

RESEARCH REPORT

Does Supportive Housing Keep Families Together?

Supportive Housing for Child Welfare Families Research Partnership

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- Intensive Supportive Housing for Families—Connecticut
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Executive Summary

In 2012, the Children's Bureau in the US Department of Health and Human Services' Administration for Children and Families funded Partnerships to Demonstrate the Effectiveness of Supportive Housing for Families in the Child Welfare System, a five-year, \$25 million demonstration that provided supportive housing to families in the child welfare system, in five sites:

- Housing, Empowerment, Achievement, Recovery, and Triumph Alliance for Sustainable Families—Broward County, Florida
- Partners United for Supportive Housing in Cedar Rapids—Cedar Rapids, Iowa
- Intensive Supportive Housing for Families—Connecticut
- Memphis Strong Families Initiative—Memphis, Tennessee
- Families Moving Forward—San Francisco, California

With funding from the Robert Wood Johnson Foundation, the Annie E. Casey Foundation, Casey Family Programs, and the Edna McConnell Clark Foundation, the Urban Institute conducted the cross-site evaluation, a mixed-methods randomized controlled trial that included 807 families, who were randomized to either a treatment group (N = 377) or a control group (N = 430). To understand the program's impact, we drew upon four data sources: child welfare administrative data, program referral data, data on housing assistance for the treatment group, and family surveys conducted at baseline and 12 months after randomization. The study launched in 2012 and concluded in December 2018. This report provides our findings from the impact analysis. Our research focused on answering the following: Does supportive housing improve access to services, keep families stably housed, help keep families together and reduce their time spent in the child welfare system, and improve the health and social and emotional well-being for parents and children?

Demonstration Design and Implementation

Supportive housing for families involved in the child welfare system has shown promise in early pilots but has not been fully tested across a large sample. As such, the Children's Bureau chose to launch a demonstration, providing sites a common framework for the intervention and leaving the program's design up to the local grantees. The framework included core components of supportive housing: a housing subsidy with supportive services implemented using a Housing First philosophy. The sites

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differed in multiple ways, including context (e.g., big city, regional service area, rural area), child welfare practices, the definitions of the target population, services, and housing. Child welfare practices varied from site to site—for example, how the local child welfare agency processed and investigated reports of child abuse and neglect, their criteria for substantiating a case, and how they respond. Each site used a common framework provided by the Children's Bureau to identify target families. All the sites included high-need families who were involved in the child welfare system, as either preservation families or reunification families. For the most part, sites targeted homeless families or those who were at imminent risk of homelessness. But there was variation in the targeting criteria.

The Children's Bureau required sites to provide parenting skills training; services and interventions to improve family functioning and assist with family reunification when children have been in out-of-home placements; ancillary services for families to provide assistance in securing services, such as safe and stable housing, transportation, and child care; evidence-based, developmentally appropriate approaches to promoting child well-being; and access to appropriate mental health services for children involved in the child welfare system, including services to address trauma. Although sites provided the required services, the services varied in several ways, including how they were provided (directly or through referral), their intensity, and their duration. In addition to the services offered, the sites' case management models and ratios of clients to case managers varied. An important distinction across sites was the type of housing provided. The Children's Bureau grant did not provide funding for housing. Sites had to leverage housing resources in the community and had to partner with housing agencies and use housing vouchers or project-based housing or raise private capital.

Services Received

Treatment group families received more supportive services than control group families. Being involved in the demonstration gave treatment group families more caseworker support, and the families received more help and knew better what resources were available to them because of the additional support. In addition to providing housing subsidies, sites provided housing search and move-in support. Families in the treatment group received various forms of housing assistance—including assistance finding a house or apartment, paying a security deposit, and acquiring furniture or appliances—at significantly higher rates than families in the control group. Families in the treatment group reported higher rates than control group families of participation in parenting services; education, employment, and training services; receiving help applying for public benefits, with somewhat higher benefit receipt; transportation assistance; and legal assistance.

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One area where families in the treatment and control groups received similar rates of services was substance use and mental health services. The lack of a difference is probably explained by the fact that all families in the study were involved with the child welfare system, and connecting parents to these services is common practice in child welfare casework. Importantly, families in the treatment group reported higher participation rates in anger management and domestic violence services.

Housing Outcomes

Supportive housing overwhelmingly improves housing outcomes. One year after enrollment, most treatment group families reported living in a house or apartment with their own lease, nearly double the rate for the control group. Families in the treatment group also reported greater housing stability. On average, treatment group families, compared with control group families, were less likely to face eviction and experience homelessness, moved less frequently, and were more likely to report expecting to remain in their current housing situation. Treatment group families also reported fewer housing quality issues, less overcrowding, lower rates of rent burden (paying more than 30 percent of their income for rent), and higher overall housing quality satisfaction. On the other hand, we detected no significant differences in neighborhood quality, any crime victimization experienced in the past six months, and reported overall neighborhood satisfaction.

Child Welfare Involvement

Supportive housing leads to better child welfare outcomes. Supportive housing appears to lead to increased reunifications among children in out-of-home care. Reunifications were more likely and happened roughly twice as fast in the treatment group. In two sites, reunifications happened four times faster than the control group. Across the sites, 20 percent more children in the treatment group over the control group were reunited within two years. Of the four sites serving reunification families, two showed increased reunifications, with each having over 30 percent more children reunifying in the treatment group.

Across the sites, there was no significant reduction in the removal of children from preservation families, nor an increase in time to removal. But results varied, with some sites showing positive effects and some showing negative effects. Twenty-four months after enrollment, three sites showed lower removal rates in the treatment group than in the control group, with the differences ranging from 8

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percent to 15 percent. It is difficult to assess why there are such differences, but one consideration is the selection of families and better identification of children at risk for removal.

Supportive housing does not appear to reduce new substantiated allegations of abuse and neglect. Although we expect supportive housing to reduce future maltreatment, comparing families in supportive housing with a control group proves difficult because of the intervention's context and the conditions of the experimental design. First, supportive housing families get more services and have more frequent encounters with mandatory reporters. This increased scrutiny may result in more reports of abuse and neglect. New substantiated reports for the control group are virtually nonexistent, while reports for the treatment group increased to 13 percent of children in intact families at two years. Second, if treatment group families are less likely to have their child removed, they have more time for a new allegation to occur, although this can be difficult to disentangle if new allegations led to the higher removals in the control group. We conclude that supportive housing did not reduce new reports, but this needs further study.

Supportive housing should not only help the child welfare system keep children with or return children to their parents but allow agencies to close cases faster. In this demonstration, we were able to observe case closures only for three sites. The impacts on closing cases generally mirrors the broader results, with cases closing faster for reunifications because of the greater likelihood and speed of reunifications. If a child welfare agency can develop an effective supportive housing program, in terms of reduced removals and increased reunifications, it will be able to close cases faster and reduce families' involvement with the child welfare system.

Parent, Family, and Child Well-Being

Receiving supportive housing improved some measures of parent and child well-being one year after study enrollment, though not across all outcomes. Some outcomes where treatment group families did not do better than control group families may reflect the lack of differences in services received or may be outcomes that take considerable time to affect. Considering the issues that qualified families for supportive housing, we do not see impact on substance use or mental health. Treatment group families received similar services to control group families, which may explain why we do not see differences. On the other hand, families in the treatment group received more domestic violence services but report higher rates of domestic violence one year after enrollment. We suspect that domestic violence services made these parents (primarily mothers) more aware of what constitutes domestic violence and are thus more likely to report it. They may also just feel more comfortable reporting it in an interview.

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Investigation of other hypotheses within the available data did not support other explanations, but we cannot rule them out. The Children's Bureau required parenting skills training, but we found little impact on parenting in terms of types of (self-reported) abuse and neglect, parental warmth, parenting stress, or parenting skills. But parents in the treatment group had a better overall relationship with their children than did parents in the control group. Other family-level outcomes showed mixed impacts. Treatment group parents were less likely to be employed than control group parents but were more likely to receive public benefits, particularly cash assistance (e.g., Temporary Assistance for Needy Families), giving them nearly as much household income as control group families. Treatment group families were less rent burdened, and measures of material hardship show lower rates of housing and utility hardship among treatment group families. On the other hand, treatment group parents did not have better physical health than control group parents and had higher incarceration rates.

Impacts on children were also mixed. Children in treatment group families did not see many changes in behavior problems, regardless of age, though they were less likely to be suspended or expelled from school. Given greater housing stability, we would expect lower absentee rates among children in supportive housing. Surprisingly, children in treatment group families had higher absence rates than children in control group families. This result needs further examination, as it could be that enrolling in supportive housing required students to change schools, while children in control group families could attend the same school, despite higher moving rates. Children younger than school age in the treatment group were more likely than children in the control group to be enrolled in early education, an important contribution to breaking the cycle of poverty. Treatment group children also had higher reading grade levels (based on parents' reports of what school officials have told them). Finally, children in the treatment group were less likely to have a learning disability than control group children but were more likely to have a higher rate of diagnosed asthma. The lower rate of learning disability could reflect a more stable home environment but could be spurious. The higher asthma rate is confined to one site. It could reflect a lower quality of housing affordable with a voucher, or it, too, could be spurious, as we did not find correlations in Broward County between diagnosed asthma and specific measures of housing quality associated with asthma (e.g., mold and pests).

Conclusion

This demonstration showed that supportive housing can improve families' lives. With subsidized housing, families become more stable. Some sites were able to keep children with their parents and reduce families' involvement with the child welfare system. Although not consistent across sites, the

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positive impact in some sites shows that supportive housing can be successful. Our study finds mixed results on parent, child, and family well-being one year after program enrollment. We are continuing to track these outcomes, capturing outcomes at four and a half years after enrollment.

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Does Supportive Housing Keep Families Together?

Each year, child welfare agencies investigate 3.6 million reports of child abuse or neglect.¹ Child protective services workers decide whether to provide services to keep the family together or, when they deem the home environment unsafe, place children in out-of-home care. Among these often low-income and troubled families, inadequate housing is common. Lack of housing (i.e., homelessness, doubling up in overcrowded and precarious living situations, or living in unsafe conditions) has enormous consequences for children, families, and the systems trying to help them. Without housing, it is difficult for families to have the stability children require for healthy development. With housing, families have a stable platform from which to navigate life's challenges, but some high-need families may require additional supports. Supportive housing has been shown to help single adults experiencing chronic homelessness and serious mental illness (Tsemberis, Gulcur, and Nakae 2004). A small-scale pilot, Keeping Families Together, believed housing could do the same for families involved in the child welfare system and showed promising findings (Tapper 2010). Based on that study, the federal government, in October 2012, funded Partnerships to Demonstrate the Effectiveness of Supportive Housing for Families in the Child Welfare System, a five-site, five-year demonstration that provides supportive housing to families in the child welfare system.

Inadequate Housing Burdens the Child Welfare System

Responding to the housing needs of low-income families burdens the child welfare system. Child welfare agencies do not have the funding, staff capacity, or expertise to be a housing agency for the families in their care and have few resources for rental assistance, so they must locate community resources, such as the local public housing authority. In most areas, wait times for housing assistance are measured in years, and families in crisis may have difficulty navigating these systems, which are complex, are burdensome, and require a high degree of organization and follow-through (NLIHC 2016). High-risk families with histories of substance use or with criminal backgrounds may also fail to meet housing eligibility criteria (Cunningham et al. 2015; Rog, Gilbert-Mongelli, and Lundy 1997). As such, child welfare caseworkers report spending more time serving inadequately housed families compared with other families on their caseload (Barth, Wildfire, and Green 2006). Child protective services workers express exasperation at this challenge (Shdaimah 2009) and often fail to explore and

understand families, housing needs because of their inability to solve these problems (Courtney, McMurtry, and Zinn 2004). Further, many see housing as just another resource that the family needs and do not see it as an intervention that can help produce the outcomes for which they are accountable, such as reducing removals or increasing reunifications (Cunningham et al. 2015).

Housing Assistance as a Strategy to Prevent Child Abuse and Neglect

Some acknowledge that lack of housing makes it difficult to protect children and keep families together (Dworsky 2014), but child welfare agencies have paid little attention to housing's potential to prevent child abuse and neglect. What if housing could help child welfare agencies improve child safety, permanence, and well-being, ultimately reducing their caseloads and preventing reentry? Evidence suggests housing can play this role. A recent study of homeless families shows that those offered housing vouchers have lower rates of family separation, both formal (e.g., child welfare agency removals) and informal (e.g., placement with family) (Gubits et al. 2013). A quasi-experimental evaluation of the Family Reunification Program, which provides housing vouchers to families involved in the child welfare system, shows that the program had some positive impact on child welfare outcomes (Pergamit, Cunningham, and Hanson 2017). Another single-site randomized controlled trial found that the Family Reunification Program reduced out-of-home placement among families receiving preservation services from a child welfare agency (Fowler and Chavira 2014). Some programs combine housing and supportive services. In New York City, Keeping Families Together found that providing supportive housing can improve child welfare outcomes (Tapper 2010).

What Partnerships Demonstrate Supportive Housing's Effectiveness

The Child Abuse Prevention and Treatment Act of 2010 authorized the Administration on Children, Youth, and Families to provide competitive grants to serve "a subset of families for whom the lack of adequate housing is a factor, in addition to other high service needs, in the imminent placement or placement of a child, or children, in out-of-home care." From this authority, the Partnerships to Demonstrate the Effectiveness of Supportive Housing for Families in the Child Welfare System launched in October 2012. The demonstration provided five-year, \$5 million grants to five sites: 4

- Housing, Empowerment, Achievement, Recovery, and Triumph Alliance for Sustainable
 Families—Broward County, Florida
- Partners United for Supportive Housing in Cedar Rapids—Cedar Rapids, Iowa
- Intensive Supportive Housing for Families—Connecticut
- Memphis Strong Families Initiative—Memphis, Tennessee
- Families Moving Forward—San Francisco, California

Each site provided supportive housing, an intervention that combines affordable housing with intensive wraparound services, to reduce child welfare involvement and improve child well-being through housing stability, family stability, and improved parenting. The demonstration funded the supportive services, and sites were required to provide housing assistance resources.

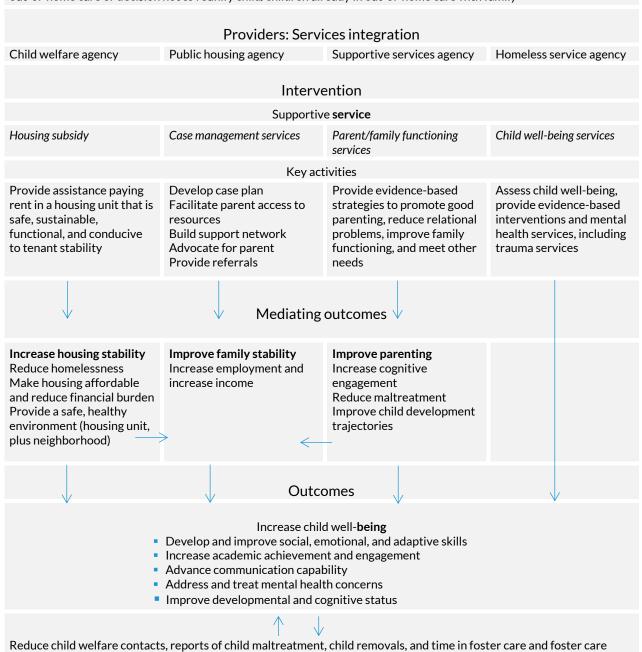
Supportive housing seeks to reduce child welfare contacts, reports of child maltreatment, child removals, out-of-home placements, and time in out-of-home care by integrating the services of multiple systems to provide care (figure 1). The program brings together the child welfare agency and homeless and community-based service providers. Supportive housing is a project-based or scattered-site housing subsidy linked with supportive services (i.e., case management, parent and family functioning, and child well-being services). By providing supportive housing, the demonstration aims to improve mediating outcomes—housing stability, family stability, and parenting, which will improve long-term outcomes that increase child well-being and reduce involvement in the child welfare system.

FIGURE 1

Logic Model

Target population

Child welfare–involved family for whom lack of adequate housing is a factor in imminent placement of child/children in out-of-home care or decision not to reunify child/children already in out-of-home care with family



placements

Research Questions and Methods

Supportive Housing for Child Welfare Families: A Research Partnership is a collaborative research effort dedicated to understanding the demonstration's effect and sharing lessons with practitioners, policymakers, and funders. The collaborative includes the Urban Institute, local evaluators from each site, and philanthropic and government funders. The Urban Institute is conducting the national evaluation, which collects and analyzes data from the five sites. Local evaluators contribute to the national evaluation and investigate site-specific research questions. The national evaluation uses a rigorous, randomized controlled trial research design to help policymakers and practitioners understand the following:

- Do supportive housing programs keep families stably housed, reduce their risk of entering the child welfare system, and improve their health and social and emotional well-being?
- How does each site define its models of supportive housing? Does each model effectively target services to families at high risk of continued child welfare involvement and family instability?
- Can the models integrate their services and get families the services they need from the various systems they must interact with?
- How much do supportive housing models for child welfare-involved families cost, and are they cost-effective? Do they produce savings across service systems, such as the child welfare and homelessness systems?

To address these questions, the national evaluation has four main components: targeting and predictive analytics, implementation and process, impact, and cost. This report gives results of the impact study, results that focus on the program's impact on several outcomes, including child welfare, housing, parenting, employment, income, material hardship, parent and child health, and children's behavior and school performance. We derived estimates from the randomized controlled trial in each site. Randomized controlled trials allow us to compare two equivalent groups so that the difference in outcomes can be properly attributed to the program. In total, 807 families were randomized to either a treatment group (N = 377) or a control group (N = 430), distributed across sites as seen in table 1.

TABLE 1
Family Sample Sizes by Site and by Randomized Group

	Broward	Cedar			San	
	County	Rapids	Connecticut	Memphis	Francisco	Total
Overall	172	195	157	129	154	807
Control group families	115	93	106	42	75	431
Treatment group families	57	102	51	87	79	376

Source: Cross-site enrollment dashboard through October 2016.

