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Report

Promoting Readiness of Minors in SSI (PROMISE) Evaluation: Interim Services and Impact Report

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CONTENTS

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TABLES

FIGURES

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ACRONYMS AND ABBREVIATIONS

ASPIRE	Achieving Success by Promoting Readiness for Education and Employment
CaPROMISE	California PROMISE
CDOR	California Department of Rehabilitation
CSC	Career service coordinator
DOL	U.S. Department of Labor
DVR	Division of Vocational Rehabilitation
ED	U.S. Department of Education
GED	General Equivalency Diploma
IEP	Individualized education program
ILC	Independent living center
LEA	Local educational agency
MD	Maryland
MIS	Management information system
n.a.	Not available
n.d.	No data available
NYS	New York State
OASDI	Old-Age, Survivors, and Disability Insurance
Pre-ETS	Pre-employment transition services
PROMISE	Promoting Readiness of Minors in Supplemental Security Income
RA	Random assignment
RDS	Research demonstration site
RFMH	Research Foundation for Mental Hygiene
SSA	Social Security Administration
DI	Social Security Disability Insurance
SSI	Supplemental Security Income
SSN	Social Security number
TANF	Temporary Assistance for Needy Families
VR	Vocational rehabilitation
WI	Wisconsin
WIOA	Workforce Innovation and Opportunity Act
WIPA	Work Incentives Planning and Assistance

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EXECUTIVE SUMMARY

Youth with disabilities—particularly those receiving Supplemental Security Income (SSI)—face individual, family, and systemic barriers to achieving education and employment outcomes that can undermine the foundation for their longer-term success. In December 2017, about 1.2 million children received SSI payments totaling about $9.3 billion in that year (Social Security Administration [SSA] 2017a, 2018a). Nearly one-third of youth SSI recipients drop out of high school before reaching age 18, and 43 percent have problems in school that result in suspension or expulsion (Hemmeter et al. 2009). Youth receiving SSI also have lower rates of competitive employment and lower wages relative to the general population of youth (Honeycutt et al. 2017a, 2017b). In addition, the large number of children with disabilities who receive SSI generates concerns about the long-term fiscal burden on the federal government because many of these children will continue to receive SSI and other public assistance as adults.

PROMISE—Promoting Readiness of Minors in SSI—was a joint initiative of the U.S. Department of Education (ED), SSA, the U.S. Department of Health and Human Services, and the U.S. Department of Labor to address critical issues related to supporting youth with disabilities by funding and evaluating programs designed to promote positive change in the lives of youth who were receiving SSI and their families. Under cooperative agreements with ED, six state agencies across 11 states implemented model demonstration projects in which they enrolled SSI youth ages 14 through 16. Under contract to SSA, Mathematica Policy Research is conducting the national evaluation of how the programs were implemented and operated, their impacts on youth and family outcomes, and their cost-effectiveness.

This report presents the estimated impacts of the six PROMISE programs on outcomes related to service receipt, education, employment, expectations, health insurance coverage, income, and youth self-determination, and on participation in SSA and other public assistance programs for youth and their families. The impacts on the primary outcomes were measured at 18 months after youth enrolled in the PROMISE evaluation. It is important to note that for some of the outcomes we report, 18 months after PROMISE enrollment is too early to draw conclusions about the impacts of the program. Nonetheless, we include an assessment of these outcomes because it allows us to capture early changes in them that will help us interpret the findings from the planned five-year impact analysis. The report also presents findings from an analysis of the costs of PROMISE program services and summarizes findings from the implementation analysis.

A. The PROMISE conceptual framework

The federal partners expected that the entities implementing the PROMISE programs would draw on their experiences with the target population and on evidence of best practices to identify innovative ways to provide services to improve the economic self-sufficiency of SSI youth and their families. Based on their review of the literature, input from the public, and consultation with subject matter experts, the federal partners postulated that two main features of the PROMISE programs would make them more effective: (1) strong partnerships between the agencies that provide services to SSI youth and their families, and (2) an individual- and family-centered approach to case management and service delivery. The federal partners also identified a set of services that could achieve the desired results and thus required the PROMISE programs to include the following core components (ED 2013a):

- **Formal partnerships between state agencies** that provide the following services: vocational rehabilitation (VR) services, special education and related services, workforce development services, Medicaid services, income assistance from Temporary Assistance for Needy Families, and services provided by federally funded state developmental disability and mental health services programs
- **Case management** to ensure that PROMISE services would be appropriately planned and coordinated, help participants navigate the broader service delivery system, and help with transition planning for post-school goals and services
- **Benefits counseling and financial education** for youth and their families on SSA work incentives, eligibility requirements of various programs, rules governing earnings and assets, and topics promoting families' financial stability
- **Career and work-based learning experiences, including paid and unpaid work experiences** in an integrated setting while they were in high school
- **Parent training and information** in two areas: (1) the parents' or guardians' role in supporting and advocating for their youth to help them achieve their education and employment goals, and (2) resources for improving the education and employment outcomes of the parents or guardians and the economic self-sufficiency of the family (hereafter, we use "parents" to refer to parents and guardians)

