongly agree (a score of 4), where higher scores demonstrate

agreement with these dimensions of collaboration and coordination. Then, to obtain 17 grantee-level averages, the organization-level construct scores were averaged within each partnership.

Table B.1 for the WTS and Table B.2 for the CCI present the mean, minimum, and maximum for each scale. In addition, the tables present the number of grantees, among 17 total grantees, that scored lower than a 3 on the scale, which indicates the number of partnerships that did not agree their partnership had that aspect of collaboration or coordination in place.

Table B.1. Partners' perceptions of collaboration based on the Working Together Survey

WTS scale	Mean	Minimum observed score	Maximum observed score	Number of partnerships (of 17) reporting score lower than 3	Internal consistency reliability (Cronbach's alpha[a])
Context of the collaboration (2 items)	3.50	3.00	3.92	0	.75
Results of the collaboration (2 items)	3.12	2.43	3.75	5	.65
Structure of collaboration (8 items)	3.09	2.67	3.54	5	.88
Collaboration process (4 items)	3.01	2.46	3.50	7	.89
Collaboration members (5 items)	2.98	2.40	3.45	7	.86

[a] The Cronbach's alpha values were calculated based on the RPG survey sample. Cronbach's alpha measures the extent to which all the items on a scale measure the same construct or idea. Values closer to 1 indicate higher concurrence among items.

Note: The statistics are based on unweighted grantee averages (n = 17), such that all 17 grantees contributed equally to the analyses, regardless of the number of respondents within each grantee. The full sample size across grantees was 163.

Source: RPG partner survey.

Table B.2. Partners' perceptions of service coordination based on the Collaborative Capacity Instrument

CCI scale	Mean	Minimum	Maximum	Number of partnerships (of 17) reporting a score lower than 3	Internal consistency reliability (Cronbach's alpha[a])
Daily practice in services coordination (3 items)	3.20	2.56	3.80	3	.83
Daily practice of screening and assessment (2 items)	2.95	2.10	3.82	7	.78
Joint staff training across organizations (1 item)	2.88	2.00	3.67	4	n.a.[b]
Shared principles, approaches, and timeframes (3 items)	2.88	2.26	3.40	9	.87
Tracking and sharing information across organizations (3 items)	2.85	2.43	3.38	10	.79

[a] The Cronbach's alpha values were calculated based on the RPG survey sample. Cronbach's alpha measures the extent to which all the items on a scale measure the same construct or idea. Values closer to 1 indicate higher concurrence among items.

[b] The Cronbach's alpha value cannot be computed on a single item.

Note: n.a. = not applicable.

The statistics are based on unweighted grantee averages (n = 17), such that all 17 grantees contributed equally to the analyses, regardless of the number of respondents within each grantee. The full sample size across grantees was 163.

Source: RPG partner survey.

C. Social network analysis

Social network analysis offers the possibility of understanding how multiple organizations within the same partnership collaborate by triangulating responses from each partner (Colvin, 2017; Friedman et al., 2007), rather than examining responses from individual partners in isolation. Social network analysis allows for more complete measurement of the relationships between the partners because some of these partners could have relationships with some organizations but not all of the organizations within the partnership. For example, the SUD treatment organization and the child welfare organization might have a relationship in which they coordinate to provide services to families; however, the SUD treatment organization might not have a relationship with the children's mental health organization, even if that organization has a relationship with the child welfare organization.

In addition, social network analysis allows for measuring unique aspects of relationships among respondents. It is well understood that organizations in the RPG can have different relationships with one another, depending on the topic on which they collaborate. For example, although the SUD treatment organization might have a relationship with the child welfare organization to coordinate case management, these two organizations might not have a relationship when it comes to providing mental health and trauma services. For this reason, the relationships between partners were examined separately for each of the eight topics listed previously. In other words, each partnership's responses were analyzed to understand its relationships as they pertained to: (1) the extent the partnerships worked together before the RPG grant, (2) the partners' relationships with one another in communicating outside of formal RPG meetings, and (3) the partners' relationships with one another on coordinating services on each of six topics.

Preparing data. The evaluation contractor prepared the social networks data separately for each of the eight networks, for each of the 17 grantee partnerships. A given partnership network can be conceptualized as an N-by-N matrix, where N represents the number of organizations within a network. Each cell *(i, j)* of the matrix represents how the organization in row *i*, is connected to the organization in column *j*.

For example, if one partnership network has five organizations but only four of those respond to the survey, the data would look like the example presented in Table B.3, in which Organization 5 is the one that did not respond.

Table B.3. Example of partnership social network data

	Organization 1	Organization 2	Organization 3	Organization 4	Organization 5
Organization 1	-	1	0	1	1
Organization 2	0	-	0	1	1
Organization 3	0	0	-	0	1
Organization 4	0	0	1	-	1
Organization 5	Missing	Missing	Missing	Missing	-

Note: A 0 represents no connection between organizations and a 1 represents a connection. The dash (-) represents a not-applicable relationship (an organization's relationship to itself).

This matrix representation shows how each organization connects with the other organizations in the network. Organization 1 (row 1) has connections to Organizations 2, 4, and 5, but not Organization 3. In this example, Organization 5 did not respond to the survey, and thus, all of its connections to other organizations are shown as missing. For the purposes of the analysis of the social network data, all of the missing values were coded as 0, indicating the organization did not acknowledge having a relationship with the other organization. The benefit of this approach is that it maintains the information that other responding organizations provided about the nonresponding organization. As seen in the last column of Table B.3, Organizations 1 through 4 reported having a relationship with Organization 5. By recoding all of Organization 5's missing values to 0, the information collected from the other organizations in the partnership network was able to be maintained.

Analyses. A density score, the proportion of relationships that exist among partners within a network, was calculated for each network. The density score explains the proportion of organizations that actually communicated or collaborated among the total possible relationships in the partnership. The score is calculated by taking the number of connections that exist between partners out of the total possible number of connections. Using the example in Table B.3, there are 8 observed connections (that is, there are eight 1s in the matrix) and a total of 20 possible connections (after ignoring the not applicable "-" self-relationships on the diagonal of the matrix). Therefore, the density for this network is 8/20 = 0.4. If every partner connected to all of the other organizations, then the density score would be 1, meaning that 100 percent or all of the possible connections were made. If none of the organizations connected with the other organizations, the density score would be 0 because 0 percent or none of the possible connections were made.

For each of the 17 partnerships, a density score was produced for each of the eight topics. The density scores for each topic area were then averaged to produce an aggregate score across all partnerships on each topic area. Table B.4 presents the average density scores across all 17 partnerships as well as the minimum and maximum density scores.

Table B.4. Social network analysis results based on communication and coordination data

Network	Density (average)	Minimum	Maximum
Worked together before the RPG grant	.42	.22	.63
Communicated outside of formal RPG meetings	.75	.39	1.00
Screening and assessment	.21	.04	.42
RPG program referrals	.17	.02	.33
Case management or coordination	.21	.06	.50
Substance use disorder treatment	.17	.02	.33
Mental health and trauma services	.17	.03	.42
Other social and family services	.26	.14	.50

Note: Density scores were computed for each network for each partnership and then scores were averaged across networks to produce the average density score for all 17 grantees on the eight networks.

Source: RPG partner survey.

D. Measures and items incorporated into the partnership framework

The hierarchy of partnership achievements (Chapter II, Figure II.5), a framework for understanding the overall structure of RPG partnerships, was created using results from the analyses of the WTS, CCI, and social network items about communication and service coordination. As discussed in Chapter II of the report, three levels represent integrated interagency collaboration: Shared Vision and Common Goals (Level 1), Aligned Operational Processes (Level 2), and Integrated Service Provision (Level 3).