Each site designed a process to identify, refer, and randomize families for the demonstration. Sites varied in the treatment-control ratio they selected:

- Broward County had four cells, two preservation (Community Services in Place, Monitoring Needed) and two reunification (New Case Opened, Only Housing Needed for Reunification); each cell used a ratio of one treatment to two controls.
- Cedar Rapids selected three treatments out of each month's referrals, with the remainder of referrals being controls.
- Connecticut had two treatment cells, one for Intensive Supportive Housing for Families and the other for families receiving their usual supportive housing program, Project Supportive Housing for Families, along with a control group. The cross-site evaluation includes only the Intensive Supportive Housing for Families and control groups, randomized at one treatment to two controls (one also went to the Project Supportive Housing for Families group).
- Memphis served only preservation families and selected two treatments to one control.
- San Francisco selected one treatment to one control.

We drew upon four data sources for the impact analyses: child welfare administrative data, program referral data, data on housing assistance for the treatment group, and family surveys conducted at baseline and 12 months after randomization (known as the Improving Family Services Survey). We provide more information on these data sources in appendix A.

We have child welfare administrative data on 98 percent of families randomized into the study. Our sample size is 794 families. The response rate for the baseline survey was 68.8 percent (81.4 percent for the treatment group and 57.7 percent for the control group), and the response rate to the 12-month follow-up survey was 65.8 percent (77.5 percent for the treatment group and 55.6 percent for the control group). The response rate differed by site, with the differences primarily reflecting each site's ability to obtain families' consent to share their names and contact information with the survey firm.

Response rates among families that provided consent were higher, at 87 percent (treatment group) and 76 percent (control group) for the baseline survey and 81 percent (treatment) and 75 percent (control) for the 12-month follow-up survey.

This report details how sites implemented the demonstration, describes the families receiving services, and reports on analysis of child welfare and family and child well-being outcomes. Our analyses are based on an intent-to-treat framework, where all families randomized to either treatment or control groups are included in the group to which they were assigned, regardless of whether they received the intervention. We report on statistical significance up to levels of 90 percent confidence and recognize as meaningful effects any standardized effect size of greater than or equal to 0.25, as accepted by the What Works Clearinghouse (2017).

How Did Sites Implement the Demonstration?

The logic model in figure 1 offers a framework for the demonstration, but sites had flexibility in designing their programs to meet local community needs. As a result, sites differ in the housing subsidy and supportive services design and in the families they targeted.

Housing Subsidy Design by Site

Demonstration sites were required to identify housing resources in their community to leverage funding for supportive services provided by the Administration on Children, Youth, and Families. Sites offered different housing types, from tenant-based housing choice vouchers to project-based housing (table 2).

TABLE 2
Housing Subsidy Source by Site

Site	Subsidy description
Broward County, Florida	Housing choice vouchers
Cedar Rapids, Iowa	Tenant-Based Rental Assistance, project-based housing (Affordable Housing Network Inc.), housing choice vouchers (City of Cedar Rapids Housing Services)
Connecticut	Housing choice vouchers
Memphis, Tennessee	Project-based housing
San Francisco, California	Housing choice vouchers, permanent supportive housing units, project-based housing, transitional housing as a bridge to permanent housing

Housing Lease-Up

Seventy-six percent of families in the treatment group leased up within the period covered by the data sites gave us. That period varies but is well past the last date a family was enrolled into the study (table 3). The low rate in San Francisco reflects significant difficulties in finding housing with affordable rent and a landlord who would accept a voucher.

TABLE 3
Lease-Up Rate

	Treatment group								
Site	families	Share leased-up							
Broward County	57	88%							
Cedar Rapids	102	92%							
Connecticut	51	92%							
Memphis	87	97%							
San Francisco	79	57%							
Total	339	76%							

Source: Program data provided by all sites.

Note: Lease-up rates are through the last observed date: November 30, 2017 (San Francisco); May 1, 2018 (Connecticut); February 2, 2018 (Cedar Rapids); September 30, 2017 (Broward County); October 22, 2018 (Memphis).

Time to lease-up varied but averaged 101 days (table 4). The variation can be explained partly by the types of subsidized housing available and each site's housing market. Memphis offered housing in project-based units. Cedar Rapids offered a mix of project-based units and tenant-based subsidies. Families moving into project-based units have faster lease-up rates because the housing is usually available when families enroll in the program. The Broward County, Connecticut, and San Francisco sites provided vouchers, which required applications and housing searches. In Cedar Rapids and Memphis, most families who leased up did so in less than one month. But in Broward County and Connecticut, average time to lease-up was 82 days and 180 days, respectively. These two sites used vouchers, and this time likely reflects the need to fill out paperwork and find an acceptable unit. San Francisco is the outlier, with an average time to lease-up of 303 days for the 45 families that leased up within the observed period. The housing market is tighter in San Francisco than in the other sites, and housing is more expensive.

TABLE 4
Time to Lease-Up

Site	Families leased-up	Median days	Average days
Broward County	50	76	82
Cedar Rapids	94	14	16
Connecticut	47	161	180
Memphis	84	4	38
San Francisco	45	303	332
Total	320	22	101

Source: Program data provided by all sites.

Note: Time to lease-up is reported through the last observed date: November 30, 2017 (San Francisco); May 1, 2018 (Connecticut); October 22, 2018 (Cedar Rapids); September 30, 2017 (Broward County); October 22, 2018 (Memphis).

Supportive Services Model by Site

Demonstration sites were required to implement "evidence-based, trauma-informed services...embedded into the service structure in order to improve housing stability and engagement in supportive services." Further, the demonstration required the sites to offer specific services, including parenting skills training, programs to promote child well-being, and evidence-based mental health services. But the demonstration did not specify which programs sites should adopt and did not specify which programs are considered evidence based. Table 5 summarizes the supportive services sites offered.

TABLE 5
Supportive Services Models by Site

	Broward County	Cedar Rapids	Connecticut	Memphis	San Francisco
Ratio of clients to case managers	10:1	12:1	7:1, higher as service intensity stepped down	17:1	15:1
Frequency of contact	Weekly, service intensity decreasing over time	Frequency varied based on stage of service and family need	Eight home visits a month, with protocol for stepping down services as needed	Weekly	Weekly
Case manager credentials	Master's degree in social work	Master's degree or bachelor's degree and two years of experience	Bachelor's degree in social work and two or more years of experience	Bachelor's degree in social services– related field	Master's degree
Supportive services	Clinical intensive case management team	Intensive Service Coordination and case progress management to tailor service timing and intensity	Teaming model	Clinical intensive interdisciplinary case management	Intensive case management, housing search assistance
Evidence- based practices	Healthy Babies Project, Strengthening Families Program, trauma-focused cognitive behavioral therapy, Center for Working Families	Parents as Teacher, Strengthening Families, Parent Child Interaction Therapy, trauma- focused cognitive behavioral therapy, Motivational Interviewing, Family Team Decision Making	Multisystemic therapy, trauma- focused cognitive behavioral therapy, Child FIRST, Family- Based Recovery, Positive Parenting Program	Nurturing Parenting, cognitive behavioral therapy	Trauma-focused cognitive behavioral therapy, child-parent psychotherapy, Positive Parenting Program, peer mentors, Safety-Organized Practice, SAFE meeting, family team meetings

Source: Mary Cunningham, Mike Pergamit, Marla McDaniel, Maeve E. Gearing, Simone Zhang, and Brent Howell, *Supportive Housing for High-Need Families in the Child Welfare System* (Washington, DC: Urban Institute, 2014), table 2, with authors' updates.

Usual Care

Differences between the housing and services provided by each site's program and what families would normally receive absent the program is an important consideration in determining the evaluation's ability to measure impact. One of the most important differences between the treatment and control groups was the provision of housing. In the treatment group, all families that participated were eligible

to receive a housing subsidy. Families in the control group across all five sites were not given priority for housing and were generally placed on waiting lists for various housing programs depending on their eligibility.

There were also considerable differences in the approach to case management in the treatment and control groups and in available supportive services. One of the biggest differences between the two groups was the ratio of case managers to clients, which ranged from 7:1 to 15:1 in the treatment group and from 17:1 to 37:1 in the control group. The planned treatment-control difference was particularly pronounced in Broward County, Cedar Rapids, and San Francisco, where the planned ratio in the treatment group was half the size of the control group. In Memphis and Connecticut, the difference was smaller. In all the sites, the case manager credentials were higher for the treatment group than for the control group—master's-level education or bachelor's-level education with additional work experience. Additionally, for the most part, the programs met at least once a week with families, compared with monthly case manager contact in the control groups. Families in the treatment group were eligible to receive services for the duration of the demonstration, compared with a year or less in the control groups. Finally, the interdisciplinary approach to case management meant that a wide variety of services that families need were provided as part of a coordinated team rather than being brokered through referrals. All sites planned to provide families direct access to employment services, educational supports, mental health and substance abuse treatment, health education and screening, domestic violence prevention, transportation, child care, legal aid, and parenting support.

Who Are the Families?

Each site designed its own targeting criteria within a federal framework to ensure that supportive housing served families for whom the program would likely have the biggest effect. The federal framework set out eligibility criteria for families in the program:

- Child welfare-involved families. Families most likely to experience negative child welfare
 outcomes (e.g., out-of-home placement, long-term open cases, reentry to the child welfare
 system in the form of re-reports of abuse or neglect, and repeat open cases).
- **Families with high service needs.** Families with multiple needs, such as mental or physical health problems, substance use, or disabled children.
- Families with severe housing issues. Families who are homeless or unstably housed.

Using these targeting criteria, caseworkers at the child welfare agency or homelessness organization identified families for the program.

TABLE 6
Family Enrollment by Site

	Broward	Cedar			San	
	County	Rapids	Connecticut ^a	Memphis	Francisco	Total
Families enrolled	57	102	51	87	79	376
Preservation families	32	59	37	87	38	253
Reunification families ^b	25	43	14	0	41	123

Source: Cross-site enrollment dashboard through October 2016.

Note: Identification of families as preservation or reunification based on status in child welfare administrative data.

The vast majority of households (93.2 percent) who enrolled in the program were headed by a female, and 86.8 percent of household heads were neither married nor living with a partner. Most households included at least two children. Seventy-three percent of families had two or more children, and almost half had more than three (table 7). The average age of the household head was 30.4 years old. About 35 percent of household heads were white, another 45.3 percent were black, and 14.1 percent were Hispanic. Many household heads (37.8 percent) had less than a high school degree. Another 26.1 percent had a high school diploma, and 36.1 percent had an associate's degree or higher.

The demonstration aims to serve high-need child welfare-involved families, reflected in family and caregiver characteristics. Families in the study have high rates of past child welfare involvement,

^a Only families participating in Intensive Supportive Housing for Families are counted.

^b Six families with both preservation and reunification cases are counted as reunification cases only.

domestic violence incidents, criminal justice involvement, substance abuse, and mental or physical health problems. Fifty-five percent of caregivers were involved with child welfare as children, with 28.6 percent reporting they were in foster care as a child, 45.0 percent reporting being physically abused as a child, and 39.5 percent reporting being sexually abused as a child. Sixty-four percent of caregivers reported having been involved in a domestic violence situation. Forty-eight percent reported a history of criminal justice involvement. Thirty-one percent reported that one or more children in the household has a mental health condition, behavioral problem, or a chronic disability. Though only about 4 percent reported having an alcohol abuse issue, roughly one in eight reported having a drug abuse issue. About 21 percent of caregivers reported having a physical, mental, or emotional problem that limits the kind or amount of work they can do. Though only 48 percent of the families were homeless at the time of randomization, 80.5 percent reported having been homeless at some time.

TABLE 7
Characteristics of Enrolled Families: A Portrait from the Baseline Survey

	N	Percentage
Demographics		
Female	590	93.2%
Age (mean)	590	30.4
Race or ethnicity		
Black	590	45.3%
White	590	35.2%
Hispanic Other	590 590	14.1% 5.4%
	370	3.4%
Marital status Married	590	9.5%
Living with partner	590	9.5% 3.7%
Divorced	590	9.5%
Widowed	590	1.5%
Separated	590	10.2%
Never married	590	65.6%
Educational attainment		
Less than high school	587	37.8%
High school or GED equivalent	587	26.1%
Associate's degree or four-year college	587	36.1%
Number of children		
0	590	0.7%
1	590	24.4%
2	590	28.8%
3	590	20.9%
4+	590	25.2%
Current challenges and supports		
Child in household has a mental health condition, behavioral problem, or chronic disability	542	31.2%
Adult in household has a disability	545	8.7%
Primary caregiver has an alcohol use issue	544	4.2%
Primary caregiver has a drug use issue	544	12.5%
Primary caregiver has a history of criminal justice involvement	545	48.7%
Household involved in a domestic violence situation	545	64.6%
Barriers to work		
Physical, mental, or emotional problem keeps respondent from working	545	21.2%
Physical, mental, or emotional problem limits amount or type of work respondent can do	545	25.0%
Ever homeless	545	80.5%
Adverse childhood experiences		
In foster care	589	28.6%
Any emotional abuse	588	55.1%
Any physical abuse	599	45.0%
Any sexual abuse	587	39.5%

Sources: Improving Family Services Survey baseline survey data or, for baseline nonrespondents, follow-up survey questions referring to the baseline time period.

 $\textbf{Notes:} \ \mathsf{Data} \ \mathsf{are} \ \mathsf{weighted} \ \mathsf{by} \ \mathsf{site} \ \mathsf{to} \ \mathsf{adjust} \ \mathsf{for} \ \mathsf{the} \ \mathsf{number} \ \mathsf{of} \ \mathsf{families} \ \mathsf{randomized} \ \mathsf{to} \ \mathsf{treatment}. \ \mathsf{Imputed} \ \mathsf{data} \ \mathsf{are} \ \mathsf{not} \ \mathsf{included}.$

Did Program Families Receive More Services?

In this section, we present results that test the demonstration's impact on families' use of supportive services. Results are based on analyses of the follow-up survey and represent outcomes at about one year after families were randomized into the study. As the supportive housing model includes case management and services around parent and family functioning and child well-being, we would expect rates of service receipt to be higher among families in the treatment group. We find that treatment group families received more supportive services than control group families.

Caseworker Support

Treatment group families report significantly higher rates of caseworker support, across several measures (table 8). Families in the treatment group are more than 30 percentage points more likely than those in the control group to report having a non-child welfare caseworker and report higher numbers of caseworkers and greater support from their caseworkers. Among families with more than one caseworker, we do not find significant differences between treatment and control group families in how well respondents feel their caseworkers work together to help them or in whether they feel overwhelmed by the number of caseworkers in their lives. This pattern of results is largely similar across sites.

Table 8 also shows that caseworkers are connecting families in the treatment group to needed services. Treatment group families are significantly more likely than control group families to report understanding the services available to them and feeling able to receive the services they need to improve their own and their children's lives. These families also report higher rates of being connected to multiple agencies for support and are more likely to agree that they have someone in their lives who makes sure they get needed services. Again, these results are similar across the sites.

TABLE 8
Supportive Services: Caseworker Support

	N	Treatment mean	Control mean	Impact (difference)	P value
Has a non-child welfare caseworker	528	74.2%	43.9%	30.3%***	0.000
Number of caseworkers	528	1.6	0.9	0.7***	0.000
Among those with at least one casewor	ker				
[Caseworker] is someone I feel I can turn to for help	312	88.5%	73.3%	15.2%**	0.001
[Caseworker] worked together with me to make a service plan for me and my child(ren)	310	83.4%	65.8%	17.6%***	0.000
Among those with more than one cases	worker				
My caseworkers work together to help me	184	56.7%	48.3%	8.4%	0.250
Sometimes I feel overwhelmed by the number of caseworkers in my life	186	50.0%	50.3%	-0.3%	0.968
l understand what services are available to me	529	86.8%	81.2%	5.6%*	0.065
I can get the services I need to improve life for me and my child(ren)	529	86.5%	76.8%	9.7%**	0.003
I get help from more than one agency or organization	529	62.6%	45.1%	17.5%***	0.000
There is someone who makes sure that I get the different services I need when I need them	529	79.1%	59.0%	20.1%***	0.000

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. *p < 0.05; ***p < 0.05.

Housing Search and Move-In Assistance

In addition to providing housing subsidies, many sites provided supportive services related to housing. These services helped families search for housing and, once located, move into their new unit. Families in the treatment group reported receiving various forms of housing assistance—including assistance finding a house or apartment, paying a security deposit, and acquiring furniture or appliances—at significantly higher rates than families in the control group (table 9). Housing assistance rates varied. Respondents in Memphis reported low rates, while respondents in Connecticut reported high rates. These differences are likely explained in part by differences in the housing model. In particular, Memphis used a project-based housing model, so housing search assistance was not necessary. But

across sites, treatment group families reported receiving housing search and move-in services at higher rates.

TABLE 9
Supportive Services: Housing Assistance

		Treatment	Control	Impact	
	N	mean	mean	(difference)	P value
Received services or assistance to find a home or apartment	530	43.0%	17.7%	25.3%***	0.000
Received assistance paying security deposit	530	34.2%	7.8%	26.4%***	0.000
Received assistance buying or donated furniture or appliances	531	41.9%	10.7%	31.2%***	0.000

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

*** p < 0.01.

Substance Abuse and Mental Health Services

Results presented in table 10 suggest that, on average, families in the treatment and control groups accessed substance abuse and mental health services at similar rates. The most commonly used service was outpatient mental health or substance use counseling. Just over a third of families in the treatment and control groups accessed this service. Higher levels of treatment—including residential substance use treatment and inpatient psychiatric treatment—were less common. Limited evidence of treatment-control differences in access to substance abuse and mental health services is expected, given that all families were in contact with the child welfare system, and connecting parents to these services is common practice in child welfare casework. Families in the treatment group reported statistically significantly higher participation rates in anger management and domestic violence services.

Site-level results suggest that sites varied both in overall rates at which families accessed these substance abuse and mental health services and in the demonstration's effects on families' use of these services.