These core program components were intended to address a range of personal barriers faced by youth with disabilities (such as low familial expectations regarding education and employment, fear of benefit loss, and limited education and skills). These personal barriers and the mitigating effects of the PROMISE components on them influence the education, employment, and financial security of SSI youth and their families. The PROMISE components were also intended to address some of the environmental factors that are important determinants of the education, employment, and financial outcomes of SSI youth and their families, including inadequate services, limited service coordination, and societal perceptions of disability. Last, the PROMISE components were intended to affect a variety of short- and long-term outcomes related to service receipt, education, employment, expectations, health insurance coverage, income, youth self-determination, and participation in SSA and other public assistance programs.

B. The PROMISE programs

In September 2013, ED announced that it had awarded $211 million over five years to five individual states and one consortium of six states to design and implement PROMISE demonstration programs. ED subsequently increased the awards to $230 million over six years after awarding supplemental funding and an extension of the award period. The awards were issued as cooperative agreements, signed by the states' governors, which entailed an ongoing working relationship between ED and the awardees to achieve the objectives of the PROMISE initiative. The awardees were state agencies that had formed partnerships with other agencies to implement PROMISE. They were selected through a competitive process that included a request for applications (ED 2013a), the preparation and submission of applications by state agencies, and a review of the applications by a panel of external peers convened by ED.

Given their substantial investment in PROMISE and the pressing needs of transition-age SSI youth and their families, the federal sponsors had three key requirements for the PROMISE

programs (ED 2013a). First, they required that each of the programs enroll a minimum of 2,000 youth in the national PROMISE evaluation. Second, they required each program to include the initiative's four core service components described above. Third, the sponsors required each program to develop partnerships with agencies responsible for providing services to SSI youth and their families.

Table ES.1 lists the six PROMISE programs, along with information about their locations, enrollment periods, service delivery end dates, and number of youth included in the research sample for the evaluation. Three programs (Achieving Success by Promoting Readiness for Education and Employment [ASPIRE], California PROMISE [CaPROMISE], and Wisconsin [WI] PROMISE) were led by state VR agencies; the remaining three were led by other types of state agencies. Each PROMISE program reflected the required partnerships and implemented the core service components. All of the programs began enrolling families in 2014 and planned to deliver services to them through September 2018, and some will deliver services longer.

Table ES.1. The six PROMISE programs

Program name and lead agency	Location	Enrollment period	Planned end date for services	Number of youth in research sample
Arkansas PROMISE; Arkansas Department of Education	25 of the state's 75 counties, grouped into four administrative regions	9/2014–4/2016	6/2019	1,805
ASPIRE; Utah State Office of Rehabilitation	Statewide in six consortium states: Arizona, Colorado, Montana, North Dakota, South Dakota, and Utah	10/2014–4/2016	3/2019	1,953
CaPROMISE; California Department of Rehabilitation	18 local sites covering 20 local educational agencies (LEAs)	8/2014–4/2016	6/2019	3,097
MD PROMISE; MD Department of Disabilities	Statewide	4/2014–2/2016	9/2018	1,866
NYS PROMISE; NYS Office of Mental Health and Research Foundation for Mental Hygiene	In three regions: the Capital Region, Western New York, and New York City	10/2014–4/2016	8/2019	1,967
WI PROMISE; WI Department of Workforce Development, Division of Vocational Rehabilitation	Statewide	4/2014–4/2016	9/2018	1,896

MD = Maryland, NYS = New York State.

C. The evaluation design

The PROMISE impact analysis is based on a random assignment design (Fraker et al. 2014a). PROMISE-eligible youth who agreed to participate in the evaluation were randomly assigned with equal probability to either a treatment group, which meant that they were eligible to receive PROMISE services, or to a control group, which meant that they were not eligible for PROMISE services but could receive other services available in their communities, independent of the PROMISE program.[1] The evaluation design allowed us to assess the extent to which the PROMISE programs affected participation in youth transition and family support services while accounting for the fact that similar services were available to the control group from other