Each level of the framework is driven by research literature that suggests partnerships move from basic exchanges, such as common goals, to more integrated exchanges, such as service coordination (Blakey, 2014; Smith & Mogro-Wilson, 2008). The evaluation used this research to develop the framework by grouping common constructs from the WTS, CCI, and social network items together by the achievements at each level. For example, Level 1 involves foundational partnership achievements, such as a common vision and shared goals; thus, the constructs from the WTS such as context of collaboration and results of the collaboration, along with the item from the social network analysis that asks the extent to which the organization communicated with another organization outside of formal RPG meetings, are grouped under this level. The intent of the analysis using these multiple sources of data was not to group partnerships by the number of levels they obtained but instead to report on each level in the framework and the progress partnerships made attaining the different characteristics on that level. This is in part because partnerships made progress on different characteristics at all levels of the framework—they did not "achieve" every characteristic of Level 1 before making progress on Level 2. Table B.5 lists the constructs and items from the survey that compose each of the three levels of the framework presented in Chapter II.

Table B.5. Survey constructs and items included in each level of the partnership framework

Level of framework	Partner survey data source	Construct or item
Level 1. Shared vision and common goals	Working Together Survey	Context of the collaboration
		Results of the collaboration
		Structure of the collaboration
	Social network items	Extent to which an organization communicated with another organization outside of formal RPG meetings
Level 2. Aligned operational processes	Working Together Survey	Collaboration process
		Collaboration members
	Collaborative Capacity Instrument	Daily practice in service coordination
		Daily practice in screening and assessment
		Joint staff training across organizations
Level 3. Integrated service provision	Collaborative Capacity Instrument	Tracking and sharing information across organizations
		Shared principles, approaches, and time frames
	Social network items	Extent to which an organization coordinated with the organization on screening and assessment
		Extent to which an organization coordinated with the organization on RPG program referrals
		Extent to which an organization coordinated on cases or case management with another organization
		Extent to which an organization coordinated with another organization to provide substance use disorder treatment
		Extent to which an organization coordinated with another organization to provide mental health and trauma services
		Extent to which an organization coordinated with another organization to provide other social and family services

APPENDIX C

OUTCOMES STUDY DATA AND METHODS

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This appendix provides a technical summary of the data and methods used to summarize participants' outcome data. The evaluation contractor used these data to describe the target population (Chapter III) and how participants' outcomes changed over time (Chapter V). The appendix has three sections: Section A describes the participants' outcome data used in this report (standardized instrument and administrative data elements). Section B describes how these data were prepared for the purposes of the analyses. Finally, Section C includes information on how these outcome data were analyzed in the report—this section provides additional technical details on: (1) how the baseline analysis was conducted in Chapter IV, (2) how individuals with both baseline and follow-up standardized instrument data differed from individuals without both data points, (3) the approach for calculating nonresponse weights, (4) the analytic approach for comparing baseline and follow-up outcomes, and (5) sensitivity analyses used to assess the robustness of the benchmark results presented in Chapters III and V.

A. Outcome data description

The cross-site evaluation collected a comprehensive set of common data elements on adults and children across grantees to understand key outcomes of interest. At program entry and exit, grantees administered standardized child and adult assessment instruments to adults. Grantees also obtained administrative child welfare and substance use disorder (SUD) treatment data for the year before Regional Partnership Grants (RPG) enrollment as well as the period following RPG enrollment.

An RPG case consists of the group of individuals who present themselves to enroll in an RPG program. An RPG case can be, but is not always, the same as the family unit. Although RPG cases could include multiple children, grantees collected administrative data and standardized assessment data on only one focal child in each case, selected according to a rule established by each grantee. This enabled the U.S. Department of Health and Human Services (HHS) to obtain detailed information on maltreatment, out-of-home placements, and child well-being outcomes in each RPG case without placing excessive burdens on grantees or families.

Standardized instrument data

Grantees administered standardized instruments to obtain information on child and adult well-being (family functioning) and adult substance use. The primary caregiver of the focal child in the case was the intended reporter for all domains—he or she would provide information on the well-being of the focal child as well as his or her own well-being. In most cases, the primary caregiver was the individual in the case engaged in substance use treatment programming and, therefore, was the reporter on substance abuse. However, in a small subset of cases, the primary caregiver was not involved in substance abuse treatment programming; in these situations, a separate individual in the case who was involved in this type of programming provided information on substance abuse. The cross-site evaluation labels the individual providing information about SUD outcomes as the recovery domain adult, who in most cases was also the primary caregiver.

The standardized instrument data collected by grantees to inform the cross-site evaluation were intended to be administered to the appropriate members of the case at program entry (enrollment) and at program exit (either successful completion of the program or dropout). The default rules for data collection stated that grantees should complete baseline data collection within 30 days of

enrollment and again within 30 days of case closure (regardless of whether the case closed as a result of successful program completion or if it was a result of program dropout). However, some grantees used modified versions of these rules (occasionally using a wider enrollment window or a longer grace period before attempting follow-up data collection, after a person did not complete programming).

Administrative data

In addition to the standardized instrument data, grantees also obtained administrative data on a common set of child welfare and SUD treatment elements. Specifically, grantees obtained data on reported incidents of child maltreatment, removals from the home and subsequent placements, and information on adult participation in state-funded SUD treatment. Maltreatment and removal administrative data were available for focal children, and enrollment data in state-funded SUD treatment were available for the substance-using adult in the case for the year before program enrollment through the year immediately following enrollment.

Data used in the report

The data used for this report are based on grantees' cumulative uploads of outcome data occurring through August 2017. Two grantees were unable to provide administrative data in August 2017; therefore, the analyses use the previous rounds of cumulative uploads of these data elements obtained through April 2017.

B. Data preparation

The data preparation steps for this report differed by data source.

Standardized instrument data preparation

The cross-site evaluation used the scoring manuals for each instrument to create scale scores for each outcome. In most cases, the scale scores are a sum or average of individual item responses—these sums or averages represent a composite, or an underlying construct of interest (for example, "externalizing behavior problems" is a construct measured by the Child Behavior Checklist [CBCL]).

The scale scores, created through combining individual items, were then transformed into norm scores. The norm scores were obtained by comparing the observed scale scores to demographically similar individuals in a normative sample (for example, comparing scale scores to children of the same age and gender). The norm scores therefore allow for a comparison of the RPG sample of children and adults relative to a large, national sample of typical adults or children, or comparison population—in particular, whether a child or adult's scores on a given trait or attitude are better or worse than a hypothetical average individual in the normative group.

Tables C.1 (adult instruments) and C.2 (child instruments) present descriptive statistics for all standardized instruments for each construct assessed in the standardized instruments. The tables show the number of items contributing to each scale, the possible score ranges, and sample means and standard deviations using all available data. The information presented in these tables can differ slightly from the information presented in Chapters III and V because the analyses presented in those chapters used different sample inclusion criteria.

In addition, included in these summary tables are Cronbach's alpha scores to illustrate the reliability of the standardized instrument constructs. Higher scores represent measures that are more reliable assessments (that is, less measurement error) of an underlying construct. In general, both adult and child outcome measures represent internally consistent or reliable assessments of the underlying construct of interest.

In addition to creating scale and norm scores for each construct of interest from the standardized instrument data, the cross-site evaluation placed individuals into risk categories based on their scores on the instruments and using definitions of *risk* articulated in the instruments' scoring manuals. The high-risk category reflects the group of children or adults who have elevated or extreme scores on the measure, which corresponds to concerning symptoms or behaviors captured by a given measure. HHS (2016a) contains detailed descriptions of the risk thresholds used for each instrument.

Administrative data preparation

The cross-site evaluation used three sources of administrative data to inform three outcome domains: (1) safety (maltreatment) data, (2) permanency (removal and placement) data, and (3) recovery (state-funded SUD treatment participation) data. Each grantee obtained safety and permanency data from its state child welfare agencies and recovery data from state substance abuse departments.