TABLE 10
Supportive Services: Substance Abuse and Mental Health Treatment

	N	Treatment mean	Control mean	Impact (difference)	P value
Used residential drug or alcohol					
treatment	530	7.9%	9.9%	-2.0%	0.388
Had psychological counseling or therapy for emotional problems	530	34.1%	35.4%	-1.3%	0.740
Outpatient mental health or drug or alcohol counseling	530	24.8%	24.8%	0.0%	0.982
Stayed in inpatient psychiatric facility	530	4.3%	3.0%	1.3%	0.398
Received services for anger management or domestic violence	531	13.3%	7.2%	6.1%**	0.010

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

** p < 0.05.

Parenting

The demonstration required sites to offer parenting services, and families in the treatment group participated in parenting services at higher rates than families in the control group (table 11). For example, 22.5 percent of families in the treatment group participated in home visiting services, and 30.4 percent participated in parenting classes. These participation rates are 9.8 and 8.3 percentage points higher than control group means, respectively, and these differences are statistically significant (p < 0.05). This pattern is similar across sites. Although participation rates in parenting services are higher among treatment group families, given that this was a service focus of the demonstration, we would have expected even higher rates of treatment group participation and greater treatment-control differences. The process study report suggests that take-up of offered parenting skills training was a common challenge, and in-depth interviews with families found that many parents did not feel they needed parenting services. These issues could help explain the results in table 11. Survey respondents misunderstanding these questions, or not thinking of the services they receive as "parenting classes," could also play a role.

TABLE 11
Supportive Services: Parenting

	N	Treatment mean	Control mean	Impact (difference)	P value
Participated in home visiting services	531	22.5%	12.7%	9.8%**	0.004
Participated in other parenting classes	531	30.4%	22.1%	8.3%**	0.028
Number of times participated in home visiting	531	2.7	2.0	0.7	0.350
Number of times participated in other parenting classes	531	5.1	4.1	1.0	0.408

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

** p < 0.05.

Education, Training, and Employment Services

On average, families in the treatment group were more likely than those in the control group to participate in education, training, and employment services (table 12). Roughly double the share of treatment group families received one-on-one employment services (32.5 percent versus 15.6 percent), and treatment group families are 5.5 percentage points more likely to report completing any education or training program. Although differences are not statistically significant, treatment group families participated in education and training programs—including those focused on a particular job or trade and GED or high school completion classes—at higher rates and are more likely to have been put in touch with an employer by an employment program (table 12). That families in the treatment group accessed education, training, and employment services at higher rates is evident in all sites. But sites differ in the share of treatment group families accessing these services. In particular, in Connecticut, where the program includes a vocational specialist, more than 60 percent of treatment group families received one-on-one employment services, representing a 40 percentage-point improvement over Connecticut families in the control group.

TABLE 12
Supportive Services: Education, Training, and Employment

	N	Treatment mean	Control mean	Impact (difference)	<i>P</i> value
Attended any education or training programs	531	22.0%	16.5%	5.5%	0.104
Completed any education or training program	531	9.6%	4.1%	5.5%**	0.004
Received one-on-one services to assess job skills and interests or to help find a job, create a résumé, or prepare for a job interview	531	32.5%	15.6%	16.9%***	0.000
Participated in training program for a specific job, trade, or occupation	529	13.4%	10.1%	3.3%	0.225
Been put in touch with employer by employment program	531	10.7%	7.0%	3.7% [†]	0.132
Participated in classes to finish high school or get GED	531	11.4%	9.0%	2.4%	0.327

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

Public Benefits Access and Other Supportive Services

Families in the treatment group were more likely to report receiving help applying for benefits (table 13).8 Almost a quarter of treatment group families received this kind of assistance, compared with 12.4 percent of control group families.

We examine treatment-control differences in the likelihood of receiving any benefit and found high rates of benefit receipt overall, with higher rates among the treatment group (93.2 percent versus 89.5 percent in the control group). Although this difference is not statistically significant, the effect size indicates a potentially meaningful difference. Looking at specific benefits, treatment group families were statistically significantly more likely to receive cash assistance, child care assistance, and child support payments compared with control group families. We did not find statistically significant treatment-control differences in receipt of most other benefits examined, including the Supplemental Nutrition Assistance Program; Supplemental Security Income for a child; the Special Supplemental Nutrition Program for Women, Infants, and Children program; Social Security Disability Insurance; and Head Start or Early Head Start. Rates of receipt of Supplemental Security Income and unemployment

^{**} p < 0.05; *** p < 0.01; † standardized effect size ≥ 0.25 .

insurance benefits were lower for treatment group families than for control group families and quite low overall. Although we expect few families to be receiving unemployment insurance benefits, the disability rates suggested that Supplemental Security Income receipt would be higher. Site-level analyses show differences across sites in overall levels of receipt of specific benefits, but the pattern of treatment-control differences in benefits receipt across sites mirror the full-sample results.

TABLE 13
Supportive Services: Public Benefits

	N	Treatment mean	Control mean	Impact (difference)	P value
Assistance applying				·	
Received assistance applying for SSI, SNAP, TANF, health insurance, WIC, or other benefits	531	23.3%	12.4%	10.9%**	0.001
Benefit receipt					
Any benefit	531	93.2%	89.5%	3.7% [†]	0.112
Cash assistance/TANF/General					
Assistance	530	30.3%	21.9%	8.4%**	0.018
SNAP	530	88.0%	84.7%	3.3%	0.251
SSI for a child	530	10.6%	10.6%	0.0%	0.994
SSI for self	531	6.4%	10.5%	-4.1%*	0.079
WIC	531	26.2%	31.7%	-5.5%	0.129
Unemployment benefits	531	0.3%	1.9%	-1.6%**	0.042
Child care payments or subsidies	531	6.1%	2.3%	3.8%**	0.025
SSDI	531	1.8%	3.1%	-1.3% [†]	0.228
Child support payments	530	13.3%	7.5%	5.8%**	0.018
Child attends a Head Start or Early					
Head Start program	529	14.4%	12.6%	1.8%	0.543

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: SNAP = Supplemental Nutrition Assistance Program; SSDI = Social Security Disability Insurance; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Woman, Infants, and Children. The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child. All controls are measured at randomization or at the time of the baseline survey. * p < 0.05; * standardized effect size ≥ 0.25 .

We also examined the demonstration's effects on access to other supportive services (table 14). Of these, transportation assistance was the most common. Fifty percent of families in the treatment group received this assistance, compared with just under 30 percent of control group families. Results reported in appendix table D.1 show subway and bus passes were the most common form of transportation assistance. Families in the treatment group were also significantly more likely to receive

legal assistance services—including assistance expunging records and help with visitation rights—and participation rates in financial education were also higher in the treatment group (table 14). Site-level results suggest these services were a focus for certain sites. In particular, treatment-control differences in receipt of legal assistance are especially pronounced in Broward County, where Legal Aid was a partner in the program.

TABLE 14
Other Supportive Services

	N	Treatment mean	Control mean	Impact (difference)	P value
	14	IIICali	IIICali	(united enice)	rvalue
Received any transportation assistance	531	50.0%	29.6%	20.4%***	0.000
Received assistance expunging records, help establishing or modifying visitation rights, or other legal assistance	531	27.4%	17.4%	10.0%**	0.005
Participated in financial education classes or training	531	10.3%	4.3%	6.0%**	0.003

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

^{**} p < 0.05; *** p < 0.01.

Did Supportive Housing Change Housing Outcomes?

Results in this section suggest the demonstration increased housing stability. Treatment group families reported more stable housing situations, better-quality housing, and less rent burden. But we detected no differences in neighborhood quality in the full sample.

A large majority, 85.8 percent, of treatment group families report living in a house or apartment with their own lease at the time of the follow-up survey (table 15). This represents a 36.6 percentage-point improvement over the control group. Control group families are more likely to report living in a house or apartment without their own lease, or in a shelter, in a hotel or motel, or somewhere else. Although the demonstration provided housing subsidies, we would not expect 100 percent of treatment group families to live in a house or apartment with a lease. Time to connect treatment group families to this kind of housing situation was lengthy in some sites, and some treatment group families did not take up the supportive housing program. Also, 11.2 percent of control group families were housed outside a house or apartment, compared with only 4 percent of treatment group families.

These results are similar across sites, but treatment group families in San Francisco report lower rates of being housed with their own lease at the one-year follow-up compared with the full sample, consistent with the lease-up rates in table 2. Although lower than the full-sample average, treatment group families in San Francisco report being housed with their own lease at significantly higher rates than control group families.

TABLE 15

Housing Type

		Treatment	Control	Impact	
Housing type	Ν	mean	mean	(difference)	P value ^a
House or apartment with own lease	531	85.8%	49.2%	36.6%***	0.000
House or apartment without own lease	531	9.9%	40.2%	-30.3%***	
Shelter, hotel or motel, or somewhere else	531	4.0%	11.2%	-7.2%***	

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

Housing Stability and Homelessness

Families in the treatment group also reported greater housing stability at the time of the follow-up survey. On average, these families, compared with the control group families, moved less frequently, were less likely to face eviction, and were more likely to expect to remain in their current housing situation (table 16). Homelessness was also less prevalent among the treatment group, relative to the control group. Just under 2 percent of treatment group families reported a homeless spell in the six months before the survey, compared with almost 15 percent of control group families. Similarly, treatment group families spent an average of just 0.1 nights in a shelter in the six months before the survey, while control group families reported an average of 5 nights in a shelter over the same period. These treatment-control differences in housing stability and homelessness is similar across sites.

^a Significant difference in housing type is measured with a chi-squared test.

^{***} p < 0.01.

TABLE 16
Housing Stability and Homelessness

	N	Treatment mean	Control mean	Impact (difference)	P value
Two or more moves since randomization	523	24.3%	45.8%	-21 5%***	0.000
Fyicted since randomization	523 529	3.9%	7.6%	-21.5%	0.000
Expect to live in current housing in six months	522	68.6%	58.2%	10.4%**	0.017
Had a homeless spell (shelter or on the street) in the past six months	530	1.7%	14.9%	-13.2%***	0.000
Nights spent in shelter in the past six months	527	0.1	5.0	-4.9***	0.000

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in the respondent's care; children's ages; whether the respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

* p < 0.1; ** p < 0.05; *** p < 0.01.

Housing Quality

Treatment group families reported fewer housing quality issues, less overcrowding, and higher housing quality satisfaction (table 17). More than one-third of control group families paid more than 30 percent of their income for rent, a measure of rent burden, while only 11.7 percent of treatment group families were rent burdened. These figures include families who lived in shelters and those who were doubled up and may not pay any rent. Looking only at families with their own lease, 41.7 percent of control group families were rent burdened compared with 9.5 percent of treatment group families. Results on housing quality are consistent across sites.

TABLE 17
Housing Quality

		Treatment	Control	Impact	
	N	mean	mean	(difference)	<i>P</i> value
Number of housing quality issues (0–14)	531	0.9	1.1	-0.2*	0.098
Overcrowding: Average people per bedroom	382	1.5	1.8	-0.3***	0.000
Housing quality is excellent, very good, or good	531	86.7%	74.0%	12.7%***	0.000
Rent burden					
Rent is more than 30% of household income (full sample)	531	11.7%	34.4%	-22.7%***	0.000
Rent is more than 30% of household income (of those with lease)	357	9.5%	41.7%	-32.2%***	0.000
Rent as a portion of income earned and benefits received in past month (full sample)	522	15.8%	28.9%	-13.1%**	0.002

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Housing quality issues include maintenance issues, pests, and a house being too dark or dirty or too cluttered or crowded. Overcrowding is measured among families currently living in a house, apartment, or mobile home.

Neighborhood Quality

In the full sample, we detected no significant differences in neighborhood quality, any crime victimization experienced in the past six months, and reported overall neighborhood satisfaction (table 18). But sites varied in treatment-control differences in housing quality. Treatment group families in Cedar Rapids and Memphis, the two sites that used project-based housing, reported more neighborhood problems than control group families. This difference is statistically significant in Cedar Rapids (p = 0.000) and is not statistically significant in Memphis (p = 0.274), but the effect size suggests a meaningful difference. Effect sizes on higher rates of crime victimization among treatment group families compared with control group families in Cedar Rapids and Memphis also suggest meaningful effects, although differences are statistically insignificant (p = 0.134 and p = 0.158, respectively). Cedar Rapids treatment group families also reported less satisfaction with their neighborhood than control group families. On the other hand, treatment group families in Broward County and Connecticut, where vouchers were used, reported fewer neighborhood problems than control group families. Broward County treatment group families also reported greater neighborhood satisfaction, while Connecticut treatment group families reported less crime victimization (the difference is statistically insignificant,

^{*} p < 0.1; ** p < 0.05; *** p < 0.01.

but effect size suggests meaningful results). San Francisco showed only small, statistically insignificant treatment-control differences in all three measures, possibly because high housing costs put treatment group and control group families in similar neighborhoods.

TABLE 18 Neighborhood Quality

		Treatment	Control	Impact	
	Ν	mean	mean	(difference)	P value
Number of neighborhood problems (0-14)	528	2.4	2.4	0.0	0.884
Any crime victimization of household members in past six months occurred	530	20.4%	15.4%	5.0%	0.124
Respondent is very or somewhat satisfied with neighborhood	528	68.7%	69.9%	-1.2%	0.768

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Neighborhood problems include school quality, graffiti, trash or junk, vacant units, police not coming when called, people selling or using drugs, gangs, and shootings and violence.

Did Supportive Housing Change Child Welfare Outcomes?

We then disentangle this into two primary outcomes: (1) whether supportive housing reduces the likelihood of removing children from preservation (intact) families, or did it lengthen the time to removal, and (2) whether supportive housing increased the likelihood of a child in out-of-home care being reunified with her family, or did it speed up reunification.

We also examine secondary outcomes, including whether supportive housing increases case closures or closes cases faster and whether supportive housing reduces subsequent substantiated reports of abuse and neglect.

In the tables that follow, we present results of estimations where the child is the unit of observation at 12, 18, and 24 months. We show results for all sites pooled into a single estimation, followed by the results for each site. Results of estimations where the family is the unit of observation show qualitatively similar results.

Does Supportive Housing Increase the Likelihood That Children Would Be with Their Families?

The results in table 19 show that supportive housing can keep families together, although the result is not universal. A primary goal of the demonstration is to reduce child welfare involvement for high-need families by reunifying separated families and preserving intact families. Across the sites, the program increases the probability of a child being at home by 7 percentage points at 12 months, 11 percentage points at 18 months, and 9 percentage points at 24 months. These effects were largely driven by Broward County, with an increased probability of being in the home between 16 and 19 percentage points, and Connecticut, with an increased probability of being in the home between 9 and 17 percentage points. Memphis did not show early impacts but saw an increased impact with modest but meaningful effects at 18 and 24 months. Conversely, San Francisco showed impacts at 12 and 18 months, but these effects disappeared by 24 months after enrollment. We found no significant results in Cedar Rapids.

TABLE 19
Child in Home at Time *T* (Child Level, All Families)

	N	Treatment mean	Control mean	Impact (difference)	P value
All sites	- 14	mean	Control ilican	(difference)	7 Value
12 months	1,624	73.0%	65.8%	7.2**	0.013
18 months	1,558	77.6%	66.8%	10.7***	0.000
24 months	1,496	76.8%	67.3%	9.4***	0.005
Broward County					
12 months	398	79.0%	60.5%	18.5***	0.006
18 months	396	86.9%	68.7%	18.2***	0.001
24 months	373	85.4%	69.7%	15.7**	0.016
Cedar Rapids					
12 months	336	45.8%	48.7%	-3.0	0.636
18 months	287	50.8%	51.0%	-0.3	0.974
24 months	254	53.7%	60.5%	-6.8	0.448
Connecticut					
12 months	291	76.3%	67.9%	8.5 [†]	0.251
18 months	291	79.9%	62.8%	17.2**	0.017
24 months	291	78.9%	62.9%	16.0**	0.027
Memphis					
12 months	334	96.7%	95.7%	1.0	0.693
18 months	319	95.0%	91.9%	3.1^{\dagger}	0.487
24 months	313	93.7%	84.4%	9.3 [†]	0.117
San Francisco					
12 months	265	68.8%	60.5%	8.3	0.185
18 months	265	70.2%	60.4%	9.9*	0.086
24 months	265	61.5%	62.7%	-1.2	0.871

Notes: The regression-adjusted models include the following control measures: whether any child was removed; age of household head; number of children in the household; child's age, race or ethnicity, and gender; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; and respondent's history of physical abuse as a child. The "all sites" model also includes site-level dummies and are weighted. All controls are measured at randomization. In a small share of the site-level models where a control perfectly predicted an outcome, this control was dropped from the model.

Does Supportive Housing Reduce Removal of Children into Out-of-Home Care?

Combining all five sites, we find no impact on whether children in the home at the time of randomization were subsequently removed, but results varied widely (table 20), with some sites showing positive effects and some showing negative effects. Connecticut showed strong and significant impacts on reducing removals at 12, 18, and 24 months. Memphis did not have impacts in the early periods but showed meaningful (but not statistically significant) impacts on reducing removals at 24 months.

^{*} p < 0.1; ** p < 0.05; *** p < 0.01; † standardized effect size ≥ 0.25.

Although Broward County appears not to have had an impact on removals, its subgroup of families labeled as "Monitoring Needed" shows reduced removals in the treatment group. Conversely, San Francisco had significant impacts on reducing removals at 12 months after randomization, but the results change direction at 24 months (and are not statistically significant). The effects are unexpectedly strong and significant on increasing removals in Cedar Rapids. This is explained by a few preservation families in the treatment group who had their children removed after randomization but reunified within the year. This result for Cedar Rapids is not found when looking at whether children were with their families at one year, implying that these children were removed but reunited quickly. The change in the coefficient over time may also suggest that perhaps the program led to removals happening sooner in the treatment group than in the control group rather than more often, as the difference gets smaller over time.

One reason the effects were not strong for preservation families is that less than 15 percent of children in preservation families in the control group were removed within 12 months and only 22 percent within 24 months. More than 75 percent of the families designated for preservation for the most part were able to stay together, even absent supportive housing.

TABLE 20
Child Removed within Time T (Child Level)

	N	Treatment mean	Control mean	Impact (difference)	P value
All sites					
12 months	1,076	12.5%	13.6%	-1.1	0.729
18 months	1,029	15.3%	18.2%	-2.9	0.439
24 months	995	16.8%	21.8%	-5.1	0.190
Broward County					
12 months	230	12.8%	15.1%	-2.2	0.697
18 months	230	12.0%	17.8%	-5.9 [†]	0.379
24 months	216	14.5%	16.5%	-2.0	0.822
Cedar Rapids					
12 months	170	43.1%	23.0%	20.1**	0.029
18 months	138	52.0%	36.6%	15.5 [†]	0.165
24 months	124	51.4%	43.8%	7.6	0.490
Connecticut					
12 months	212	5.2%	15.8%	-10.6*	0.056
18 months	212	6.7%	23.3%	-16.5***	0.009
24 months	212	7.8%	23.0%	-15.2**	0.015
Memphis					
12 months	330	2.2%	3.8%	-1.6 [†]	0.505
18 months	315	5.3%	7.5%	-2.2	0.626
24 months	309	6.9%	15.3%	-8.3 [†]	0.171
San Francisco					
12 months	134	10.6%	25.0%	-14.5**	0.027
18 months	134	16.3%	24.1%	-7.8 [†]	0.324
24 months	134	27.3%	21.4%	5.9	0.545

Notes: The regression-adjusted models include the following control measures: age of household head; number of children in the household; child's age, race or ethnicity, and gender; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; and respondent's history of physical abuse as a child. The "all sites" model also includes site-level dummies and are weighted. All controls are measured at randomization. In a small share of the site-level models where a control perfectly predicted an outcome, this control was dropped from the model.

In addition to looking at whether a child was removed, we also looked at how quickly a child was removed through estimation of the hazard of removal. Hazard coefficients less than 1 imply slower removals, while hazard coefficients greater than 1 imply faster removals. Consistent with the results above, there is no significant effect of treatment on the speed of removal across sites. Connecticut not only had lower rates of removal among treatment group preservation families, but the time to removal was significantly slower than for the control group.

^{*} p < 0.1; ** p < 0.05; *** p < 0.01; † standardized effect size ≥ 0.25.

TABLE 21
Time to Removal (Child Level)

	N	Hazard coefficient	P value
All sites	995	0.8	0.46
Broward County	216	0.7	0.72
Cedar Rapids	124	1.5	0.22
Connecticut	212	0.1***	0.00
Memphis	309	0.7	0.59
San Francisco	134	1.6	0.42

Notes: The regression-adjusted models include the following control measures: age of household head; number of children in the household; child's age, race or ethnicity, and gender; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; and respondent's history of physical abuse as a child. The "all sites" model also includes site-level dummies and are weighted. All controls are measured at randomization. In a small share of the site-level models where a control perfectly predicted an outcome, this control was dropped from the model. For the hazard estimation, we use the 24-month sample.

**** p < 0.01.

Does Supportive Housing Increase Reunification?

The effects of supportive housing on children being in the home is primarily driven by an increased probability of reunification among children that were removed at randomization and primarily in Broward County and Connecticut (table 22). The impacts in Broward County and Connecticut are large and strongly significant, with the treatment group twice as likely to reunify as the control group. But we found no significant impacts in Cedar Rapids or San Francisco. Memphis did not serve reunification cases, so it is not included in table 22.

TABLE 22
Child Reunified within Time *T* (Child Level, Reunification Families)

		Treatment		Impact	
	N	mean	Control mean	(difference)	P value
All sites					
12 months	548	46.0%	27.4%	18.5***	0.001
18 months	529	62.5%	40.0%	22.5***	0.000
24 months	501	66.0%	46.9%	19.1***	0.001
Broward County					
12 months	168	64.6%	29.6%	35.0***	0.001
18 months	166	79.4%	46.0%	33.3***	0.000
24 months	157	85.1%	53.6%	31.5***	0.000
Cedar Rapids					
12 months	166	24.0%	20.6%	3.4	0.690
18 months	149	51.4%	43.7%	7.7	0.464
24 months	130	56.3%	59.8%	-3.4	0.774
Connecticut					
12 months	79	34.2%	17.8%	16.3 [†]	0.110
18 months	79	57.1%	21.0%	36.1***	0.000
24 months	79	57.1%	21.0%	36.1***	0.000
San Francisco					
12 months	131	52.1%	43.8%	8.4	0.413
18 months	131	51.2%	48.6%	2.7	0.803
24 months	131	51.2%	48.6%	2.7	0.803

Notes: The regression-adjusted models include the following control measures: after how many months the child was removed; age of household head; number of children in the household; child's age, race or ethnicity, and gender; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; and respondent's history of physical abuse as a child. The "all sites" model also includes site-level dummies and are weighted. All controls are measured at randomization. In a small share of the site-level models where a control perfectly predicted an outcome, this control was dropped from the model.

*** p < 0.01; † standardized effect size ≥ 0.25 .

Table 23 shows comparable findings for time to reunification. Across all sites, children in the treatment group reunify twice as fast as those in the control group. As with the results above, this effect is driven by Broward County and Connecticut, where children in the treatment group reunify more than four times as fast as in the control group.

TABLE 23
Time to Reunification (Child Level)

	N	Hazard coefficient	P value
All sites	501	2.0***	0.00
Broward County	157	4.6***	0.00
Cedar Rapids	130	1.1	0.86
Connecticut	79	4.1***	0.01
San Francisco	131	1.5	0.26

Notes: The regression-adjusted models include the following control measures: age of household head; number of children in the household; child's age, race or ethnicity, and gender; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; and respondent's history of physical abuse as a child. The "all sites" model also includes site-level dummies and are weighted. All controls are measured at randomization. In a small share of the site-level models where a control perfectly predicted an outcome, this control was dropped from the model.

*** p < 0.01.

Does Supportive Housing Allow Child Welfare Agencies to Close Cases Faster?

We find no significant effects on whether a case was closed across the sites (table 24), although we had data only on case openings and closures in Cedar Rapids, Connecticut, and San Francisco. But even in these three sites, there is substantial variation. In Connecticut, there were no significant impacts at 12 and 18 months, but by 24 months, children in the treatment group were 14 percentage points less likely to have a case open. San Francisco showed no differences between treatment and control groups in case closure. Cedar Rapids cases were significantly more likely to be open at 12 months, were significantly less likely to be open at 18 months, but showed roughly no difference by 24 months. ¹⁰

TABLE 24

Case Open at Time *T* (Child Level)

	N	Treatment mean	Control mean	Impact (difference)	P value
All sites					
12 months	892	68.5%	66.4%	2.2	0.593
18 months	843	56.3%	61.2%	-4.9	0.246
24 months	810	48.0%	53.7%	-5.8	0.267
Cedar Rapids					
12 months	336	86.8%	71.7%	15.1***	0.005
18 months	287	66.8%	76.5%	-9.7*	0.097
24 months	254	57.5%	56.6%	0.9	0.917
Connecticut					
12 months	291	50.5%	56.0%	-5.5	0.468
18 months	291	52.2%	53.6%	-1.4	0.866
24 months	291	38.8%	53.1%	-14.4*	0.073
San Francisco					
12 months	265	62.8%	66.4%	-4.0	0.598
18 months	265	44.9%	47.6%	-2.7	0.665
24 months	265	45.2%	48.2%	-3.0	0.691

Notes: The regression-adjusted models include the following control measures: whether any child was removed; age of household head; number of children in the household; child's age, race or ethnicity, and gender; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; and respondent's history of physical abuse as a child. The "all sites" model also includes site-level dummies and are weighted. All controls are measured at randomization. In a small share of the site-level models where a control perfectly predicted an outcome, this control was dropped from the model.

There is no effect on whether cases were closed, but cases closed 20 percent faster in the treatment group, even though the difference does not achieve standard levels of statistical significance (table 25). This effect is largely driven by Cedar Rapids, where cases closed more quickly in the treatment group than in the control group.

^{*} *p* < 0.1; *** *p* < 0.01.

TABLE 25
Time to Case Closure (Child Level)

	N	Hazard coefficient	P value
All sites	810	1.2*	0.130
Cedar Rapids	254	1.7**	0.015
Connecticut	291	1.1	0.618
San Francisco	265	1.0	0.858

Notes: The regression-adjusted models include the following control measures: age of household head; number of children in the household; child's age, race or ethnicity, and gender; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history, and respondent's history of physical abuse as a child. The "all sites" model also includes site-level dummies and are weighted. All controls are measured at randomization. In a small share of the site-level models where a control perfectly predicted an outcome, this control was dropped from the model. For the hazard estimation, we use the 24-month sample. *p < 0.1; **p < 0.05.

There was no overall effect on case closure, specifically for children in preservation families, but children who were out of home at the time of randomization (reunification cases) were less likely to have a case open at 18 and 24 months (table 26). These impacts are largely driven by Cedar Rapids and Connecticut, where treatment cases are more likely to be closed at 18 and 24 months. There were no significant differences among the treatment and control groups for preservation families, except in Cedar Rapids, where families were significantly less likely to have their case closed at 12 and 24 months.

TABLE 26

Case Open at Time *T* (Child Level, Reunification Families)

	N	Treatment mean	Control mean	Impact (difference)	P value
All sites					
12 months	376	90.8%	86.3%	4.4 [†]	0.229
18 months	359	73.6%	84.3%	-10.7**	0.033
24 months	340	58.2%	73.5%	-15.3**	0.028
Cedar Rapids					
12 months	166	93.2%	91.0%	2.1	0.659
18 months	149	76.1%	90.7%	-14.6**	0.031
24 months	130	51.3%	67.9%	-16.6 [†]	0.132
Connecticut					
12 months	79	97.1%	95.6%	1.5 [†]	0.575
18 months	79	82.9%	94.5%	-11.6 [†]	0.124
24 months	79	66.2%	89.3%	-23.1**	0.016
San Francisco					
12 months	131	79.4%	74.8%	-4.6	0.497
18 months	131	60.2%	60.2%	8.9	0.322
24 months	131	61.8%	68.8%	7.0	0.464

Notes: The regression-adjusted models include the following control measures: how many months the child was removed; age of household head; number of children in the household; child's age, race or ethnicity, and gender; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; and respondent's history of physical abuse as a child. The "all sites" model also includes site-level dummies and are weighted. All controls are measured at randomization. In a small share of the site-level models where a control perfectly predicted an outcome, this control was dropped from the model.

Does Supportive Housing Reduce New Substantiated Allegations?

There was no significant impact on new substantiated allegations for preservation families, but this varies (table 27). In Memphis, the probability of subsequent substantiated allegations was higher in the treatment group than in the control group, with the difference growing over time. In Broward County, the initial difference in the probability of substantiated allegations was higher in the treatment group than in the control group, but the size of the difference decreases slightly over time. In both Connecticut and San Francisco, the treatment group had about 10 percentage points lower rates of substantiated allegations at 12 months, but this difference is gone by 24 months.

^{**} p < 0.05; † standardized effect size ≥ 0.25.

TABLE 27
New Substantiated Allegation at Time T (Child Level)

	N	Treatment mean	Control mean	Impact (difference)	P value
All sites				(dillier dilled)	
12 months	1.076	11.8%	11.0%	0.8	0.777
18 months	1.029	17.5%	13.8%	3.7	0.236
24 months	995	21.0%	17.8%	3.2	0.374
Broward County					
12 months	230	34.7%	18.3%	16.4**	0.049
18 months	230	40.6%	25.2%	15.4 [†]	0.115
24 months	216	42.3%	32.9%	9.5	0.443
Cedar Rapids					
12 months	170	13.1%	12.7%	0.4	0.928
18 months	138	16.8%	20.5%	-3.7	0.556
24 months	124	20.9%	21.1%	-0.2	0.980
Connecticut					
12 months	212	6.9%	15.9%	-9.1 [†]	0.132
18 months	212	19.3%	17.8%	1.5	0.856
24 months	212	19.8%	21.4%	-1.5	0.855
Memphis					
12 months	330	4.0%	0.9%	3.1 [†]	0.115
18 months	315	6.3%	0.8%	5.5**	0.038
24 months	309	13.1%	1.6%	11.5**	0.016
San Francisco					
12 months	134	3.6%	13.8%	-10.2*	0.070
18 months	134	8.8%	13.9%	-5.1 [†]	0.379
24 months	134	18.2%	20.4%	-2.3	0.803

Notes: The regression-adjusted models include the following control measures: age of household head; number of children in the household; child's age, race or ethnicity, and gender; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; and respondent's history of physical abuse as a child. The "all sites" model also includes site-level dummies and are weighted. All controls are measured at randomization. In a small share of the site-level models where a control perfectly predicted an outcome, this control was dropped from the model.

The time to substantiated allegations shows results consistent with those above, with no impact across sites except a strong and significant impact in Memphis, where children in the treatment group have subsequent substantiated allegations seven times faster than children in the control group (table 28).

^{*} p < 0.1; ** p < 0.05; † standardized effect size ≥ 0.25 .

TABLE 28
Time to Substantiated Allegation (Child Level)

	N	Hazard coefficient	P value
All sites	951	1.2	0.56
Broward County	216	1.4	0.48
Cedar Rapids	124	0.8	0.54
Connecticut	212	1.1	0.81
Memphis	309	7.4**	0.01
San Francisco	134	1.0	0.95

Notes: The regression-adjusted models include the following control measures: age of household head; number of children in the household; child's age, race or ethnicity, and gender; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; and respondent's history of physical abuse as a child. The "all sites" model also includes site-level dummies and are weighted. All controls are measured at randomization. In a small share of the site-level models where a control perfectly predicted an outcome, this control was dropped from the model.

** p < 0.05.

Did Supportive Housing Change Parent, Family, and Child Well-Being?

This section draws on data from the follow-up survey to explore the demonstration's impacts on family economic well-being; parent well-being, including health and mental health; parenting; and measures of child well-being, including children's health, school performance, and behavior.

Family Economic Well-Being

Full-sample results show that families in the treatment group worked in the week before the survey at lower rates than families in the control group, although differences in household income are not statistically significant (table 29). It could be that supportive housing lifts economic pressures to work, freeing parents to focus on their child welfare case plans, which can be time consuming. Further investigation reveals that greater public benefit receipt among the treatment group explains the comparable average household income despite control group respondents working at higher rates. But impacts differed across the sites. In Connecticut and Cedar Rapids, household income among treatment group families is statistically significantly lower than among control group families, and in all other sites, differences are not statistically significant.

Table 29 also presents results on material hardship. We expected overall material hardship among treatment group families to decrease compared with control group families, but we detected no such decrease. Although the housing subsidy may reduce economic burdens, the families are still poor, and our broad measure of material hardship may indicate only that all families continue to struggle economically. Examining subcomponents of material hardship, we found that treatment group families were, on average, 5.1 percentage points less likely to experience utilities hardship. Treatment group families report lower rates of housing hardship, and although this difference is not statistically significant, the effect size suggests a meaningful effect. We did not find a significant effect on food hardship or medical hardship. Site-level results are mixed and are somewhat different from these full-sample results.

TABLE 29
Economic Well-Being

	N	Treatment mean	Control mean	Impact (difference)	P value
Household income in past six months, pretax	506	\$5,790.60	\$6,628.00	-\$837.40	0.167
Currently working	531	33.9%	47.1%	-13.2%**	0.002
Material hardship					
Material hardship reported in one or more domains	531	30.0%	27.2%	2.8%	0.488
Food	531	14.8%	11.4%	3.4%	0.224
Housing	530	9.3%	13.3%	-4.0% [†]	0.138
Utilities	530	6.5%	11.6%	-5.1%**	0.033
Medical	531	9.3%	8.7%	0.6%	0.806

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Food-related hardship includes the respondent or child ever being hungry but unable to afford food. Housing-related hardship includes the respondent or household member forgoing medical attention or prescription medication because of cost.

Parent Well-Being

Results in table 30 estimate the demonstration's effects on measures of parents' physical health, mental health, and exposure to domestic violence. We detected no significant treatment-control differences in physical health (on a five-point, self-reported scale ranked from poor to excellent), in self-reported mental health, in major depression, or on a measure of self-efficacy (the Pearlin Mastery Scale). Treatment group respondents experienced higher rates of domestic violence in the past six months at nearly 15 percent, compared with 6.2 percent of control group respondents. This pattern is similar across sites, although the magnitude of the differences varies, with higher rates and larger differences in Cedar Rapids and Connecticut than in the other three sites.

The higher rates of domestic violence among families in the treatment group is troubling. We conducted supplemental analyses to explore this result further. When unstably housed families become housed, this could provide a situation where domestic violence perpetrators can cohabit. But we found no evidence of an association between the intervention and the likelihood that respondents report having a romantic partner, living with a partner, or the number of nights spent with a partner, or the likelihood that respondents report spending more or fewer nights with a partner than they would prefer

^{**} p < 0.05; † standardized effect size ≥ 0.25.

because of a housing situation. Another possibility is that living with other people, such as when a family doubles up, may help "control" partners' actions. But we find no evidence of a relationship between risk of reporting recent domestic violence and housing type (housed with a lease, housed without a lease, or staying in a shelter, hotel or motel, or somewhere else) or overcrowding. We do find that respondents who received services for anger management or domestic violence are more likely to report recent domestic violence (21.4 percent versus 9.6 percent), and the difference is statistically significant (p < 0.01). Treatment group families report receiving services for anger management or domestic violence at higher rates (table 30). Of course, the causal pathways could go in either direction. It could be that exposure to services for domestic violence make treatment group members more likely to recognize and report domestic violence.

TABLE 30
Parent Physical Health, Mental Health, and Risk

	N	Treatment mean	Control mean	Impact (difference)	P value
Self-reported physical health is excellent, very good, or good	530	68.4%	74.4%	-6.0%	0.142
Self-reported mental health is excellent, very good, or good	529	72.1%	70.7%	1.4%	0.739
Depression scale (0-24)	526	5.2	5.3	-0.1	0.795
Suffers from major depression	526	15.7%	19.3%	-3.6%	0.279
Pearlin Mastery Scale (7–28)	525	22.7	22.8	-0.1	0.639
Recent domestic violence	485	14.8%	6.2%	8.6%**	0.002

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

** p < 0.05.

Table 31 reports treatment-control differences in parents' alcohol and drug use. Reports of drug and alcohol use were low overall and lower than reported by caseworkers when referring families to the supportive housing program. This may be because of respondents' reluctance to report alcohol or drug use while having an open child welfare case. ¹² On average, families in the treatment group have higher scores on a measure of alcohol use and dependence. But we detected no significant differences in rates of hazardous alcohol consumption or in measures of drug use and dependence. Rates and treatment-control differences in parents' alcohol and drug use are similar across sites.