Specifically, grantees provided to these organizations the lists of individuals they had enrolled (either focal children or recovery domain adults, as appropriate) and asked the organization to provide information on that subset of individuals. The state then returned to the grantee data about those individuals, if such data existed. The safety data returned to grantees contained information on the dates of maltreatment investigations, the type of maltreatment, and whether the report was substantiated. The permanency data returned to grantees contained information on dates of removal and placement into different settings and whether removals ultimately ended as a permanent placement. The recovery data provided to grantees included information on dates of enrollment into substance use treatment and program completion (if applicable).

Using the administrative data, the cross-site evaluation team created person-level indicator variables for whether a given incident occurred in a particular period. For example, the cross-site evaluation created indicator variables for whether focal children had an incident of substantiated maltreatment in the year before enrolling in the RPG. The cross-site evaluation team used this type of operationalization for all administrative data outcomes and focused on the 1-year periods before and after RPG enrollment for the purpose of all administrative data analysis.

Table C.1. Adult outcomes measures

Measures	Instrument	Possible score range	Number of items	Program entry				Program exit			
				N	M (SD)	Reported score range	Cronbach's alpha	N	M (SD)	Reported score range	Cronbach's alpha
Depressive symptoms	CES-D	0–36	12	1,944	12.1 (9.0)	0–36	0.92	1,206	9.0 (8.6)	0–36	0.93
Parenting stress	PSI-SF	39–180	36	1,147	75.0 (21.5)	36–168	0.93	749	70.7 (21.2)	36–167	0.94
Parenting skills											
Inappropriate expectations for child	AAPI-2	1–10	7	1,783	4.9 (1.7)	1–10	0.71	756	5.1(1.8)	1–10	0.66
Lack of empathy for child	AAPI-2	1–10	10	1,783	4.7 (2.0)	1–10	0.77	756	5.3 (2.3)	1–10	0.80
Values corporal punishment	AAPI-2	1–10	11	1,783	5.4 (1.9)	1–10	0.84	756	5.5 (1.8)	1–10	0.85
Treats child like an adult peer, not a child	AAPI-2	1–10	7	1,783	5.5 (2.0)	1–10	0.78	756	5.9 (2.0)	1–10	0.75
Oppresses child's independence	AAPI-2	1–10	5	1,783	5.1 (2.2)	1–10	0.46	756	5.1(2.1)	1–10	0.50
Adult substance use											
Drug use	ASI-SR	0–1	13	1,800	0.11 (0.15)	0–0.88	0.78	1,120	0.04 (0.10)	0–0.77	0.79
Alcohol use	ASI-SR	0–1	6	1,909	0.03 (0.08)	0–0.76	0.80	1,121	0.02 (0.06)	0–0.59	0.72
Problems related to substance use											
Employment	ASI-SR	0–1	4	2,024	0.66 (0.29)	0–1.00	0.66	1,124	0.58 (0.30)	0–1.00	0.64
Legal	ASI-SR	0–1	5	1,947	0.22 (0.32)	0–1.00	0.81	1,179	0.14 (0.28)	0–1.00	0.83
Medical	ASI-SR	0–1	3	2,067	0.22 (0.32)	0–1.00	0.89	1,163	0.18 (0.29)	0–1.00	0.88
Psychiatric	ASI-SR	0–1	11	1,451	0.31 (0.22)	0–0.98	0.78	747	0.24 (0.22)	0–0.95	0.81
Family/social	ASI-SR	0–1	13	1,483	0.25 (0.22)	0–1.00	0.76	793	0.17 (0.20)	0–0.87	0.77
Childhood/adult trauma symptoms	TSC-40	1–120	40	1,857	29.1 (20.2)	0–110	0.94	1,165	21.7(19.23)	0–103	0.95

Note: M = mean; N = number; SD = standard deviation.

Source: RPG administration of standardized instruments for adult outcomes, including data submitted through August 2017. Depressive symptoms were assessed using the Center for Epidemiologic Studies Depression Scale (CES-D); parenting stress was assessed using the Parenting Stress Index-Short Form (PSI-SF); parenting skills were measured using the Adult-Adolescent Parenting Inventory-2 (AAPI-2); adult substance use was measured using the Addiction Severity Index, Self-Report form (ASI-SR); and childhood/adult trauma symptoms were assessed using the Trauma Symptoms Checklist (TSC-40).

Table C.2. Child well-being measures at program entry and exit

Measures[a]	Instrument	Possible score range	Number of items	Program entry				Program exit			
				N	M (SD)	Reported score range	Cronbach's alpha	N	M (SD)	Reported score range	Cronbach's alpha
Sensory processing:											
Low threshold raw score	ITSP 0 to 6 months	17–85	17	288	74.2 (8.1)	43–85	0.78	132	74.2 (7.0)	37–85	0.76
Low threshold raw score	ITSP 7 to 36 months	23–115	23	331	94.7 (12.4)	43–115	0.85	277	95.5 (11.6)	54–115	0.85
Executive functioning	BRIEF										
Global executive composite	BRIEF_P	33–115	63	375	54.4 (14.9)	31–111	0.97	233	52.8 (15.3)	31–109	0.98
Global executive composite	BRIEF	30–101	72	556	53.6 (14.5)	30–96	0.98	355	51.4 (13.4)	30–95	0.98
Emotional and behavioral problems	CBCL										
Emotional problems	CBCL_PS	29–100	36	482	50.5 (12.6)	29–85	0.91	306	48.0 (12.0)	29–78	0.91
Emotional problems	CBCL_SA		32	539	53.3 (12.5)	33–86	0.91	334	49.6 (11.9)	33–80	0.90
Behavioral problems	CBCL_PS	28–100	24	476	50.1 (13.3)	28–89	0.94	304	47.9 (12.7)	28–89	0.94
Behavioral problems	CBCL_SA		35	537	55.5 (12.7)	33–90	0.94	334	51.8 (11.9)	33–83	0.94
Total problems score	CBCL_PS	24–100	99	475	50.5 (13.7)	28–89	0.97	304	48.0 (13.1)	28–86	0.97
Total problems score	CBCL_SA		109	537	54.4 (13.6)	24–88	0.96	334	50.2 (13.5)	24–86	0.96
Socialization standard score	Vineland II	20–160	99	929	98.9 (25.5)	29–160	0.98	614	101.6 (26.2)	29–160	0.98
Post-traumatic stress-Total score	TSCYC	40–110	27	712	55.9 (15.9)	40–110	0.94	31	57.1 (17.3)	40–110	NA

Note: M = mean; N = number; SD = standard deviation.

Source: RPG administration of standardized instruments for child well-being, including data submitted through August 2017. Sensory processing was assessed using the Infant-Toddler Sensory Profile (ITSP), executive functioning was assessed using the Behavior Rating of Executive Function (BRIEF or BRIEF_P for preschool aged children), emotional and behavioral problems were assessed using the Child Behavior Checklist Preschool (CBCL_PS) or School Age (CBCL_SA) forms, socialization skills were assessed using the Vineland Adaptive Behavior Scales (Vineland II), and trauma symptoms were assessed using the Trauma Symptoms Checklist for Young Children (TSCYC).

C. Analytic approaches used to describe outcome data

Baseline analysis for Chapter III

For each standardized instrument measure of interest, this report presents the mean and standard deviation of each outcome as well as the proportion of individuals in the high-risk category as descriptive statistics in Chapter III. The benchmark approach presented in the body of the report uses nearly all available data (after excluding a small number of foster parent respondents from the analysis because the analysis seeks to describe the family of origin). The cross-site evaluation team also conducted sensitivity analyses with varying approaches to this inclusion criteria, and the results are very similar after using more restrictive inclusion criteria for the analysis (see the following sensitivity analysis section for more information on the approaches and a summary of the robustness of the findings).