TABLE 31
Parent Alcohol and Drug Use

		Treatment	Control	Impact	P
	Ν	mean	mean	(difference)	value
Alcohol use and dependence scale (0-26)	530	1.6	1.1	0.5**	0.025
Hazardous alcohol consumption	531	25.5%	21.1%	4.4%	0.246
Drug use and dependence scale (0–19)	531	1.4	1.5	-0.1	0.932
Score on drug use and dependence scale indicates					
possible drug abuse or dependence (drug scale ≥ 2)	531	30.3%	30.8%	-0.5%	0.900

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

** p < 0.05.

Similarly, we find small differences in parents' criminal justice involvement—for both convictions and incarceration—with treatment group families having higher rates than control group families (table 32). We also see limited treatment-control differences in parents' criminal justice involvement across sites, although overall conviction and incarceration rates vary. For example, no families in San Francisco report either outcome, whereas in Cedar Rapids, parents' convictions and incarcerations are more common than in any other site.

TABLE 32

Parent Criminal Justice Involvement

		Treatment	Control	Impact	P
	Ν	mean	mean	(difference)	value
Convicted of a crime in the past six months	502	7.3%	5.1%	2.2%	0.242
Been incarcerated in an adult correctional institution					
in the past six months	500	5.5%	3.4%	$2.1\%^{\dagger}$	0.168

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

[†] standardized effect size ≥ 0.25.

Parenting

Table 33 reports the demonstration's effects on parenting. As the logic model shows, one pathway through which the demonstration was expected to improve child welfare outcomes was through improved parenting (figure 1). The first row of table 33 summarizes respondents' self-assessments of the quality of their relationships with their child or children and considers all children other than those for whom parental rights have been terminated. Just under 18 percent of families in the treatment group report an excellent, very good, or good relationship, which represents a statistically significant 6.5 percentage-point improvement over control group families. This difference holds when restricting to parents who report living with at least one child at least some of the time (table 33, second row of data). Significant treatment-control differences are not detected in any of the other measures of parenting we examined, including physical and verbal abuse, neglect, warmth and supportiveness, parenting stress, and self-assessed parenting skills.

TABLE 33
Parenting

	N	Treatment mean	Control mean	Impact (difference)	P value
Average relationship quality across all children is					
excellent, very good, or good	511	17.7%	11.2%	6.5%**	0.029
Parenting practices of respondent in past six months (among those who lived with at least one child, at lea		e of the time, in	the past six	months)	
Average relationship quality across all children is excellent, very good, or good	416	16.7%	7.8%	8.9%**	0.004
Average number of times parent practiced corporal punishment or was physically aggressive to child	417	0.5	0.4	0.1	0.244
Average number of times parent was verbally aggressive to child	417	2.2	2.0	0.2	0.589
Average number of times parent exhibited neglectful behaviors toward child	417	0.2	0.1	0.1	0.185
Parenting warmth and supportiveness scale (0–4)	417	3.4	3.5	-0.1	0.316
Parenting stress scale (1–5)	416	2.4	2.4	0.0	0.950
Parenting skill scale (1–5)	416	4.4	4.4	0.0	0.637

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Children for whom parental rights have been terminated are excluded from the analysis. On the parenting warmth and supportiveness scale, stress scale, and skill scale, higher values indicate greater warmth and supportiveness, stress, and skill, respectively.

^{**} p < 0.05.

Child Well-Being

Because parents reported child well-being, we report child-level outcomes only for children who either lived with their parent or were in some contact with their parent during the past month. Additionally, we excluded children for whom parental rights have been terminated. Thus, the sample for analyses of child well-being includes 78 percent of all children for the treatment group, or 630 children, and 79 percent of all children for the control group, or 527 children.

Children's Health

Results show no significant differences between the treatment and control groups in parents' reports of children's overall physical and mental health (table 34). The findings on physical health are similar across sites, with high ratings for all children. For parents' reports of their children's mental health, treatment-control differences vary across sites, with Broward County and San Francisco showing higher ratings of children's mental health in the treatment group than in the control group and Cedar Rapids and Memphis showing lower ratings in the treatment group than in the control group. Further analysis would be necessary to explain these differences.

Overall, use of emergency or urgent care services for children's routine care was rare. For only 10 children, parents used emergency or urgent care. These children were more likely to be in treatment group families. Results in table 34 also show that children in the demonstration accessed dental care at high rates, with no detectable differences between children in treatment and control group families. But parents in the treatment group tended to rate the condition of their children's teeth less favorably than parents in the control group. This result is most pronounced in San Francisco and Memphis.

The survey also asked about diagnoses of certain conditions. Children in the treatment group were less likely to be diagnosed with a learning disability and more likely to be diagnosed with asthma, but treatment-control differences in diagnoses of high blood lead levels and mental health or behavioral conditions were not statistically significant. Results on learning disabilities were similar across sites, but we detected statistically significant differences in asthma diagnoses only in Broward County.

Treatment-control differences in the likelihood children were diagnosed with mental health and behavioral problems were mixed, with Broward County and San Francisco having lower rates of diagnosis in the treatment group and Memphis showing higher rates among the treatment group than among the control group in each site. Finally, we find no significant differences in children's likelihood of receiving treatment for mental health or behavioral problems across treatment and control groups, given a diagnosis.

The finding of higher average rates of asthma diagnosis among children in treatment group families in Broward County is concerning. Recent research links housing assistance with higher exposure to certain indoor asthma triggers (e.g., mold and pests) and with higher asthma risk (Ganesh et al. 2017; Mehta et al. 2018). Among children in Broward County, living in a house with a lease is associated with a 17.6 percentage-point higher asthma risk (p < 0.01), compared with living in other housing circumstances. Treatment group families in Broward County living in a house or apartment with a lease report lower housing quality on some measures. Higher rates of asthma diagnosis among the treatment group could also be partly explained by increased medical attention among treatment group families. Overall, and in Broward County, children in treatment group families are more likely to receive treatment for asthma.

TABLE 34
Child Physical Health, Mental Health, Diagnosis, and Treatment

	N	Treatment mean	Control mean	Impact (difference)	P value
Parent-reported global physical health is excellent, very good, or good	1,148	95.3%	95.3%	0.0%	0.98
Parent-reported global mental health is excellent, very good, or good	1,145	88.5%	89.2%	-0.7%	0.71
Child's routine care is emergency or urgent care services	1,072	1.2%	0.3%	0.9%**	0.04
Child saw a dentist within the past two years	894	95.5%	94.4%	1.1%	0.56
Condition of child's teeth is excellent, very good, or good	931	88.5%	92.9%	-4.4%*	0.05
Doctor's diagnosis					
Learning disability	1,144	10.5%	15.9%	-5.4%**	0.02
Asthma	1,143	16.4%	11.2%	5.2%**	0.03
High blood lead levels	1,145	0.7%	0.5%	0.2%	0.50
Mental health condition or behavioral problem	1,144	15.6%	17.1%	-1.5%	0.47
Child currently receiving treatment for mental or behavioral problem(s)	1,144	11.6%	13.2%	-1.6%	0.39

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification cases; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; child's age and gender; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Children for whom parental rights have been terminated or the respondent reports no contact with the child are excluded from the analysis. "Routine care is emergency or urgent care" is measured only among families who reported the child had a place for routine care. No place for routine care is reported for 57 children, or 4.27 percent of the full sample. Dental care and condition of child's teeth measures are among children 2 and older with teeth.

^{*} p < 0.1; ** p < 0.05.

Children's School Performance

Results in table 35 explore the demonstration's impacts on children's education and performance in school. Among children younger than 5, children in treatment group families attend early education at higher rates than children in control group families. Although this difference is not statistically significant (p = 0.11), the effect size suggests a potentially meaningful result. This difference is most evident in Cedar Rapids and Memphis, where 10.5 percent and 5 percent, respectively, of children younger than 5 in treatment group families are in early education, and no control group children are in this form of care. In other sites, this difference reverses sign.

The follow-up survey asked about academic achievement, attendance, and school changes for school-age children. We detected no statistically significant differences in parent-reported usual grades between children in the treatment and control groups. But parents report treatment group children's reading level was at or above grade level at higher rates, relative to the control group (81.7 and 72.1 percent, respectively). Rates of parent-reported absences are low among both groups, though lower among children in control group families. We find no significant differences in the likelihood a child changes schools because of a housing move, including school changes that occur during the school year rather than over summer vacation. Site-level analyses suggest differences across sites on the outcomes examined in table 35. For example, statistically significant positive impacts on children's reading levels are evident only in Cedar Rapids and Memphis, the two sites that had higher enrollment rates in early education in their treatment groups. School moves are more common among treatment group families than among control group families in Connecticut and Broward County, sites that use vouchers, but are less common in Cedar Rapids and Memphis, sites that use project-based housing. On the other hand, San Francisco uses vouchers but shows lower rates of school moves in the treatment group.

TABLE 35
Child School Performance

	N	Treatment mean	Control mean	Impact (difference)	<i>P</i> value
In early education	532	6.1%	3.1%	3.0%†	0.11
Usual grades last semester were As and Bs or Bs and Cs	393	82.1%	79.0%	3.1%	0.45
Reading level on track last semester	481	81.7%	72.1%	9.6%**	0.02
Absent 10 or fewer school days for any reason last semester	445	91.4%	95.6%	-4.2%*	0.08
Absent 10 or fewer school days for illness or injury last semester	443	95.5%	98.6%	-3.1%*	0.07
Child changed schools because of housing move	480	17.7%	16.8%	0.9%	0.84
School change occurred during the school year	480	16.2%	12.1%	4.1%	0.31

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification cases; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; child's age and gender; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Children for whom parental rights have been terminated or the respondent reports no contact with the child are excluded. Participation in early education is measured among children younger than 5. All other outcomes reported in table 35 are measured among children enrolled in grades 1–12.

Child Behavior

We examine the demonstration's effects on several measures of child behavior (table 36). For very young children (younger than 3), we use a measure of overall behavior. Among toddlers (ages 3 to 5) and school-age children (ages 6 to 18), we examine three dimensions of child behavior: externalizing behavior (e.g., temper tantrums, fights, arguments), internalizing behavior (e.g., shows anxiety, appears lonely, acts depressed), and prosocial behavior (e.g., is confident with people, plays well with others, understands others' feelings). Across these measures, and at all ages we examined, we detected no significant differences between children in the treatment or control groups. We find limited evidence of effects on instances of parents' speaking with the school about their child's behavior or attendance or on criminal or juvenile justice involvement among older children. The one significant finding in table 36 shows treatment group parents of school-age children reported, on average, significantly lower rates of suspension or expulsion during the child's most recent semester. Similar to results on children's school performance, analyses of treatment-control differences in child behavior outcomes by site suggest results may vary across sites, with some showing evidence of positive effects on some outcomes for some age groups and others showing mixed or negative effects with no distinct patterns.

^{*} p < 0.1; ** p < 0.05; † standardized effect size ≥ 0.25 .

TABLE 36
Child Behavior

	N	Treatment mean	Control mean	Impact (difference)	P value
Among children younger than 3 Child behavior scale (4–20)	326	8.8	8.5	0.3	0.46
Among children 3 to 5 years old Externalizing behavior scale (6–18) Internalizing behavior scale (4–12) Prosocial behavior scale (13–39)	280	10.6	10.1	0.5	0.18
	280	5.0	5.1	-0.1	0.57
	280	34.5	34.7	-0.2	0.68
Among children 6 to 18 years old Externalizing behavior scale (6–18) Internalizing behavior scale (6–18) Prosocial behavior scale (13–39)	527	9.8	10.1	-0.3	0.51
	526	8.9	8.7	0.2	0.41
	528	30.6	30.8	-0.2	0.62
Among children enrolled in grades 1–12 Suspended or expelled last semester Had contact with school about problems with child's behavior or attendance last semester	482	7.2%	14.8%	-7.6%**	0.01
	480	22.0%	26.8%	-4.8%	0.24
Among children 12 and older Has been arrested or taken into custody, jail, or juvenile justice facility in past six months	183	5.2%	5.3%	-0.1%	0.97

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification cases; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; child's age and gender; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Children for whom parental rights have been terminated or the respondent reports no contact with the child are excluded. For the child behavior scale, externalizing behavior scale, and internalizing behavior scale, higher values indicate greater behavior problems. For the prosocial behavior scale, higher values indicate more prosocial behaviors.

** p < 0.05.

Do Impacts on Parent, Family, and Child Well-Being Differ for Preservation versus Reunification Families?

In this section, we explore how the demonstration's impacts on parent, family, and child well-being differ for preservation versus reunification families. Appendix tables E.1 through E.16 reproduce the results presented in this section for subsamples determined by whether the family had a preservation or a reunification case at randomization. For preservation families, the child welfare system has determined that the child is sufficiently safe with the family to remain at home, whereas for reunification families, the system has assessed the risk level at home as too high for the child to remain. Thus, preservation families might be more high functioning and therefore more able to benefit from the

housing and services provided by this supportive housing intervention. Following this logic, we would expect similar or better well-being outcomes among preservation families, compared with the full sample.

Although the results are mixed, findings presented in appendix tables E.1 through E.16 provide some support for this expectation. Parent-level results show that parents with a reunification case at baseline face greater challenges (e.g., higher levels of alcohol and drug use) than preservation families and that the demonstration's impacts on some well-being outcomes look worse for reunification parents than for preservation parents. For example, evidence of significantly lower employment rates among treatment group families are present only among those who had a reunification case at baseline, and the evidence of positive effects of the demonstration on parents' report of their overall relationship quality with their children is evident only among preservation families. Child-level differences by preservation and reunification are even more mixed, with results among preservation families largely following the full-sample results presented in this section. Some well-being outcomes had evidence of greater positive impacts of the demonstration among reunification families while the opposite was true for other outcomes.

Discussion

The concept of providing supportive housing to child welfare involved families has been developing over the past 20 years. In 1998, the State of Connecticut Department of Children and Families contracted with The Connection Inc. to develop the Supportive Housing for Families program, a child welfare family reunification and preservation program providing intensive case management and housing. In a study of 1,720 families, the program showed success moving families into permanent housing, and half were employed or receiving disability benefits at exit (Farrell et al. 2010). Between August 2007 and June 2009, the Corporation for Supportive Housing launched a small pilot providing supportive housing to homeless families with open child welfare cases in New York City. The Robert Wood Johnson Foundation–funded pilot, Keeping Families Together, showed promising outcomes for 29 families (Tapper 2010).

Based on these successes, in 2012, the Children's Bureau in the US Department of Health and Human Services' Administration for Children and Families initiated a five-year demonstration in five sites, providing supportive housing to high-needs families who were homeless, or at risk of homelessness, and were involved in the child welfare system. The five sites were Broward County, Florida; Cedar Rapids, Iowa; the state of Connecticut; Memphis, Tennessee; and San Francisco, California. This report describes the findings of a cross-site evaluation of the demonstration. Each site enrolled families in its supportive housing program using random assignment, with families assigned to receive supportive housing (treatment group) or services-as-usual (control group). Each site also had local evaluators who will issue separate, site-specific findings.

Because this was a demonstration, sites did not implement a tested model. Instead, they were provided a common framework that included core components of supportive housing: a housing subsidy with supportive services implemented using a Housing First philosophy.

The sites differed in multiple ways, including context (e.g., big city, regional service area, rural area), child welfare practices, the definitions of the target population, services, and housing.

Child welfare practices varied by site in, for example, how the local child welfare agency processed and investigated reports of child abuse and neglect, its criteria for substantiating a case, and how it responded. Broward County, instead of opening child welfare cases, relies heavily on referrals to community services. Half of its demonstration families were identified through this mechanism. Other child welfare policies, such as determining what is in the child's best interest or when to terminate

parental rights, also vary locally, with some sites more flexible than others. All these policies could affect outcomes.

Each site used a common framework from the Children's Bureau to identify target families. But there was variation in the targeting criteria. All the sites included high-need families who were involved in the child welfare system, as either preservation families or reunification families. Memphis was the exception and targeted only preservation families. Most sites targeted families early in their child welfare case. Broward County had multiple cells reflecting different time points in the child welfare case. Cedar Rapids, concerned about having too few cases to support an experimental design, did not target a specific time in their child welfare cases. For the most part, sites targeted homeless families or those who were at imminent risk of homelessness. But some sites varied in their definitions of homelessness. San Francisco included doubled-up families, which is part of the county's official definition of homelessness but is not included in US Department of Housing and Urban Development's definition.

The Children's Bureau required sites to provide parenting skills training; services and interventions to improve family functioning and assist with family reunification when children have been in out-of-home placements; ancillary services for families to provide assistance in securing such services as safe and stable housing, transportation, and child care; evidence-based, developmentally appropriate approaches to promoting child well-being; and access to appropriate mental health services for children involved in the child welfare system, including services to address trauma. Although sites provided the required services, the specific services varied in several ways, including how they were provided (directly or through referral), their intensity, and their duration. Some sites offered additional services that other sites did not offer, such as Connecticut's provision of a vocational counselor and Broward County having Legal Aid as a partner.

In addition to the types of services offered, the sites' case management models and ratio of clients to case managers varied. In four of the sites, the ratio ranged from 12 to 17 families per case manager. Connecticut case managers carried caseloads of seven families.

An important distinction between sites was the type of housing provided. The Children's Bureau grant did not provide funding for housing; sites had to find sources that could provide housing for at least 50 families. This meant sites had to gather resources from within their communities, partnering with housing agencies or raising private capital. Broward County, Connecticut, and San Francisco provided housing choice vouchers. But Connecticut's vouchers were state-funded while Broward County and San Francisco used US Department of Housing and Urban Development–funded vouchers.

Memphis used a single-site housing approach where all demonstration families lived in one of two complexes that housed only demonstration families. Cedar Rapids used a mixed approach with many families receiving project-based housing, though its developments were for low-income families and included families that were not part of the demonstration. Further, although most of the sites attempted to provide a permanent housing subsidy, Cedar Rapids initially procured Tenant-Based Rental Assistance for two years that was extended for another two years. After implementation began, the local housing agency amended its administrative plan to give homeless families with an open child welfare case preference on the Section 8 waiting list. Once the list was opened, about half of Cedar Rapids families received a voucher while other families received project-based housing.

Services Received

Treatment group families received more supportive services than control group families. Being involved in the demonstration gave treatment group families more caseworker support, and the families felt they received more help and knew better what resources were available to them because of the additional support.

In addition to housing subsidies, sites provided housing search and move-in support. Families in the treatment group received various forms of housing assistance—including assistance finding a house or apartment, paying a security deposit, and acquiring furniture or appliances—at significantly higher rates than families in the control group.

Families in the treatment group reported higher rates than control group families of participation in parenting services; education, employment, and training services; receiving help applying for public benefits, with somewhat higher benefit receipt; transportation assistance; and legal assistance.

One area where families in the treatment and control groups received similar rates of services was substance use and mental health services. The lack of a difference is probably explained by the fact that all families in the study were involved with the child welfare system, and connecting parents to these services is common practice in child welfare casework. Importantly, families in the treatment group reported higher participation rates in anger management and domestic violence services.

Housing Outcomes

Treatment group families reported more stable housing situations, better-quality housing, and less rent burden. But we detected no differences in neighborhood quality in the full sample.

At one year after study enrollment, most treatment group families lived in a house or apartment with their own lease, nearly double the rate for the control group. Families in the treatment group reported greater housing stability. On average, these families moved less frequently, were less likely to face eviction and experience homelessness, and were more likely to expect to remain in their current housing situation, compared with control group families. Treatment group families also reported fewer housing quality issues, less overcrowding, lower rates of rent burden (paying more than 30 percent of income for rent), and higher overall housing quality satisfaction.

On the other hand, we detected no significant differences in neighborhood quality, any crime victimization experienced in the past six months, and reported overall neighborhood satisfaction. But these differences varied by site. Treatment group families in Cedar Rapids and Memphis, the two sites that used project-based housing, reported more neighborhood problems than control group families, while treatment group families in Broward County and Connecticut, where vouchers were used, reported fewer neighborhood problems than control group families.

Child Welfare Involvement

Keeping Children with Their Parents

Supportive housing appears to increase reunifications among children in out-of-home care. In addition to an increased likelihood of reunification, reunifications happened roughly twice as fast in the treatment group, reducing the time in foster care by about 3.7 months. Across the sites, 20 percent more children in the treatment group over the control group were reunited within two years. Of the four sites serving reunification families, ¹⁴ two showed increased reunifications. Although the impact was small in San Francisco and was zero in Cedar Rapids, Broward County and Connecticut each had 33 percentage points more reunifications in their treatment groups than in their control groups.

Overall, across the sites, we saw no significant differences in the likelihood of removing children from intact families, and supportive housing does not increase the time to removal. But this masks important differences across sites. Connecticut shows substantial reduction in removals, with 20

percentage points fewer children removed in treatment group families than in control group families. San Francisco shows early impacts, but these faded, with no difference at two years, while Memphis shows no early impacts but shows modest differences at two years. Broward County shows no impacts overall, but one of their subgroups, deemed Monitoring Needed, shows substantially reduced removals. Finally, Cedar Rapids shows a negative impact—that is, treatment group families are more likely to have their child removed than control group families. This difference decreases over time but remains negative at two years. Excluding Cedar Rapids from the pooled estimation shows intact treatment group families have 7 percentage points fewer removals than control group families.

Combining all sites and both subpopulations, treatment group families show a higher rate of having their children with their parents, mostly driven by the reunification families in Broward County and Connecticut.

It is difficult to assess why there are such differences. One important consideration is the selection of families. In Broward County, the subgroup deemed Community Services in Place had only 2 percent of the children in the control group removed. In Memphis, intact families are also selected from among families that do not appear to be at high risk of having their children removed, as only 15 percent of intact control group families have their child removed within two years. In comparison, in Connecticut, 24 percent of intact control group families have their child removed within two years, similar to the rate in San Francisco. Intact control group families in Cedar Rapids have an even higher removal rate of 44 percent at two years, but its treatment group reached that level at only one year and continued to see removals increase. Although family selection is not the entire explanation, it is a contributing factor. San Francisco shows lower removal rates at one year, but the difference disappears after two. The difficulty in using vouchers in San Francisco, leading to long periods without housing, could explain this difference in that caseworkers may try to keep the family together, but prolonged homelessness finally leads to child removal.

For reunification, Connecticut selected families who were unlikely to have their children returned without supportive housing. Only 20 percent of its control group reunification families had their children returned within two years. Broward County, Cedar Rapids, and San Francisco all had control group reunification rates between 50 and 60 percent. Broward County and Connecticut had similar treatment-control differences, but Broward County reunified 85 percent of its treatment group children, while Connecticut reunified 59 percent.

The evidence appears strongest for supportive housing increasing reunification of children in outof-home care. The mixed, and weaker, evidence for reducing removals could call into question using supportive housing with intact families, but three sites showed reduced removals, and the particular success in Connecticut demonstrates that supportive housing can keep intact families together. Their success suggests that better identification of families at risk of having their children removed would improve supportive housing programs. Even in Connecticut, only 24 percent of intact control group children were removed, still only a modest share of children in a group selected for being at high risk of removal.

Re-reports

Supportive housing does not appear to reduce new substantiated allegations of abuse and neglect. Although we expect supportive housing to reduce future maltreatment, comparing families in supportive housing with a control group proves difficult because of the intervention's context and the conditions of the experimental design. First, supportive housing families receive more services and have more frequent encounters with mandatory reporters. This increased scrutiny may increase reports of abuse and neglect. This is exemplified in Memphis, where families that remain in their supportive housing units continue to receive services as long as they live there. New substantiated reports for the control group are virtually nonexistent, while reports for the treatment group increase to 13 percent of children in intact families at two years. Second, if treatment group families are less likely to have their children removed, they have more time for a new allegation to occur, although this can be difficult to disentangle if new allegations led to the higher removals in the control group. We conclude that supportive housing did not reduce new reports, but this needs further study.

Closing Cases

From the child welfare system's perspective, supportive housing should help keep children with or return children to their parents and allow the agency to close cases faster. In this demonstration, we observed case closures for only three sites. The impacts on closing cases generally mirrors the broader results, with cases closing faster for reunifications because of the greater likelihood and speed of reunifications. As with the discussion of removals above, supportive housing in Connecticut does lead to closing preservation cases faster. Thus, if a child welfare agency can develop an effective supportive housing program, in terms of reduced removals and increased reunifications, it will be able to close cases faster and reduce families' involvement with the child welfare system.

Parent and Child Well-Being

Receiving supportive housing improved some measures of parent and child well-being one year after study enrollment, though not across all outcomes. Some outcomes where treatment group families did not do better than control group families may reflect the lack of differences in services received or may be outcomes that take considerable time to affect.

Considering the issues that qualified families for supportive housing, we do not see any impact on substance use or mental health. Treatment group families received similar services to control group families, which may explain why we do not see differences in these outcomes. On the other hand, families in the treatment group received more domestic violence services but report higher rates of domestic violence one year after study enrollment. We suspect that receiving domestic violence services made these parents (primarily mothers) more aware of what constitutes domestic violence and they are thus more likely to report it. They may also feel more comfortable reporting it in an interview. Investigation of other hypotheses within the data did not support other explanations, but we cannot rule them out.

The Children's Bureau required parenting skills training, but we found little impact on parenting in terms of (self-reported) abuse and neglect, parental warmth, parenting stress, or parenting skills. But parents in the treatment group reported having a better overall relationship with their children than did parents in the control group.

Other family-level outcomes showed mixed impacts. Treatment group parents were less likely to be employed than control group parents but were more likely to receive public benefits, particularly cash assistance (e.g., Temporary Assistance for Needy Families), giving them nearly as much household income as control group families. Treatment group families were less rent burdened, and measures of material hardship show lower rates of housing and utility hardship among treatment group families. On the other hand, treatment group parents did not have better physical health than control group parents, and they had higher incarceration rates, though this latter outcome occurred primarily in Cedar Rapids.

Impacts on children were also mixed. Children in treatment group families did not see many changes in behavior problems, regardless of age, though they were less likely to be suspended or expelled from school. Given greater housing stability, we would expect lower absentee rates among children in supportive housing. Surprisingly, children in treatment group families had higher absentee rates than children in control group families. This result needs further examination, as it could be that enrolling in supportive housing required students to change schools, while control group families were able to keep their children in the same school, despite higher rates of moving.

Children younger than school age in the treatment group were more likely than children in the control group to be enrolled in early education, an important contribution to breaking the cycle of poverty. Treatment group children also had higher reading grade levels (based on parents' reports of what school officials have told them).

Finally, children in the treatment group were less likely to have a learning disability than control group children but had a higher rate of diagnosed asthma. The lower rate of learning disability could reflect a more stable home environment but could also be spurious. The higher asthma rate is confined to Broward County. It could reflect a lower quality of housing affordable with a voucher, or it, too, could be a spurious finding, as we did not find correlations in Broward County between diagnosed asthma and specific measures of housing quality associated with asthma (e.g., mold and pests).

Conclusion

This demonstration showed that supportive housing can improve families' lives. Families with subsidized housing become more stable. Some sites were able to keep children with their parents and reduce families' involvement with the child welfare system. Although not consistent across sites, as a demonstration, the positive impact in some sites shows that supportive housing can be successful. We need more detailed analyses to explore what differences across sites' programs explain differences in outcomes. For example, the differences in type of housing provided might explain some outcome differences, and they may intersect with other differences, such as local child welfare practices. Findings from this impact study should be considered in conjunction with the findings from our process study. detailed in a separate report. Finally, many well-being outcomes take years to improve. The study measured well-being outcomes one year after enrollment, but in some sites, much of that year was spent searching for housing. Results from an ongoing follow-up survey, capturing outcomes 54 months after study enrollment, will help us understand whether positive outcomes persist and whether neutral (or negative) outcomes become positive over a longer period. Furthermore, although we examine child welfare outcomes 24 months after study enrollment, recidivism into the child welfare system may take place after 24 months. The long-term study will also collect child welfare administrative data to measure outcomes through 54 months.

Appendix A. Methods

Data Sources

We drew upon four data sources for the impact analyses: child welfare administrative data, program referral data, data on housing assistance for the treatment group, and data from a family survey conducted at baseline and at 12 months after randomization.

Child Welfare Administrative Data

Child welfare data vary by site but contain longitudinal data covering out-of-home placements, reunifications, terminations of parental rights, case closings, and re-reports of abuse and neglect and substantiation of those reports. Broward County and Memphis did not contain data on case openings and closings.

Although administrative data are almost universally available for families in the study, there are limitations. Specifically, we do not have child welfare data for some families from Broward County. Broward County provided child-level data only for families in out-of-home care. For families that were never in out-of-home care, there are no demographic- or child-level administrative data. We use survey data to fill in missing items for some children, covering all but 13 families in Broward County, or 88 percent (91 percent of treatment group families and 86 percent of control group families).

Referral Data

Referral data include information on housing status at referral, the caregiver's child welfare history, and family challenges such as disability, mental health issues, substance abuse issues, past criminal justice involvement, domestic violence history, and any issues related to children's health and development, as assessed by child welfare intake and investigation workers and case-carrying caseworkers. These data are specified differently across sites, so we focus on items that are comparable across sites.

Housing Assistance Data

Administrative data from public housing authorities or service providers describe the housing assistance treatment group families received, including the time until housed and the type of housing

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assistance received (i.e., a housing choice voucher, project-based housing unit, local subsidy, or other form of assistance).

Survey Data

We contracted the survey firm RTI International to conduct baseline and follow-up surveys of families in the treatment and control groups at each site. Known as the Improving Family Services Survey, field interviewers surveyed one family member and asked about that family member, his or her partner, his or her children, and about the children's other parent(s). We use information from the baseline survey to measure family characteristics and data from the follow-up survey to measure interim outcomes.

Families were included in the survey if they consented to provide RTI their contact information. Consent from families varied by site, particularly among the control group. Once families consented, RTI would schedule interviews. Some families were never located, and others refused to take the survey.

Sample Inclusion

For outcomes measured using child welfare administrative data, we restricted our sample to families for whom we have data for a full year past their randomization date. Table A.1 shows the number of children and families for whom we observe outcomes at each of our three analysis points: 12 months, 18 months, and 24 months after randomization.

TABLE A.1
Child Welfare Administrative Data Analysis Sample Sizes, by Family and Child Level and over Time

	Children	Families
12 months	1,624	794
18 months	1,558	759
24 months	1,496	733

Source: Child welfare administrative data.

For analyses relying on survey data to measure outcomes, we include families who completed our follow-up survey. Table A.2 shows the sample sizes for our survey data analyses.

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TABLE A.2
Survey Data Analysis Sample Sizes, by Family and Child Level

		Family Level			Child Level	
	Treatment	Control	Total	Treatment	Control	Total
Broward County	53	92	145	122	219	341
Cedar Rapids	80	44	124	136	88	224
Connecticut	41	45	86	90	80	170
Memphis	76	32	108	213	82	295
San Francisco	42	26	68	69	58	127
Total	292	239	531	630	527	1,157

Analytic Approach

We estimated a combination of linear regression models and linear probability models, depending on the outcome. We weighted each regression model to account for differences in treatment-control ratios across sites (see appendix B for a description of the weighting scheme).

In models using survey data, we include site dummies to control for systematic differences by site; respondent's educational attainment, age, and race and ethnicity; whether the respondent lives with a partner; number of children in the respondent's care; and children's ages (whether there are any children from birth to age 5, ages 6 to 11, or 12 and older in the respondent's care). We also control for family risk factors at baseline, including family homelessness at randomization, family history of child welfare involvement, respondent's history of child welfare involvement as a child, respondent's criminal history, respondent's domestic violence history, respondent's history of physical abuse as a child, and respondent's history of sexual abuse as a child. In child-level analyses, we also control for the child's age and gender. All controls are measured at randomization or at the time of the baseline survey. All models also include a control for the time between randomization and follow-up survey, as this varied by respondent. In the small share of models where a control perfectly predicted an outcome, we dropped this control from the model.

In analyses using child welfare administrative data, we control for measures available at all sites. These include site, child gender, child age and race or ethnicity, whether the child was removed at the time of randomization, months in care if removed, caregiver age, number of children in the household, whether the family was homeless at the time of referral, and whether the caregiver had a child protective services case as a child, a history of criminal justice involvement, or a history of domestic violence. For site-level analyses, we used these same controls, though there may have been others available for a given site.

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In analyses using survey and child welfare administrative data, we addressed missingness in study control variables by using multiple imputation with chained equations and selecting the first imputation. The share of missing cases was low on all control variables. In analyses of child-level outcomes, standard errors are clustered at the family level to account for likely within-family dependence. In impact tables, we present regression-adjusted means for treatment and control groups; the difference between treatment and control group means, which provides the demonstration's estimated impact on the given outcome; and the *p* value on the test that the estimated impact is different than zero.

Weighting

Because the treatment-to-control ratio varied across sites and, within some sites, across time, we created weights to maintain a constant treatment-to-control ratio. The weights are calculated to balance the samples of treatment-to-control ratios across sites so that the weight for group j (where j = treatment or control) in site k, using randomization ratio h, is as follows:

$$W_{jkh} = \left(\frac{n_j/n}{n_{jkh}/n_{kh}}\right)$$

 n_i = Number of families in the assigned group j

 n_{jkh} = Number of families in the assigned group j, in site k, using randomization ratio h

 n_{kh} = Number of families in site k, using randomization ratio h

n = Number of families

For the subsamples of preservation and reunification families, we used a similar method to create weights, except that we calculated the n's with the following additional weight on each observation:

$$\frac{n_{jk}}{n_{jks}}$$

where n_{jk} is the number of families in random assignment group j, in site k, in the full sample, and n_{jks} is the number of families in random assignment group j, in site k, in subgroup sample s.

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Appendix B. Survey Sample

Survey Response Rates

Of the 807 families randomized into the study, 555 took the baseline survey, a 68.8 percent response rate. The response rate was 81.4 percent for the treatment group and 57.7 percent for the control group. Not all families consented to be contacted by RTI. Among those who gave consent, the overall baseline survey response rate was 84.1 percent. The response rate among members of the treatment group who consented was 88.2 percent, and the response rate among members of the control group who consented was 79.5 percent. Families who did not take the baseline survey were still eligible to take the follow-up survey, so our analytic sample includes some baseline survey nonrespondents.

Response patterns to the follow-up survey were similar. Of the 807 families in the study, 531 responded, a 65.8 percent response rate. The treatment group response rate was 77.5 percent, and the control group response rate was 55.6 percent. Survey response rates were higher among families who consented to be contacted: 80.5 percent overall, 83.9 percent for the treatment group, and 76.6 percent for the control group. In appendix C, we investigate whether selection into the survey sample led to baseline differences between the control and treatment groups.

Table B.1 shows the share of families that consented to be contacted by the survey firm by group assignment (treatment and control) and by site, as well as survey response rates by group assignment and site. The share of randomized families that consented to be contacted by the survey firm varied by site but tended to be higher in the treatment group. Among families that consented, baseline and follow-up survey response rates were high, especially given the mobile nature of the study population.

Response rates tended to be higher among treatment group families than among control group families.