For the administrative data, the cross-site evaluation reports the prevalence rates of individuals who experienced a given incident in the year before RPG enrollment. For example, the cross-site evaluation presents the percentage of children with substantiated maltreatment reports in a given year, using all available administrative data provided by grantees.

Comparing individuals with and without follow-up data for Chapter V

To understand whether individuals included in the pre-post change analysis differed from those who did not have follow-up data, the cross-site evaluation compared the demographics and baseline measures for individuals with both baseline and follow-up data to those for individuals with baseline data only. Individuals who had baseline and follow-up data on at least one measure in a particular domain were included in the group with both baseline and follow-up data for that domain. There was a small proportion of individuals with follow-up data; however, without baseline data, these analyses excluded these individuals. Analysts conducted independent t-tests to determine whether there were statistically significant differences between the two groups on these characteristics, to understand the degree to which the sample contributing to the pre-post analysis generalized to the broader RPG sample; Chapter V summarizes these findings, which are presented in greater detail here. The differences in these samples are presented separately for each outcome domain:

Focal children with and without follow-up safety and permanency administrative data. The administrative safety and permanency data were available for 2,726 focal children, of whom 72 percent had both baseline and follow-up data and 28 percent had only baseline data. Because the follow-up administrative data period was defined for cases enrolled in the RPG for at least 1 year, those with baseline data only were in the program for less than 1 year as of the end of the grant period—that is, they are the most recent enrollees into their local RPG programs. Tables C.3 and C.4 show the results of comparisons between these two groups of children.

The two groups were similar in demographics, substantiated reports of maltreatment, and removal from home in the year before RPG enrollment. That is, there were no substantive differences between the focal children contributing to the pre-post analysis of administrative data and the late-enrolling focal children.

Table C.3. Demographics of focal children with and without follow-up safety and permanency administrative data

Characteristics	Individuals with follow-up data	Individuals without follow-up data	*p*-value
Age by category			
Younger than 1	28	28	0.96
1 to 4	32	34	0.42
5 to 8	21	19	0.13
9 or older	18	19	0.58
Gender			
Female	49	49	0.98
Male	51	51	0.98
Race			
White only	79	77	0.49
Black only	9	9	0.55
American Indian or Alaskan Native, Asian, or Native Hawaiian or Other Pacific Islander only	2	3	0.98
More than one race	10	11	0.52
Ethnicity			
Hispanic	11	9	0.16
Non-Hispanic	89	91	0.16
Residence at enrollment			
Private residence	62	60	0.36
Foster parent's residence	31	32	0.89
Foster or group home	1	2	0.09
Treatment facility, shelter, or correctional facility	5	6	0.20
Other residence	1	0	0.00
Number of children	1,771–1,954	715–772	

Source: RPG Enrollment and Service Log data submitted through July 2017.

Table C.4. Percentage of focal children with substantiated reports of maltreatment or out-of-home placement in the year before RPG enrollment, comparing those with and without follow-up administrative safety data

	Substantiated		
Outcome	Individuals with follow-up data	Individuals without follow-up data	*p*-value
Reported maltreatment: abuse, neglect, and other types	36	34	0.35
Abuse: any type	9	9	0.77
Neglect: any type	26	25	0.49
Removed from home	29	28	0.47
Number of children	1,954	772	

Source: Administrative data collected from state or county child welfare agencies, submitted through August 2017.

Focal children with and without follow-up standardized assessment data. Child well-being data were available for 1,816 focal children, of whom 48 percent had both baseline and follow-up data, 42 percent had baseline data only, and 10 percent had follow-up data only. Tables C.5

and C.6 show the results of comparisons between children with both baseline and follow-up data and those without follow-up data.

The two groups were similar with respect to children's average age, gender, ethnicity, primary language, and residence at enrollment (Table C.5). However, when looking at specific age groups, focal children without follow-up data were less likely to be younger than 1 year old than those with follow-up data. In addition, focal children without follow-up data were more likely to be white only (81 versus 77 percent) but less likely to be more than one race (8 versus 12 percent) than those with follow-up data.

When looking at outcome measures at baseline, the two groups performed similarly in sensory processing and socialization skills; however, focal children without follow-up data were at higher risk in other areas of well-being than those with follow-up data (Table C.6). Compared with those with follow-up data, focal children without follow-up data had significantly more emotional problems, behavior problems, and total problems as measured by the CBCL and trauma symptoms as measured by the Trauma Symptom Checklist for Young Children (TSCYC) at baseline; they were also more likely to be characterized in the high-risk category in these areas at baseline (6 to 16 percentage point differences).

Table C.5. Demographics of focal children with and without follow-up child standardized assessment data

Characteristics	Individuals with follow-up data	Individuals without follow-up data	*p*-value
Age by category			
Younger than 1	29	23	0.02
1 to 4	30	34	0.08
5 to 8	22	22	1.00
9 or older	20	21	0.57
Gender			
Female	49	49	0.78
Male	50	51	0.78
Race			
White only	77	81	0.03
Black only	9	7	0.20
American Indian or Alaskan Native, Asian, or Native Hawaiian or Other Pacific Islander only	3	4	0.78
More than one race	12	8	0.01
Ethnicity			
Hispanic	13	11	0.30
Non-Hispanic	87	89	0.30
Residence at enrollment			
Private residence	63	66	0.31
Foster parent's residence	29	28	0.66
Foster or group home	1	1	0.37
Treatment facility, shelter, or correctional facility	6	5	0.39
Other residence	0	0	0.88
Number of children	791–872	715–766	

Source: RPG Enrollment and Service Log data submitted through July 2017.

Table C.6. Child well-being before receiving RPG programming for focal children with and without follow-up child standardized assessment data

Aspect of child well-being at baseline	Instrument	Mean (SD)			Percentage of children in high-risk category		
		Individuals with follow-up data	Individuals without follow-up data	*p*-value	Individuals with follow-up data	Individuals without follow-up data	*p*-value
Sensory processing	ITSP	<0.1 (0.7)	0.1 (0.7)	0.22	31	37	0.10
Executive functioning	BRIEF	52.2 (13.8)	55.9 (15.4)	0.00	18	28	0.00
Emotional problems	CBCL	50.8 (12.1)	53.2 (13.1)	0.00	16	23	0.01
Behavior problems	CBCL	51.9 (12.5)	54.1 (13.9)	0.01	17	26	0.00
Total problems	CBCL	51.3 (13.1)	54.0 (14.3)	0.00	18	28	0.00
Socialization	Vineland II	97.9 (25.7)	99.9 (25.3)	0.24	13	11	0.38
Trauma symptoms (PTSD)	TSCYC	53.0 (13.1)	59.0 (17.9)	0.00	20	36	0.00
Number of children		334–529	271–492		340–529	277–492	

Note: BRIEF = Behavior Rating of Executive Function; CBCL = Child Behavior Checklist; ITSP = Infant-Toddler Sensory Profile; PTSD = post-traumatic stress disorder; SD = standard deviation; TSCYC = Trauma Symptom Checklist for Young Children.

Source: RPG baseline administration of standardized instruments, including data submitted through August 2017.

Primary caregivers with and without follow-up standardized assessment data. Primary caregiver assessment data were available for 2,237 adults, of whom 49 percent had both baseline and follow-up data, 50 percent had baseline data only, and 1 percent had follow-up data only. Tables C.7 and C.8 show the results of comparisons between caregivers with both baseline and follow-up data and those without follow-up data.

The two groups did not differ in most demographic characteristics (Table C.7). The two groups were similar with respect to primary caregiver's age, gender, race, ethnicity, language, whether he or she lived in institutional settings at enrollment, education, income, and employment status. The only differences between the two groups were in relationship status and whether the focal child was in a parent's care at enrollment—caregivers without follow-up data were less likely to be married or cohabiting with the focal child's biological parent (25 versus 30 percent) and less likely to have the focal child in care at enrollment (46 versus 54 percent) than those with follow-up data.