TABLE B.1
Survey Response Rates by Condition and Site

		Randomized		conser	Families consenting to share information		Baseline survey completion as a share of consenting families		e survey n as a share lomized ilies	comple share of c	Follow-up survey completion as a share of consenting families		ip survey tion as a andomized ilies
		С	T	С	Т	С	T	С	T	С	Т	С	T
Broward County	N	115	57	115	57	91	56	91	56	92	53	92	53
	%	66%	33%	100%	100%	79%	98%	79%	98%	80%	93%	80%	93%
Cedar Rapids	N	93	102	59	91	46	78	46	78	44	80	44	80
	%	47%	53%	64%	88%	78%	86%	50%	76%	75%	88%	48%	78%
Connecticut	N	106	51	54	44	52	43	52	43	45	41	45	41
	%	68%	33%	51%	86%	96%	98%	49%	84%	83%	93%	43%	80%
Memphis	N	42	87	42	87	33	80	33	80	32	76	32	76
	%	33%	67%	100%	100%	79%	92%	79%	92%	76%	87%	76%	87%
San Francisco	N	75	79	42	69	26	50	26	50	26	42	26	42
	%	49%	51%	56%	87%	62%	73%	35%	63%	62%	61%	35%	53%
Total	N	430	377	312	348	248	307	248	307	239	292	239	292
	%	53%	47%	73%	92%	80%	88%	58%	81%	77%	84%	56%	78%

Note: C = control group; T = treatment group.

Nonresponse Analysis

This appendix focuses on the overall effect of survey nonresponse by examining baseline characteristics of families among those in the full sample of 807 families randomized into the study, comparing those who consented to share their contact information with the survey firm with families who did not consent, and comparing those who responded to the follow-up survey with those who did not. Among these groups, we examined characteristics that are predictive of the outcomes we examined: having a reunification versus preservation case, the family having prior child welfare involvement, the respondent having had child welfare involvement as a child, family homelessness, and respondent's history of domestic violence and criminal justice involvement (table B.2).

Sites gathered consent to share contact information with the survey firm in different ways. Broward County and Memphis made the consent part of their application process, which preceded random assignment. Cedar Rapids, Connecticut, and San Francisco relied on caseworkers or service providers to gain consent after random assignment. The different procedures are evident in the results of the consent process in that consent rates are higher in Broward County and Memphis and higher among treatment group families than among control group families in the other three sites.

The top half of table B.2 focuses on differences between families who did and did not consent to be contacted by the survey firm. A handful of differences are significant. In the full sample, consenting families were less likely than nonconsenting families to have a reunification (versus preservation) case at randomization. This result varies considerably by site. In Cedar Rapids, consenting families were more likely to have a reunification case at randomization. In San Francisco, consenting families were more likely to have a preservation case. Memphis enrolled only preservation cases, and all consented to be contacted by the survey firm. This variation in consent and focus on reunification versus preservation cases explains the full-sample significant difference in likelihood of having a reunification at baseline across families who did and did not give consent. In the full sample, consenting families also report homelessness at randomization at higher rates than nonconsenting families. This difference is likely explained by high rates of consent and homelessness at randomization among families in Memphis. Finally, in Connecticut, consent is associated with a higher likelihood of having had child welfare involvement as a child.

The bottom half of table B.2 focuses on differences between families who did and did not respond to the follow-up survey, including families who did not consent to be contacted by the survey firm.

Significant differences in baseline characteristics of follow-up respondents versus nonrespondents are

driven by the differences in consent described above. For example, the only significant difference between respondents and nonrespondents in the full sample is lower rates of preservation cases among follow-up respondents, which mirrors the results for consent. Also, similar to the analyses of consent, follow-up response is associated with a higher likelihood of having had child welfare involvement as a child.

Table B.3 explores the relationships between consent and follow-up survey response and respondents' characteristics at baseline in a somewhat different way—by estimating multivariate regression models with consent and follow-up response as the dependent variables, baseline characteristics as covariates, and with and without controls for the site. Results of these analyses show that significant associations between baseline characteristics and families' likelihood of consenting to be contacted by the survey firm and responding to the follow-up survey are explained by site-level differences in rates of consent and follow-up response. This finding reflects the consent process described above. Differences in family characteristics are mostly eliminated once sites are controlled for, which suggests that variation in caseworkers' attempts to gain consent is primarily caseworker specific, rather than related to the families.

TABLE B.2

Baseline Characteristics by Consent, Follow-Up Survey Response, and Site

	Ov	erall	all Broward County		Ceda	Cedar Rapids Conn		onnecticut M		Memphis		San Francisco	
	Co	nsent	Coi	nsent	Consent Co		Co	Consent		Consent		Consent	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	
Reunification case at randomization	40.8%	33.3%*		35.5%	33.3%	50.7%**	28.8%	30.6%		0.0%	65.0%	48.0%*	
Family had prior child welfare involvement	49.6%	42.5%		41.2%	39.5%	45.3%	75.9%	66.3%		32.6%	23.0%	31.0%	
Respondent had child welfare involvement as a child	52.5%	55.5%		45.9%	47.4%	55.3%	51.7%	68.4%**		59.7%	58.0%	54.0%	
Family homeless at randomization (versus unstably housed)	35.3%	49.1%**		41.8%	36.8%	30.7%	22.4%	19.4%		92.2%	51.0%	61.0%	
Respondent history of													
Domestic violence	36.7%	36.1%		35.3%	50.0%	46.0%	34.5%	28.6%		31.8%	27.9%	35.5%	
Criminal justice involvement	55.4%	48.2%		30.6%	60.5%	64.7%	55.2%	50.0%		50.4%	51.2%	48.6%	
N	147	660	0	172	45	150	59	98	0	129	43	111	

	Ov	erall	Broward	d County	Cedar	Rapids	Conn	ecticut	Mem	phis	San Fr	ancisco	
	Foll	ow-up	Follo	Follow-up		Follow-up		Follow-up		Follow-up		Follow-up	
	res	ponse	resp	onse	resp	onse	res	ponse	response		response		
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	
Reunification case at randomization	41.7%	31.1%**	25.9%	37.2%	40.8%	50.0%	35.2%	25.6%	0.0%	0.0%	62.8%	39.7%**	
Family had prior child welfare involvement	46.4%	42.4%	50.0%	39.6%	45.3%	43.5%	75.7%	65.1%	33.0%	32.0%	25.6%	33.3%	
Respondent had child welfare involvement as a child	54.3%	55.3%	50.0%	45.1%	54.7%	53.2%	51.4%	70.9%**	57.0%	60.0%	57.0%	53.0%	
Family homeless at randomization (versus unstably housed)	44.2%	47.9%	30.8%	43.8%	35.9%	29.8%	25.7%	16.3%	95.0%	92.0%	57.0%	60.3%	
Respondent history of													
Domestic violence	34.8%	36.9%	23.1%	37.5%	48.4%	46.0%	31.4%	30.2%	29.0%	32.0%	32.6%	34.3%	
Criminal justice involvement	52.8%	47.7%	34.6%	29.9%	57.8%	66.9%	58.6%	46.5%	57.0%	49.0%	48.8%	50.0%	
N	276	531	27	145	71	124	71	86	21	108	86	68	

Sources: Improving Family Services Survey 12-month follow-up survey, referral data, and child welfare administrative data.

Notes: All variables are measured at randomization or at the time of the baseline survey. Imputed data are not used. Follow-up response is measured among all families randomized, regardless of consent.

^{*} *p* < 0.1; ** *p* < 0.05.

TABLE B.3

Multivariate Nonresponse Analysis

	Con	sent	Follow-up	response
Reunification case at randomization	-0.041	0.004	-0.106***	-0.043
	(0.030)	(0.030)	(0.036)	(0.037)
Family had prior child welfare involvement	-0.030	0.003	-0.030	-0.024
	(0.028)	(0.026)	(0.034)	(0.034)
Respondent had child welfare involvement as a child	0.019	0.038	0.008	0.026
	(0.027)	(0.026)	(0.034)	(0.033)
Family homeless at randomization (versus unstably				
housed)	0.073***	0.001	0.022	-0.018
	(0.027)	(0.030)	(0.034)	(0.036)
Respondent history of				
Domestic violence	-0.009	-0.009	0.014	0.011
	(0.028)	(0.026)	(0.035)	(0.033)
Criminal justice involvement	-0.039	-0.010	-0.038	-0.012
	(0.027)	(0.026)	(0.034)	(0.033)
Broward County		0.285***		0.405***
		(0.038)		(0.050)
Cedar Rapids		0.084*		0.223***
		(0.049)		(0.055)
Connecticut		-0.091		0.109*
		(0.056)		(0.061)
Memphis		0.283***		0.387***
		(0.040)		(0.057)
Constant	0.831***	0.701***	0.713***	0.462***
	(0.032)	(0.049)	(0.040)	(0.056)
Observations	795	795	795	795
R ²	0.019	0.152	0.016	0.114

Sources: Improving Family Services Survey 12-month follow-up survey, referral data, and child welfare administrative data. **Notes:** All variables are measured at randomization or at the time of the baseline survey. Imputed data are not used. Follow-up response is measured among all families randomized, regardless of consent.

**** p < 0.01.

Timing of Interviews

Because of a lag in setting up the survey at the beginning of the project and delays in obtaining consent from families, many families took the baseline survey several months after randomization. Consenting families become eligible for the follow-up survey 12 months after randomization, even if they were not included in the baseline survey. The average time between randomization and the baseline survey was 3.4 months (table B.4). The average time between randomization and the follow-up survey was 13.7 months. Given the lag between randomization and the baseline survey, we choose only baseline measures that are not expected to be different because of the interview's timing.

TABLE B.4
Timing of Baseline and Follow-Up Interviews, Relative to Randomization

Time between Randomization and Baseline Survey **Broward** Cedar San Total County **Rapids** Connecticut Memphis Francisco Mean (months) 3.4 3.7 3.8 1.8 3.4 4.1 Share 0-3 months 59% 55% 85% 62% 49% 52% 10% 4-6 months 25% 33% 24% 24% 32% 7-9 months 14% 15% 19% 6% 14% 15% 10-12 months 1% 0% 2% 0% 1% 3% Ν 486 138 111 73 105 59

_		Time betv	veen Randor	nization and Follo	w-Up Survey	
		Broward	Cedar			San
	Total	County	Rapids	Connecticut	Memphis	Francisco
Mean (months)	13.7	14.3	12.9	14.2	13.3	14.0
Share						
10-11 months	1%	0%	1%	0%	2%	1%
12-14 months	76%	68%	89%	73%	81%	69%
15-17 months	15%	19%	9%	16%	13%	21%
18-21 months	6%	9%	2%	6%	5%	7%
More than 21 months	2%	4%	0%	5%	0%	1%
N	531	145	124	86	108	68

Sources: Improving Family Services Survey baseline and 12-month follow-up survey and referral data.

Appendix C. Baseline Equivalence

To test whether any differences between treatment and control groups in our child welfare administrative data sample occurred by chance, we use our administrative data sample and compare observable characteristics in the two groups at baseline.

Only one difference was statistically significant: the number of children. But the difference is small, an average of 2.1 children in the treatment group versus 2.0 children in the control group (p = 0.065).

TABLE C.1

Difference in Treatment and Control Group in Child Welfare Administrative Data Sample at Baseline

	N	Treatment mean	Control mean	<i>P</i> value
Household level				
Female	734	94%	92%	0.169
Age	734	30.4	30.5	0.879
Race or ethnicity	672			0.279
Hispanic		15%	17%	
Black		47%	40%	
Other		5%	6%	
White		34%	38%	
Prior criminal justice history	783	51%	47%	0.237
Prior domestic violence	784	35%	36%	0.807
Prior child protective services case	783	47%	41%	0.104
Prior child protective services case as a child	783	58%	53%	0.190
Homeless at randomization	785	48%	46%	0.518
Number of children	794	2.1	2.0	0.065
At least one child removed at randomization	794	40%	41%	0.896
All children removed at randomization	794	35%	36%	0.751
Child level				
Female	1,616	48%	49%	0.809
Age	1,603	5.3	5.4	0.639
Black	1,567	48%	49%	0.633
Hispanic	1,613	13%	13%	0.843
White	1,567	38%	38%	0.935
Other (includes Asian and Native American)	1,568	10%	10%	0.860
Case open at randomization	1,226	64%	60%	0.166
Removed at randomization	1,624	34%	35%	0.635
Months removed	548	4.0	3.3	0.121

Source: Referral data.

To test whether self-selection into the follow-up survey sample introduced differences in our treatment and control groups, we compare treatment group respondents with control group respondents using child welfare administrative data and referral data from baseline (table C.1). For most characteristics we examined, treatment-control differences are small and statistically

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insignificant. Treatment group follow-up survey respondents are statistically significantly more likely than those in the control group to have higher levels of education (p < 0.1) and to have had prior involvement with the criminal justice system (p < 0.05). Additionally, treatment group families in the follow-up survey sample are more likely than control group families to have had prior involvement with the child welfare system (p < 0.05). All factors considered in table C.2, other than respondent gender, are included as controls in the main analyses. Of course, unobserved personal or family characteristics that could influence study results are not accounted for.

TABLE C.2

Difference in Treatment and Control Group Follow-Up Survey Respondents at Baseline

	N	Treatment mean	Control mean	Difference	P value
Female	531	94.6%	94.0%	0.6%	0.755
Age	531	30.1	30.2	-0.2	0.806
Race or ethnicity					0.596
Black	531	45.1%	47.4%	-2.3%	
White	531	36.4%	34.9%	1.4%	
Hispanic	531	14.0%	10.8%	3.3%	
Other	531	4.5%	6.9%	-2.4%	
Educational attainment					0.492
Less than high school or GED equivalent	528	36.3%	40.1%	-3.8%	
High school or GED	528	24.3%	27.9%	-3.6%	
Some college or higher	528	39.4%	32.0%	7.4%	
Lives with a partner	531	14.1%	14.0%	0.2%	0.961
Number of children in respondent's care	531	2.7	2.6	0.1	0.714
Reunification case at randomization	531	31.4%	31.5%	-0.1%	0.972
Family had prior child welfare involvement	528	46.8%	38.4%	8.3%*	0.069
Respondent had child welfare involvement as a child	528	57.5%	53.6%	3.9%	0.392
Family homeless at randomization (versus unstably housed)	530	47.4%	47.2%	0.3%	0.956
Respondent's history of					
Domestic violence	529	33.9%	36.9%	-3.0%	0.494
Criminal justice involvement	528	52.6%	41.3%	11.3%**	0.015
Physical abuse in childhood	529	44.3%	44.3%	0.0%	0.992
Sexual abuse in childhood	528	39.5%	40.3%	-0.8%	0.861

Sources: Improving Family Services Survey baseline survey, referral data, and child welfare administrative data.

Notes: All variables are measured at randomization or at the time of the baseline survey. Means are weighted by site to adjust for site differences in treatment and control ratios. Imputed data are not used. Significant differences in race or ethnicity and educational attainment are measured with a chi-squared test.

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^{*} p < 0.1; ** p < 0.05.

Appendix D. Additional Results Table

TABLE D.1

Supportive Services: Transportation Assistance

		Treatment	Control	Impact	
	Ν	mean	mean	(difference)	P value
Received any transportation assistance	531	50.0%	29.6%	20.4%***	0.000
Subway or bus passes	531	42.8%	23.6%	19.2%***	0.000
Gas cards	531	9.2%	7.4%	1.8%	0.420
Any other transportation assistance	531	6.1%	2.9%	3.2%*	0.060
A donated vehicle	531	1.2%	1.8%	-0.6% [†]	0.440
Help repairing vehicle	531	4.3%	1.4%	2.9%**	0.020

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

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^{*} p < 0.1; ** p < 0.05; *** p < 0.01; † standardized effect size ≥ 0.25 .

Appendix E. Well-Being Outcomes by Preservation and Reunification Families

TABLE E.1
Economic Well-Being, Preservation Families

	N	Treatment mean	Control mean	Impact (difference)	P value
Household income in past six months,				•	
pretax	350	\$5,049.30	\$5,762.20	-\$712.90	0.195
Currently working	366	32.1%	39.7%	-7.6%	0.142
Material hardship					
Material hardship reported in one or					
more domains	366	30.7%	24.9%	5.8%	0.247
Food	366	14.7%	9.3%	5.4% [†]	0.103
Housing	365	9.3%	15.4%	-6.1%*	0.077
Utilities	365	6.3%	8.9%	-2.6%	0.325
Medical	366	9.9%	6.5%	3.4%†	0.245

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Food-related hardship includes the respondent or child ever being hungry but unable to afford food. Housing-related hardship includes the respondent or household member forgoing medical attention or prescription medication because of cost.

^{*} p < 0.1; † standardized effect size ≥ 0.25 .

TABLE E.2
Economic Well-Being, Reunification Families

	N	Treatment mean	Control mean	Impact (difference)	P value
Household income in past six months,				,	
pretax	156	\$7,427.60	\$7,574.00	-\$146.40	0.909
Currently working	165	37.3%	60.3%	-23.0%**	0.004
Material hardship					
Material hardship reported in one or					
more domains	165	28.7%	33.4%	-4.7%	0.504
Food	165	15.4%	16.8%	-1.4%	0.777
Housing	165	9.2%	9.1%	0.1%	0.992
Utilities	165	6.9%	14.8%	-7.9%*	0.061
Medical	165	7.3%	15.5%	-8.2%*	0.081

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Food-related hardship includes the respondent or child ever being hungry but unable to afford food. Housing-related hardship includes respondent being unable to pay rent or the mortgage or being evicted because of nonpayment. Medical-related hardship includes the respondent or household member forgoing medical attention or prescription medication because of cost.

* p < 0.1; ** p < 0.05.