With regard to outcome measures at baseline, the two groups were similar in parenting stress and most of the parenting attitudes dimensions at baseline (Table C.8). However, caregivers without follow-up data had higher depressive symptoms scores as measured by the Center for Epidemiologic Studies Depression Scale (CES-D) (mean = 12.8 versus 11.5) and were more likely to be severely depressed (40 versus 33 percent) than those with follow-up data. In addition, individuals with both baseline and follow-up data expressed fewer attitudes that are predictive of maltreatment on one construct on the Adult-Adolescent Parenting Inventory (AAPI)—specifically, in terms of their lack of empathy for their children, in which caregivers with both baseline and follow-up data were less likely to be in the high-risk category than those without follow-up data (30 versus 25 percent).

Table C.7. Demographics for primary caregivers with and without follow-up standardized assessment data in RPG cases

Characteristics	Individuals with follow-up data	Individuals without follow-up data	*p*-value
Average age in years (SD)	31 (31)	31 (31)	0.44
Gender			
Female	86	86	0.77
Male	14	14	0.77
Race			
White only	83	84	0.59
Black only	10	10	0.91
American Indian or Alaskan Native, Asian, or Native Hawaiian or Other Pacific Islander only	3	4	0.62
More than one race	5	3	0.09
Ethnicity			
Hispanic	9	7	0.11
Non-Hispanic	91	93	0.11
Lived in institutional setting at enrollment	18	17	0.75
Highest level of education			
Some high school	29	30	0.90
High school diploma/GED	40	42	0.25
Some postsecondary education	28	26	0.36
Bachelor's degree or higher	3	2	0.15
Income in past 12 months			
$0–$9,999	71	71	0.72
$10,000–$18,999	16	17	0.71
$19,000–$24,999	7	6	0.70
$25,000 or higher	6	6	0.61
Income source			
Wage or salary	40	40	0.77
Public assistance	34	36	0.24
Retirement or pension	1	1	0.99
Disability	9	8	0.18
Other	10	8	0.16
None	24	25	0.65
Employment status			
Full-time employment	17	20	0.10
Part-time employment	15	15	0.89
Self-employed	1	1	0.87
Unemployed	44	44	1.00
Not in the labor force	23	20	0.14
Relationship status			
Single, divorced, separated, or widowed	60	62	0.19
Married to or cohabiting with focal child's biological parent	30	25	0.01
Married to or cohabiting with other individual	11	13	0.10
Focal child in parent's care at enrollment			
Yes	54	46	0.00
No	43	51	0.00
Unknown	3	3	0.66
Number of adults	999–1,088	1,034–1,122	

Note: GED = Test of General Education Development; SD = standard deviation.

Source: RPG Enrollment and Service Log data submitted through July 2017.

Table C.8. Baseline measures for primary caregivers with and without follow-up standardized assessment data

Aspect of parent well-being and parenting	Instrument	Mean (SD)			Percentage of adults in high-risk category		
		Individuals with follow-up data	Individuals without follow-up data	*p*-value	Individuals with follow-up data	Individuals without follow-up data	*p*-value
Parenting stress	PSI	74.6 (21.8)	75.5 (21.1)	0.49	19	21	0.35
Depressive symptoms	CES-D	11.5 (8.6)	12.8 (9.4)	0.00	33	40	0.00
Inappropriate expectations for child	AAPI	4.90 (1.7)	4.9 (1.7)	0.73	19	17	0.12
Lack of empathy for child	AAPI	4.7 (2.0)	4.8 (2.0)	0.07	30	25	0.01
Values corporal punishment	AAPI	5.4 (1.9)	5.4 (1.8)	0.94	16	15	0.89
Treats child like an adult peer, not a child	AAPI	5.5 (2.0)	5.6 (2.0)	0.68	15	16	0.78
Oppresses child's independence	AAPI	5.0 (2.3)	5.2 (2.2)	0.21	28	26	0.14
Number of adults		613–1,043	534–974		613–1,043	534–974	

Note: AAPI = Adult-Adolescent Parenting Inventory; CES-D = Center for Epidemiologic Studies Depression Scale; PSI = Parenting Stress Index; SD = standard deviation.

Source: RPG baseline administration of standardized instruments, including data submitted through August 2017.

Recovery domain adults with and without standardized assessment data. Recovery domain adult assessment data were available for 2,343 adults, of whom 45 percent had both baseline and follow-up data, 48 percent had baseline data only, and 6 percent had follow-up data only. Tables A.9 and A.10 show the results of comparisons between individuals with both baseline and follow-up data and those without follow-up data.

The two groups were similar in most demographic characteristics with the exception of education, relationship status, and whether they had the focal child in parent's care at enrollment (Table C.9). Compared with those with follow-up data, adults without follow-up data were more likely to have less education than high school (33 versus 29 percent) but less likely to have some postsecondary education (25 versus 29); less likely to be married to or cohabiting with the focal child's biological parent (26 versus 30 percent); and less likely to have the focal child in care at enrollment (43 versus 53 percent).

For outcome measures at baseline, there were no significant differences between the two groups in severity of drug or alcohol use (Table C.10). However, adults without follow-up data exhibited higher levels of problems related to their psychiatric well-being and family and social lives and experienced more childhood or adult trauma symptoms than those with follow-up data. They were also more likely to be characterized as at high risk in trauma symptoms (41 versus 34 percent).

Table C.9. Demographics for adults reporting on substance use with and without follow-up standardized assessment data

Characteristics	Individuals with follow-up data	Individuals without follow-up data	*p*-value
Average age in years (SD)	31 (7)	30 (7)	0.11
Gender			
Female	84	85	0.36
Male	16	15	0.36
Race			
White only	84	83	0.75
Black only	8	9	0.37
American Indian or Alaskan Native, Asian, or Native Hawaiian or Other Pacific Islander only	3	4	0.81
More than one race	5	4	0.36
Ethnicity			
Hispanic	9	7	0.10
Non-Hispanic	91	93	0.10
Lived in institutional setting at enrollment			
Institutional settings	18	17	0.38
Not institutional settings			
Highest level of education			
Some high school	29	33	0.03
High school diploma/GED	39	41	0.50
Some postsecondary education	29	25	0.01
Bachelor's degree or higher	2	1	0.09
Income in past 12 months			
$0–$9,999	73	74	0.83
$10,000–$18,999	15	15	0.61
$19,000–$24,999	6	5	0.55
$25,000 or higher	6	5	0.55
Income source			
Wage or salary	39	39	1.00
Public assistance	35	36	0.70
Retirement or pension	1	1	0.67
Disability	10	7	0.02
Other	10	9	0.46
None	23	25	0.30
Employment status			
Full-time employment	17	18	0.75
Part-time employment	12	14	0.18
Self-employed	2	2	0.78
Unemployed	46	46	0.97
Not in the labor force	23	20	0.14
Relationship status			
Single, divorced, separated, or widowed	60	61	0.46
Married to or cohabiting with focal child's biological parent	30	26	0.04
Married to or cohabiting with other individual	10	13	0.07
Focal child in parent's care at enrollment			
Yes	53	43	0.00
No	45	55	0.00
Unknown	2	2	0.28
Number of adults	980–1,061	1,046–1,130	

Note: GED = Test of General Education Development; SD = standard deviation.

Source: RPG Enrollment and Service Log data submitted through July 2017.

Table C.10. Baseline measures for adults reporting substance use with and without follow-up standardized assessment data

Baseline measure of substance use	Instrument	Individuals with follow-up data	Individuals without follow-up data	*p*-value
Substance use	ASI			
Drug use		0.11	0.12	0.05
Percentage in high-severity category for drug use		29	33	0.08
Alcohol use		0.03	0.03	0.42
Percentage in high-severity category for alcohol use		4	4	0.76
Percentage in high-severity category for use of drugs or alcohol or both		33	37	0.06
Problems related to substance use	ASI			
Employment		0.66	0.67	0.36
Legal		0.22	0.23	0.19
Medical		0.21	0.24	0.06
Psychiatric		0.30	0.33	0.00
Family or social		0.22	0.27	0.00
Childhood or adult trauma symptoms	TSC-40	27.6	30.7	0.00
Percentage in high risk category	TSC-40	34	41	0.00
Number of adults		707-1,007	728-1,027	

Note: ASI = Addiction Severity Index; TSC-40 = Trauma Symptoms Checklist.

Source: RPG baseline administration of standardized instruments, including data submitted through August 2017.

Recovery domain adults with and without follow-up recovery administrative data. Administrative data were available for 2,731 recovery domain adults, of whom 72 percent had both baseline and follow-up data and 28 percent had baseline data only. Again, as for the administrative safety and permanency data described earlier for children, those with baseline administrative data had been in the program for less than 1 year and, therefore, were the most recent enrollees into the program. Tables C.11 and C.12 show the results of comparisons between these two groups of individuals.

The two groups were similar with respect to adults' gender, race, ethnicity, education, whether they lived in institutional settings at enrollment, and relationship status but different in income, employment status, and whether they had the focal child in a parent's care at enrollment. Compared with those with follow-up data, adults without follow-up data had higher income; their incomes were more likely to come from wages or salary (43 versus 39 percent); they were more likely to have full-time work (22 versus 17 percent), and more likely to have the focal child in care at enrollment (50 versus 44 percent). In addition, adults without follow-up recovery data were less likely to be enrolled in at least one treatment in the year before enrolling in the RPG than those with follow-up data (20 versus 29 percent). However, as noted previously, the two samples of recovery domain adults compared here differ solely in terms of when they enrolled in the RPG; therefore, these differences were more likely due to random sampling error (Type I error due to multiple comparisons), rather than true differences in the samples.

Table C.11. Demographics for adults reporting on substance use with and without follow-up recovery administrative data

Characteristics	Individuals with follow-up data	Individuals without follow-up data	*p*-value
Average age in years (SD)	30(7)	31(7)	0.01
Gender			
Female	85	83	0.34
Male	15	17	0.34
Race			
White only	84	84	0.75
Black only	9	8	0.22
American Indian or Alaskan Native, Asian, or Native Hawaiian or Other Pacific Islander only	3	4	0.06
More than one race	4	4	0.59
Ethnicity			
Hispanic	8	7	0.18
Non-Hispanic	92	93	0.18
Lived in institutional setting at enrollment	17	15	0.17
Highest level of education			
Some high school	31	30	0.65
High school diploma/GED	40	43	0.15
Some postsecondary education	27	24	0.23
Bachelor's degree or higher	2	2	0.83
Income in past 12 months			
$0–$9,999	75	68	0.00
$10,000–$18,999	14	16	0.25
$19,000–$24,999	5	7	0.08
$25,000 or higher	5	8	0.01
Income source			
Wage or salary	39	43	0.04
Public assistance	35	31	0.05
Retirement or pension	1	1	0.77
Disability	8	8	0.84
Other	9	10	0.38
None	25	24	0.91
Employment status			
Full-time employment	17	22	0.00
Part-time employment	14	13	0.61
Self-employed	2	2	0.55
Unemployed	45	41	0.10
Not in the labor force	23	21	0.36
Relationship status			
Single, divorced, separated, or widowed	59	60	0.78
Married to or cohabiting with focal child's biological parent	28	28	0.89
Married to or cohabiting with other individual	13	12	0.83
Focal child in parent's care at enrollment			
Yes	44	50	0.01
No	52	49	0.16
Unknown	4	1	0.00
Number of adults	1,622–1,954	626–777	

Note: GED = Test of General Education Development; SD = standard deviation.
Source: RPG Enrollment and Service Log data submitted through July 2017.

Table C.12. Baseline measures for adults reporting substance use with and without follow-up administrative data

Baseline measures	Individuals with follow-up data	Individuals without follow-up data	*p*-value
Substance abuse treatment			
Percentage enrolled in at least one treatment in year before programming	29	20	0.00
Number of adults	564–1,954	155–777	

Source: Administrative data collected from state or county child welfare agencies, submitted through August 2017.

Summary of comparison of individuals with and without follow-up data. There were several differences between individuals with and without follow-up data. Generally, individuals without follow-up data were at higher risk than those with data at both time points for all standardized instrument analyses. And those without follow-up data for the administrative outcome analyses were relatively comparable to those with both baseline and follow-up data; this latter comparison is less subject to concern of differences in composition of the samples because the groups differed solely in terms of their entry into the RPG program.

Nonresponse weights for pre-post analysis for Chapter V

To describe the changes in outcomes of those who received RPG services, the ideal approach would be to compare outcomes for the full population of eligible individuals enrolled in the RPG from baseline (program entry) to follow-up (program exit). By using the full sample of eligible respondents in an analysis, a full description of how the population served by the RPG changed over time would be feasible. Administrative data for all eligible RPG participants were available (when eligibility to participate in the pre-post analysis is defined as being enrolled for at least 1 year at the time of the end of the grant period); therefore, the cross-site evaluation can report on these outcomes.

However, there is a concern about the representativeness of the sample with observed standardized instrument data at both baseline and follow-up. The percentage of eligible individuals with standardized assessment scores at both baseline and follow-up was relatively low, with response rates ranging from 16 to 44 percent across instruments. In addition, as explained earlier, those with and without standardized assessment data at follow-up differed. These two factors make it unlikely that the small sample of respondents with standardized instruments data at both baseline and follow-up were representative of the full population of individuals enrolled in the RPG. Therefore, to reduce nonresponse bias for the outcome estimates, the cross-site evaluation used nonresponse weights to statistically adjust the analysis of the observed data. A description of the process for generating and using these weights follows.

Instrument-specific weights. The cross-site evaluation created separate nonresponse weights at the individual level for each of the standardized instruments. There are several reasons for creating individual-level, instrument-specific weights. First, not all the instruments apply to all children; for example, the Infant-Toddler Sensory Profile (ITSP) can be used only for children ages birth to 36 months. Second, the grantees varied in terms of the instruments that they collected: not all grantees collected the full battery of instruments examined in the cross-site

evaluation. Third, focal children, primary caregivers, and recovery domain adults (when different from the primary caregiver) were each associated with a different set of standardized instruments. Therefore, each instrument requires separate weights because the population eligible for each of the instruments differed. The variables used for calculating nonresponse weights include demographic variables, baseline measures of outcomes, and variables from baseline administrative date (safety, permanency, and recovery), which differ slightly for each of the three groups of RPG participants.

Procedure for computing sampling weights. There were five steps in creating and validating the weights.

1. Initial data preparation. The first step in the weighting procedure was to prepare the data for the target sample of interest. For each instrument, the cross-site evaluation team identified the subset of the respondent sample (focal child, primary caregiver, or recovery domain adult) that was potentially eligible to complete the assessment at both time points. That is, the team identified the subset of respondents that: (1) had been enrolled in the RPG for long enough to observe a follow-up assessment, (2) were age-eligible for both the baseline and follow-up assessments (this applied for the focal child outcomes), and (3) were enrolled within a grantee that collected a given standardized outcome (because a subset of grantees did not administer all standardized instruments).