TABLE E.3

Parent Physical Health, Mental Health, and Risk, Preservation Families

		Treatment	Control	Impact	
	N	mean	mean	(difference)	P value
Self-reported physical health is excellent, very good, or good	366	66.9%	74.6%	-7.7%	0.118
Self-reported mental health is excellent, very good, or good	366	72.7%	72.6%	0.1%	0.972
Depression scale (0-24)	363	5.4	4.9	0.5	0.411
Suffers from major depression	363	16.3%	16.4%	-0.1%	0.967
Pearlin Mastery Scale (7-28)	360	22.3	22.8	-0.5	0.231
Recent domestic violence	338	14.1%	4.5%	9.6%**	0.008

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

** p < 0.05.

TABLE E.4

Parent Physical Health, Mental Health, and Risk, Reunification Families

	N	Treatment mean	Control mean	Impact (difference)	P value
Self-reported physical health is excellent, very good, or good	164	71.3%	76.7%	-5.4%	0.430
Self-reported mental health is excellent, very good, or good	163	71.3%	70.2%	1.1%	0.866
Depression scale (0-24)	163	5.2	5.7	-0.5	0.510
Suffers from major depression	163	16.6%	21.2%	-4.6%	0.353
Pearlin Mastery Scale (7-28)	165	23.5	23.2	0.3	0.546
Recent domestic violence	147	18.0%	10.0%	8.0% [†]	0.136

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

TABLE E.5

Parent Alcohol and Drug Use, Preservation Families

[†] standardized effect size ≥ 0.25.

		Treatment	Control	Impact	
	Ν	mean	mean	(difference)	P value
Alcohol use and dependence scale (0–26)	365	1.6	1.1	0.5*	0.079
Hazardous alcohol consumption	366	24.9%	20.0%	4.9%	0.269
Drug use and dependence scale (0–19)	366	1.2	1.3	-0.1	0.637
Score on drug use and dependence scale indicates possible drug abuse or dependence					
(drug scale ≥ 2)	366	28.2%	28.1%	0.1%	0.981

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

^{*} p < 0.1.

TABLE E.6

Parent Alcohol and Drug Use, Reunification Families

N	Treatment mean	Control mean	Impact (difference)	P value
165	1.7	1.0	0.7	0.185
165	24.0%	27.0%	-3.0%	0.659
165	1.9	1.5	0.4	0.341
165	35.1%	28 5%	6.6%	0.330
	165 165	N mean 165 1.7 165 24.0% 165 1.9	N mean mean 165 1.7 1.0 165 24.0% 27.0% 165 1.9 1.5	N mean mean (difference) 165 1.7 1.0 0.7 165 24.0% 27.0% -3.0% 165 1.9 1.5 0.4

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

TABLE E.7

Parent Criminal Justice Involvement, Preservation Families

	Treatment		Control	Impact	
	Ν	mean	mean	(difference)	P value
Convicted of a crime in the past six months	347	5.2%	5.2%	0.0%	0.977
Been incarcerated in an adult correctional institution in the past six months	346	4.3%	3.3%	1.0%	0.554

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

TABLE E.8

Parent Criminal Justice Involvement. Reunification Families

		Treatment	Control	Impact	
	Ν	mean	mean	(difference)	P value
Convicted of a crime in the past six months	155	10.5%	6.1%	4.4% [†]	0.243
Been incarcerated in an adult correctional					
institution in the past six months	154	10.2%	1.9%	8.3%**	0.019

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey.

** p < 0.05; † standardized effect size ≥ 0.25 .

TABLE E.9

Parenting, Preservation Families

	N	Treatment mean	Control mean	Impact (difference)	<i>P</i> value
Average relationship quality across all children is excellent, very good, or good	359	20.0%	9.6%	10.4%**	0.004
Respondent's parenting practices in the past six mo (among those who lived with at least one child, at le		e of the time, in	the past six	months)	
Average relationship quality across all children is excellent, very good, or good	320	21.1%	8.1%	13.0%**	0.001
Average number of times parent practiced corporal punishment or was physically aggressive to child	320	0.6	0.4	0.2*	0.069
Average number of times parent was verbally aggressive to child	320	2.3	1.9	0.4	0.361
Average number of times parent exhibited neglectful behaviors toward child	320	0.3	0.1	0.2*	0.097
Parenting warmth and supportiveness scale (0–4)	320	3.4	3.5	-0.1	0.204
Parenting stress scale (1–5)	320	2.5	2.5	0.0	0.956
Parenting skill scale (1–5)	320	4.4	4.4	0.0	0.539

Source: Improving Family Services Survey 12-month follow-up survey.

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Children for whom parental rights have been terminated are excluded. On the parenting warmth and supportiveness scale, stress scale, and skill scale, higher values indicate greater warmth and supportiveness, stress, and skill, respectively.

^{*} p < 0.1; ** p < 0.05.

TABLE E.10
Parenting, Reunification Families

	N	Treatment mean	Control mean	Impact (difference)	<i>P</i> value
Average relationship quality across all children is excellent, very good, or good	152	16.8%	12.7%	4.1%	0.386
Respondent's parenting practices in the past six mor (among those who lived with at least one child, at lea		e of the time, in	the past six	months)	
Average relationship quality across all children is excellent, very good, or good	96	0.5	0.6	-0.1	0.842
Average number of times parent practiced corporal punishment or was physically aggressive to child	97	0.3	0.6	-0.3	0.215
Average number of times parent was verbally aggressive to child	97	1.9	1.9	0.0	0.896
Average number of times parent exhibited neglectful behaviors toward child	97	0.1	0.2	-0.1	0.245
Parenting warmth and supportiveness scale (0–4)	97	3.6	3.6	0.0	0.471
Parenting stress scale (1–5)	96	2.1	2.1	0.0	0.951
Parenting skill scale (1–5)	96	4.5	4.6	-0.1	0.403

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification case; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; children's ages; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Children for whom parental rights have been terminated are excluded from the analysis. On the parenting warmth and supportiveness scale, stress scale, and skill scale, higher values indicate greater warmth and supportiveness, stress, and skill, respectively.

TABLE E.11
Child Physical Health, Mental Health, Diagnoses, and Treatment, Preservation Families

	N	Treatment mean	Control mean	Impact (difference)	P value
Parent-reported global physical health is excellent, very good, or good	850	94.4%	94.9%	-0.5%	0.750
Parent-reported global mental health is excellent, very good, or good	846	86.6%	89.8%	-3.2%	0.170
Child's routine care is emergency or urgent care services	800	1.2%	0.4%	0.8%†	0.100
Child saw a dentist within the past two years	670	94.6%	95.5%	-0.9%	0.590
Condition of child's teeth is excellent, very good, or good	690	87.8%	93.6%	-5.8%**	0.030
Doctor's diagnosis					
Learning disability	846	11.4%	16.4%	-5.0%*	0.060
Asthma	846	18.2%	11.6%	6.6%**	0.020
High blood lead levels	847	0.6%	0.0%	0.6%	0.155
Mental health condition or behavioral problem	848	17.6%	17.4%	0.2%	0.940
Child receiving treatment for mental or behavioral problem(s)	848	12.7%	13.2%	-0.5%	0.820

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification cases; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; child's age and gender; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Children for whom parental rights have been terminated or the respondent reports no contact with the child are excluded. "Routine care is emergency or urgent care" is measured only among families who reported the child had a place for routine care. No place for routine care is reported for only 57 children, or 4.27 percent of the full sample. Dental care and condition of child's teeth measures are among children 2 and older with teeth.

^{*} p < 0.1; ** p < 0.05; † standardized effect size ≥ 0.25 .

TABLE E.12
Child Physical Health, Mental Health, Diagnoses, and Treatment, Reunification Families

	N	Treatment mean	Control mean	Impact (difference)	P value
Parent-reported global physical health is excellent, very good, or good	298	98.2%	95.2%	3.0%*	0.090
Parent-reported global mental health is excellent, very good, or good	299	92.5%	87.5%	5.0% [†]	0.190
Child's routine care is emergency or urgent care services	272	1.6%	0.0%	1.6%	0.163
Child saw a dentist within the past two years	207	99.1%	87.8%	11.3%**	0.020
Condition of child's teeth is excellent, very good, or good	241	89.1%	91.0%	-1.9%	0.610
Doctor's diagnosis					
Learning disability	298	8.2%	13.7%	-5.5% [†]	0.140
Asthma	297	12.2%	10.9%	1.3%	0.770
High blood lead levels	298	1.3%	1.9%	-0.6%	0.677
Mental health condition or behavioral problem	296	7.5%	18.5%	-11.0%**	0.010
Child receiving treatment for mental or behavioral problem(s)	296	5.9%	15.3%	-9.4%**	0.010

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification cases; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; child's age and gender; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Children for whom parental rights have been terminated or the respondent reports no contact with the child are excluded. "Routine care is emergency or urgent care" is measured only among families who reported the child had a place for routine care. No place for routine care is reported for only 57 children, or 4.27 percent of the full sample. Dental care and condition of child's teeth measures are among children 2 and older with teeth.

^{*} p < 0.1; ** p < 0.05; † standardized effect size ≥ 0.25 .

TABLE E.13
Child School Performance, Preservation Families

	N	Treatment mean	Control mean	Impact (difference)	<i>P</i> value
In early education	383	4.5%	3.7%	0.8%	0.630
Usual grades last semester were As and Bs or Bs and Cs	299	81.8%	75.2%	6.6%	0.190
Reading level on track last semester	359	83.0%	71.1%	11.9%**	0.010
Absent 10 or fewer school days for any reason last semester	345	89.0%	95.9%	-6.9%**	0.030
Absent 10 or fewer school days for illness or injury last semester	344	94.2%	98.3%	-4.1%**	0.030
Child changed schools because of housing move	360	16.9%	19.3%	-2.4%	0.680
School change occurred during the school year	360	15.1%	12.2%	2.9%	0.550

Notes: Participation in early education is measured among children younger than 5. All other outcomes reported in table E.13 are measured among children enrolled in grades 1–12. The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification cases; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; child's age and gender; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Children for whom parental rights have been terminated or the respondent reports no contact with the child are excluded.

^{**} p < 0.05.

TABLE E.14
Child School Performance, Reunification Families

	N	Treatment mean	Control mean	Impact (difference)	<i>P</i> value
In early education	149	4.6%	5.9%	-1.3%	0.750
Usual grades last semester were As and Bs or Bs and Cs	94	74.5%	90.3%	-15.8%**	0.010
Reading level on track last semester	122	75.4%	73.1%	2.3%	0.730
Absent 10 or fewer school days for any reason last semester	100	100.0%	93.9%	6.1%*	0.073
Absent 10 or fewer school days for illness or injury last semester	99	100.0%	100.0%	0.0%	-
Child changed schools because of housing move	120	17.8%	16.7%	1.1%	0.870
School change occurred during the school year	120	17.8%	16.7%	1.1%	0.870

Notes: Participation in early education is measured among children younger than 5. All other outcomes reported in table E.14 are measured among children enrolled in grades 1–12. The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification cases; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; child's age and gender; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Children for whom parental rights have been terminated or the respondent reports no contact with the child are excluded.

^{*} p < 0.1; ** p < 0.05.

TABLE E.15
Child Behavior, Preservation Families

	N	Treatment mean	Control mean	Impact (difference)	P value
Among children younger than 3 Child behavior scale (4–20)	240	9.0	8.8	0.2	0.570
Among children 3 to 5 years old Externalizing behavior scale (6–18) Internalizing behavior scale (4–12) Prosocial behavior scale (13–39)	199 199 199	10.5 4.9 34.6	9.9 5.1 34.5	0.6 -0.2 0.1	0.210 0.450 0.860
Among children 6 to 18 years old Externalizing behavior scale (6–18) Internalizing behavior scale (4–12) Prosocial behavior scale (13–39)	398 397 397	9.9 9.0 30.7	10.0 8.4 30.8	-0.1 0.6* -0.1	0.860 0.050 0.850
Among children enrolled in grades 1–12 Suspended or expelled last semester Had contact with school about problems with child's behavior or attendance last semester	360 358	8.6%	16.4% 28.5%	-7.8%** -4.2%	0.030
Among children 12 and older Has been arrested or taken into custody, jail, or juvenile justice facility in past six months	144	6.0%	7.2%	-1.2%	0.790

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification cases; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; child's age and gender; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Children for whom parental rights have been terminated or the respondent reports no contact with the child are excluded. For the child behavior scale, externalizing behavior scale, and internalizing behavior scale, higher values indicate greater behavior problems. For the prosocial behavior scale, higher values indicate more prosocial behaviors.

^{*} p < 0.1; ** p < 0.05.

TABLE E.16
Child Behavior, Reunification Families

	N	Treatment mean	Control mean	Impact (difference)	P value
Among children younger than 3 Child behavior scale (4-20)	86	8.0	8.1	-0.1	0.910
Among children 3 to 5 years old Externalizing behavior scale (6–18) Internalizing behavior scale (4–12) Prosocial behavior scale (13–39)	81 81 81	10.4 5.2 34.3	10.5 5.2 35.6	-0.1 0.0 -1.3 [†]	0.860 0.980 0.180
Among children 6 to 18 years old Externalizing behavior scale (6–18) Internalizing behavior scale (4–12) Prosocial behavior scale (13–39)	129 129 131	9.5 8.6 30.4	10.6 9.5 30.6	-1.1 [†] -0.9* -0.2	0.100 0.070 0.820
Among children enrolled in grades 1–12 Suspended or expelled last semester Had contact with school about problems with child's behavior or attendance last semester	122 122	3.0%	10.1% 25.1%	-7.1%* -7.1%	0.080
Among children 12 and older Has been arrested or taken into custody, jail, or juvenile justice facility in past six months	39	0.0%	0.0%	0.0%	-

Notes: The weighted regression-adjusted models include the following control measures: time between randomization and follow-up survey; site; reunification cases; respondent's educational attainment, age, and race or ethnicity; number of children in respondent's care; child's age and gender; whether respondent lived with a partner; family homelessness at randomization; family history of child welfare involvement; respondent's history of child welfare involvement as a child; respondent's criminal history; respondent's domestic violence history; respondent's history of physical abuse as a child; and respondent's history of sexual abuse as a child. All controls are measured at randomization or at the time of the baseline survey. Children for whom parental rights have been terminated or the respondent reports no contact with the child are excluded. For child behavior scale, externalizing behavior scale, and internalizing behavior scale, higher values indicate greater behavior problems. For the prosocial behavior scale, higher values indicate more prosocial behaviors.

^{*} p < 0.1; † standardized effect size ≥ 0.25 .

Notes

- 1 "Child Maltreatment," US Department of Health and Human Services, Administration for Children and Families, Children's Bureau, last modified January 25, 2016, http://www.acf.hhs.gov/programs/cb/research-data-technology/statistics-research/child-maltreatment.
- ² CAPTA Reauthorization Act of 2010, Pub. L. No. 111-320, 124 Stat. 3459 (2010).
- The demonstration was launched in collaboration with four private foundations—the Robert Wood Johnson Foundation, the Annie E. Casey Foundation, the Casey Family Programs, and the Edna McConnell Clark Foundation—that are supporting technical assistance efforts and a national evaluation. CSH (formerly the Corporation for Supportive Housing) and, early on, the Center for the Study of Social Policy provided technical assistance. The Urban Institute is conducting the national evaluation. The local evaluators in each site are Barry University (evaluating the site in Broward County, Florida), the University of Iowa (Cedar Rapids, Iowa), the University of Connecticut (Connecticut), the University of Tennessee (Memphis, Tennessee), and Chapin Hall at the University of Chicago (San Francisco, California).
- ⁴ Each site received a one-year no-cost extension.
- 5 "Partnerships to Demonstrate the Effectiveness of Supportive Housing for Families in the Child Welfare System: HHS-2012-ACF-ACYF-CA-0538," US Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth, and Families, accessed February 25, 2019, https://ami.grantsolutions.gov/files/HHS-2012-ACF-ACYF-CA-0538_0.htm.
- ⁶ "Partnerships to Demonstrate the Effectiveness," Health and Human Services.
- Data for the analyses are from the baseline and follow-up surveys and do not include all families in the demonstration.
- Results in table 13 are based on questions in the follow-up survey that asked respondents to report help they received from government programs over the past six months. Mis- or underreporting of public benefit and government assistance receipt is a common concern in survey data. But San Francisco compared responses with the items on cash assistance and Supplemental Nutrition Assistance Program receipt with program administrative records and found that survey respondents reported benefits receipt largely accurately. These supplemental analyses increase confidence in the results in table 13.
- We did not control for length of time the case was open before randomization, as we did not have this measure across all sites. Controlling for this in Cedar Rapids does not notably change the point estimates but eliminates any statistical significance.
- 10 This may be because of changes in the sample, as not all cases were observed for 24 months.
- In our long-term follow-up study, currently under way, we include a more detailed measure that captures the frequency of material hardship. We expect that, had we used such a measure in this study, we might have seen lower frequency of material hardship in the treatment group.
- Questions about alcohol and drug use were administered using a method that allows respondents to answer questions without interacting with the interviewer, which has been shown to reduce underreporting. But despite this and assurances of confidentiality, respondents in both the baseline and follow-up surveys reported low rates of alcohol and drug use. If underreporting is similar for each group (treatment and control), this issue should not affect our ability to detect the demonstration's potential effects on parents' alcohol and drug use. But underreporting might have generally reduced the reports to low rates in both groups so that differences cannot be detected.

86 NOTES

- $^{\rm 13}$ "Partnerships to Demonstrate the Effectiveness," Health and Human Services.
- $^{14}\,$ Memphis served only intact families.

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Michael Pergamit, a senior fellow in the Center on Labor, Human Services, and Population at the Urban Institute, is a labor economist whose research focuses on vulnerable youth. He codirects an evaluation of a paid internship program for youth in Washington, DC, and Baltimore public schools; an evaluation of a mentoring and case management program in Washington, DC, and Maryland; and a demonstration involving pilot-testing employment and training programs to aid disconnected youth. He was the project director for the Multisite Evaluation of Foster Youth Programs (Chafee evaluation) and is currently helping design the next set of evaluations. Previously, he led a project exploring the relationship between growing up in a vulnerable family and movements into education and the labor market as a young adult; a study predicting safe exits from shelters for runaway and homeless youth; a study examining correlates of early initiation into the labor market; and a labor market needs assessment of disadvantaged youth in Chicago. Pergamit also works on issues of integrating and accessing public benefits and services. He codirects an evaluation of two programs providing housing and services to families involved in the child welfare system and a study of multiple benefit use by low-income families. Before joining Urban, Pergamit spent 10 years at the National Opinion Research Center and 13 years at the US Bureau of Labor Statistics (BLS). For 10 years, he was the director of the National Longitudinal Surveys at the BLS. He has a PhD from the University of Chicago.



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