Because of this subset of individuals for a given standardized instrument, the cross-site evaluation then focused on a targeted list of variables of interest: (1) demographic characteristics, (2) administrative data, and (3) baseline and follow-up assessments of each instrument. Because there was a small amount of missing data for a subset of demographic characteristics and the baseline measures of the standardized instruments, the cross-site evaluation team used the multiple imputation procedure in SAS to impute any missing data at baseline. The imputation approach was informed by the nearly comprehensive demographic data and observed baseline scores as well as complete administrative data at baseline. After imputation, each individual had complete information, either observed or imputed, for all demographic data, baseline assessments of the standardized instrument of interest, and administrative data at baseline.

2. Predictor variable identification. Given the set of input data, the next step was to identify the appropriate set of variables associated with completing a follow-up assessment for a given standardized instrument. In addition to considering all variables observed at baseline as potential predictors, the cross-site evaluation team identified all two-way interactions among the pool of covariates that were potentially significant in predicting the response variable. They accomplished this using the chi-square automatic interaction detector (CHAID) algorithm (Kass, 1980). They implemented this step using a SAS procedure called HPSPLIT.

3. Estimating an initial nonresponse weight for the instrument. For each standardized instrument, the cross-site evaluation team conducted stepwise logistic regression to estimate the propensity of each individual completing the follow-up assessment. This analysis used as its dependent variable whether an individual had both baseline and follow-up data for a given instrument. As predictors of this outcome, the cross-site team used demographic variables, baseline administrative data, baseline standardized assessment scores, and any two-way interactions identified via CHAID in Step 2. Given the final model, a propensity score was

estimated for each individual (the predicted probability that the person would have both baseline and follow-up data for a given instrument). The inverse of this propensity score based on the final model for respondents was then used as the initial weight for the nonresponse analysis.

4. Adjustments to the initial weight. The weights from Step 3 were refined to more fully represent the eligible sample of interest. Although the inverse propensity score serves as a starting point for the weights, it is necessary for the sum of the weights for an instrument to equal the total number of eligible individuals, and the inverse propensity scores do not satisfy this requirement.

To make the inverse probability weight $w_{inv,i}$ sum to the full baseline sample size associated with each instrument measure, the cross-site evaluation team applied a simple ratio adjustment factor $\frac{n}{\sum w_{inv,i}}$ to the inverse probability weight for each respondent, where n is the full sample size, n_r is the number of respondents, and the ratio adjusted weight is renamed as $w_{adj,i}$, such that

(1) $\sum_{i=1}^{n_r}(\frac{n}{\sum w_{inv,i}})w_{inv,i} = \sum_{i=1}^{n_r} w_{adj,i} = n.$

Following the ratio adjustment, the individual weights sum to the intended target population size. However, in doing so, a small number of observations have extreme weights (either very small or very large), which would lead to large variances in sample estimates of interest. The cross-site evaluation used a weight-trimming procedure to identify and reduce large weights, to address this concern. The procedure compares each observation's weight relative to the average squared weight of all other observations in the sample, and adjusts all weights accordingly, effectively pulling extreme weights toward the sample average. This iterative procedure eventually produces a revised or final set of weights without outlier weights, in which the sum of all weights equals the intended target population size.

5. Nonresponse validation assessments. After finalizing the weights, the cross-site evaluation team validated the appropriateness of the weights using administrative data to examine whether adjustment for nonresponse by weighting reduced nonresponse bias. Because administrative data (for example, maltreatment, removals, and recovery) were available for each relevant individual, the cross-site evaluation team had true population information for these measures. Therefore, it was possible to compare how the subset of respondents to a standardized instrument could recover the full population parameters of these administration variables, after applying the nonresponse weights.

First, using data on all individuals eligible for a given standardized instrument, the cross-site evaluation team calculated the true prevalence rates of key administrative variables at baseline and follow-up (maltreatment or removals for children and recovery rates for adults). Next, using only the sample of respondents who had observed scores for the specific instrument at both baseline and follow-up, the prevalence rates of the administrative variables of interest were calculated without using nonresponse weights. Finally, for this same sample of respondents, the cross-site evaluation recalculated the prevalence rates of the administrative variables of interest weighted by the nonresponse weights.

The comparisons of the unweighted and weighted estimates of the prevalence rates of the administrative variables of interest, relative to the population prevalence rates, demonstrated that weighting reduced nonresponse bias in several of the instruments. In other words, the prevalence weights calculated using nonresponse weights were more similar to the population prevalence rates than the unweighted prevalence weights for most standardized instruments examined. Table C.13 shows an example of this validation for children with the Behavior Rating of Executive Function (BRIEF) scores at both baseline and follow-up. The first row in this table shows the true prevalence rates for this variable for the full population of focal children eligible for this analysis (1,371 individuals at baseline, 1,063 at follow-up). The second row shows the prevalence rates of these administrative variables for the subset of focal children with BRIEF data at baseline and follow-up (n = 452). This subset appears to be a more at-risk sample than the broad population because the prevalence rates of baseline maltreatment are nearly 67 percent, when the population rate is closer to 56 percent.

Table C.13 shows that, in this example, applying the nonresponse weights in the estimation of prevalence statistics led to mixed results. The prevalence rates for maltreatment appear to have improved—the baseline maltreatment rate using nonresponse weights is now 58 percent (closer to the population rate of 56 percent than the unweighted prevalence rate of 67 percent), and the follow-up maltreatment rate after applying weights is now 20 percent (an improvement toward the target population rate of 18 percent, relative to the unweighted prevalence rate of 23 percent). On the other hand, the changes in the prevalence rates for removals appears to be somewhat odd—the prevalence rate of baseline removals is marginally worse after applying rates (30 percent), relative to the target of 28 percent, given the unweighted result was 29 percent. And there was no improvement in recovering the target follow-up removal rate (5 percent), after applying the weights (the rate stayed at 3 percent). This illustrative example shows that although there were some improvements in recovering population parameters after applying nonresponse weights, it was not always the case that this process reduced potential nonresponse bias.

Table C.13. Comparisons of unweighted and weighted estimates of maltreatment and removal rates to the population rates for children with the BRIEF scores at both baseline and follow-up

		Maltreatment rate		Removal rate	
Sample/approach	N	Baseline	Follow-up	Baseline	Follow-up
Population of RPG children eligible for the BRIEF	1,371 (1,063 for follow-up)	56%	18%	28%	5%
Children with the BRIEF scores at both baseline and follow-up (unweighted)	452 (320 for follow-up)	67%	23%	29%	3%
Children with the BRIEF scores at both baseline and follow-up (weighted)	452 (320 for follow-up)	58%	20%	30%	3%

Note: BRIEF = Behavior Rating of Executive Function; N = number.

Source: Administrative data collected from state or county child welfare agencies, submitted through August 2017.

Using the nonresponse weights. The cross-site evaluation team applied these nonresponse weights for each instrument in the benchmark pre-post change analysis. This approach attempted to reduce nonresponse bias in the analysis of these critical outcomes. However, due to the concern that the nonresponse weights did not always improve the estimation of population parameters (as shown with the removal outcome in Table A.13), as a sensitivity analysis, the pre-post analysis was conducted without adjusting for these weights.

Baseline to follow-up change analysis

For standardized instrument results, the report presents baseline means and standard deviations, follow-up means and standard deviations, along with a change score, which is a difference in means. For all analyses of a given instrument, the cross-site evaluation included the nonresponse weights described earlier when calculating the statistics. The inferential assessment of whether the differences in the scores between baseline and follow-up differed significantly from zero (that is, the paired t-test analyses) included these weights.

The cross-site evaluation used a comparable approach to report on the administrative data. The prevalence rates of a given outcome (for example, incidence of maltreatment) in the pre-intervention year and the intervention year is presented, as is the change in the prevalence rates between these two periods. Again, a paired t-test was used to assess whether the changes in individual categories was significantly different from zero. However, it was unnecessary to use nonresponse weights for the administrative data, given that there are complete data on these outcomes for the eligible sample. All inferential tests used a Type I error rate (alpha) level of 0.05 (two-tailed) to describe a result as statistically significant.

Benchmark versus sensitivity analyses

As noted earlier, the main or benchmark approach for presenting baseline statistics or pre-post change results used all available data for a given outcome of interest. However, the cross-site evaluation tested the sensitivity of the observed results by limiting the sample to: (1) individuals who had baseline assessments within a grantee-specified window around the enrollment date and (2) the first instance of individual outcome measures for the small subset of individuals who had outcome data in multiple cases, such as a focal child who was associated with two separate cases (for example, associated with two primary caregivers who were not living together). In addition, the cross-site evaluation team assessed the extent to which the analysis of standardized instrument changes over time was sensitive to the use of nonresponse weights. In all of these analyses, the findings from the sensitivity analyses were similar to the benchmark analyses, suggesting that the benchmark findings are robust.

Baseline statistics. The sensitivity analysis findings about the baseline statistics were very comparable to the benchmark findings for the baseline analysis reported in Chapter III. When the analysis of standardized instruments was limited to individuals whose baseline measure was sufficiently close to the enrollment date, about 90 percent of all baseline assessments were maintained in the analysis (range = 85 to 95 percent across all standardized instruments). The average difference between the benchmark means and the mean scores using this trimmed sample was only 0.003 standard deviation units. Fully 98 percent of the means using this trimmed sample were within 0.05 standard deviations of the benchmark sample, suggesting that the results are robust, regardless of the sample inclusion criteria.

The results were equally robust when comparing the benchmark sample against the sample that dropped the second instance of RPG enrollment—that is, the small sample of individuals who enrolled in the RPG multiple times (across different cases). This analysis included 96 percent of the records used in the benchmark analysis; not surprisingly, the average difference in means between these two samples was only 0.001 standard deviations from the benchmark, and 100 percent of the means in this sensitivity analysis were within 0.05 standard deviations of the benchmark.

In sum, this suggests that the approaches used to define the benchmark sample and for the baseline analysis in Chapter III did not play a substantive role in the interpretation of the findings because the sensitivity results largely replicated the findings.

Pre-post comparisons. The sensitivity analyses for the pre-post comparison analyses were also extremely similar to the benchmark pre-post analyses reported in Chapter V. When the pre-post change analysis was limited to the subset of individuals whose baseline measure was sufficiently close to the enrollment date, only 5 percent of observations were dropped. When comparing the results of how overall average scores changed from baseline to follow-up across the standardized instruments after limiting the sample, all (100 percent) of the pre-post comparisons had the same statistical significance as the benchmark analysis, and 92 percent showed both the same sign (positive or negative change) and significance.

A similar set of findings was observed when the sample contributing to the pre-post analysis was limited to the first instance of assessments for individuals who spanned multiple cases. The vast majority (96 percent) of the records in the benchmark analysis were included in this analysis (that is, only 4 percent of records spanned multiple cases). Using the subgroup of records of individuals who did not span cases, 96 percent of the pre-post contrasts had the same sign (positive or negative change) as the benchmark analysis, 96 percent had the same statistical significance, and 92 percent had both the same direction and significance as the benchmark analysis.

In addition, the benchmark pre-post analysis that incorporated nonresponse weights (reported in Chapter V) and a sensitivity analysis that ignored the nonresponse were also very comparable. Almost all (95 percent) of the weighted pre-post contrasts had the same sign as the nonweighted results, and 92 percent of the contrasts had the same statistical significance. In addition, 89 percent of the weighted pre-post contrasts had both the same sign and significance as the nonweighted results.

Again, these sensitivity results suggest that the approaches taken to define the benchmark sample and approach for the pre-post analysis did not play a substantive role in the interpretation of the findings. The benchmark results presented in Chapter V appear to be robust relative to these alternate definitions of the analytic sample and analytic approach.

APPENDIX D

LIST OF ALL EBPs OFFERED BY GRANTEES

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Table D.1. List of all EBPs

EBP name	Number of grantees offering EBP[a]	Number of grantees enrolling families in EBP[b]	Number of families enrolled
Child–caregiver therapy			
Alternatives for Families-Cognitive Behavioral Therapy (AF-CBT)	1	0	0
Child–Parent Psychotherapy (CPP)	5	4	126
Family Behavior Therapy (FBT)	1	1	139
Parent–Child Interaction Therapy (PCIT)	3	2	34
Family strengthening			
24/7 Dad	1	0	0
Celebrating Families!	5	3	114
Centering Pregnancy	1	0	0
Child and Adolescent Services System Program (CASSP)	1	1	34
Family Group Conferencing	1	0	0
Guiding Good Choices (GGC)	1	0	0
Head Start	1	1	11
Healthy Families	1	1	52
Homebuilders Intensive Families Preservation Services	2	1	96
Incredible Years Parenting Class	2	1	7
Keys for Interactive Parenting (KIPS)	1	1	42
My Baby and Me (ages 0-3)	1	0	0
Nurse Family Partnership (NFP)	1	0	0
Nurturing Parenting Programs (NPP)	9	7	697
Parent–Child Assistance Program (PCAP)	1	1	180
Parents and Children Together (PACT)	1	1	4
Parents as Teachers Curriculum	1	1	49
Partners in Parenting	1	1	27
SafeCare	1	1	6
Strengthening Families Program	4	3	243
Family treatment drug court			
Family Treatment Drug Court (FTDC)	1	1	69
Response to trauma			
Attachment, Self-Regulation, and Competence (ARC)	1	1	44
Lifespan Integration	1	0	0
Structured Psychotherapy for Adolescents Responding to Chronic Stress (SPARCS)	1	1	10
Supportive Education for Children of Addicted Parents	1	1	3

TABLE D.1. (*continued*)

EBP name	Number of grantees offering EBP[a]	Number of grantees enrolling families in EBP[b]	Number of families enrolled
Trauma Recovery and Empowerment Model (TREM)	1	0	0
Substance use disorder focus			
12-Step Facilitation Therapy	1	1	9
Beyond Trauma	1	1	32
Hazelden Co-Occurring Disorders Program (CDP)	2	1	42
Hazelden Living in Balance (LIB)	4	4	249
Helping Men Recover	2	1	6
Matrix Model	5	4	188
Modified Therapeutic Community (MTC)	2	2	90
Peer Recovery Support Services	1	1	36
Relapse Prevention Therapy (RPT)	1	0	0
Seeking Safety	8	7	499
Therapy or counseling style			
Cognitive Behavioral Therapy (CBT)	5	3	198
Dialectical Behavior Therapy (DBT)	1	1	25
Moral Reconation Therapy	1	0	0
Motivational Enhancement Therapy (MET)	1	0	0
Motivational Interviewing (MI)	7	7	387
Prolonged Exposure	1	0	0
Solution-Focused Brief Therapy (SFBT)	1	1	177
Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)	8	5	87

[a] Number of grantees offering EBPs is based on information from the Enrollment and Service Log and RPG site visits in fall 2015.

[b] Calculated as the number of grantees with at least one family enrolled in the EBP.

Note: EBP = evidence-based program or practice.

Bolded text indicates focal EBPs. EBPs were grouped into types using the approach from Strong, Avellar, Francis, Angus, &Esposito (2013), with two revisions: Seeking Safety is now classified as a substance use disorder EBP, and Trauma-Focused Cognitive Behavioral Therapy is now classified as a therapy or counseling EBP. Both were classified as response to trauma EBPs in Strong et al., (2013). These EBPs are complex models that can be classified in multiple categories. These two EBPs were reclassified based on information on how grantees were implementing these focal EBPs, and to equalize distribution of the sample across the categories.

Source: RPG Enrollment and Service Log data from January 1, 2014, to July 14, 2017.

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