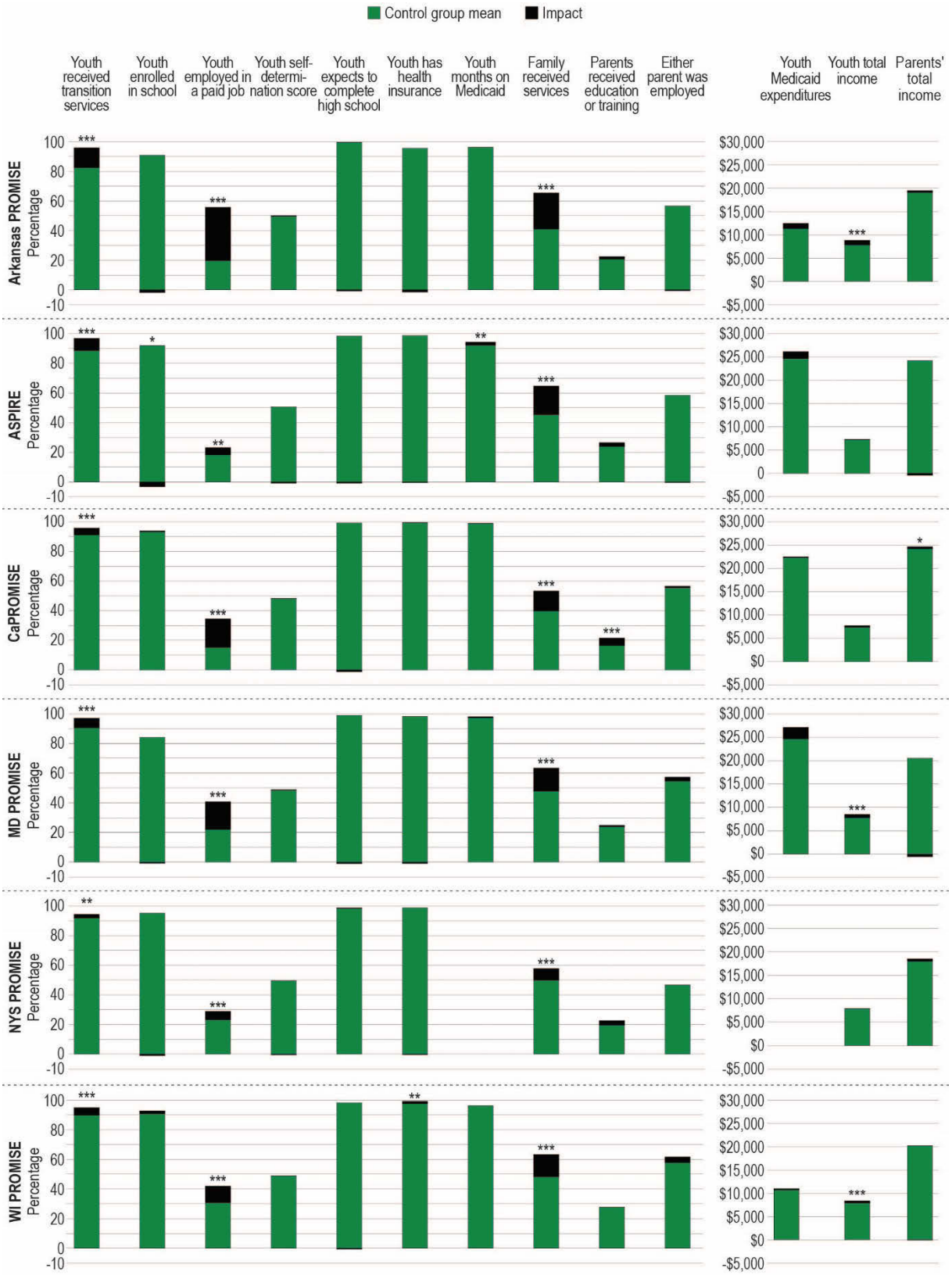
[1] To be eligible for PROMISE, youth had to be age 14 through 16 at the time of enrollment, in SSI current pay status at some time during the PROMISE enrollment period (and not terminated from SSI before enrolling in the evaluation), living in a PROMISE program service delivery area, and not residing in an institution.

sources. Random assignment is expected to lead to the creation of two groups of youth with similar pre-intervention experiences and characteristics, on average. As a result, we can attribute any observed differences in outcomes between the two groups to be an accurate estimate of the impacts of the program. The impact analysis findings presented in this interim report show whether each PROMISE program improved the outcomes of the youth and families who were offered PROMISE services 18 months after they enrolled in the evaluation.

D. Findings from the interim impact analysis

The estimated impacts on primary youth and family outcomes were generally similar across the six PROMISE programs (Figure ES.1). Estimated impacts on secondary outcomes are not shown in the figure; they can be found in the main text of the report. Each of the six programs increased youth's receipt of transition services, youth's paid employment, and family member receipt of support services during the first 18 months after enrollment. None of the programs had an impact on the number of hours of key services that youth and families received, but four programs (Arkansas PROMISE, ASPIRE, CaPROMISE, and WI PROMISE) increased the likelihood that youth applied for VR services (not shown in the figure). Each program had a positive impact on youth's receipt of job-related training or training credentials (not shown in the figure). Four of the programs (Arkansas PROMISE, CaPROMISE, MD PROMISE, and WI PROMISE) had positive impacts on youth's total income from earnings and SSA payments. Only CaPROMISE reduced youth's receipt of any SSA payments (not shown in the figure), and increased parents' education and job-related training. By 18 months after enrollment, none of the programs had a desirable impact on youth's self-determination and expectations or youth's reliance on Medicaid, nor on parents' total income. We also found that impacts on youth and parent outcomes varied for specific subgroups of youth, particularly by their age at enrollment and primary impairment, and, for ASPIRE, by state.

Figure ES.1. PROMISE program impacts on primary outcomes

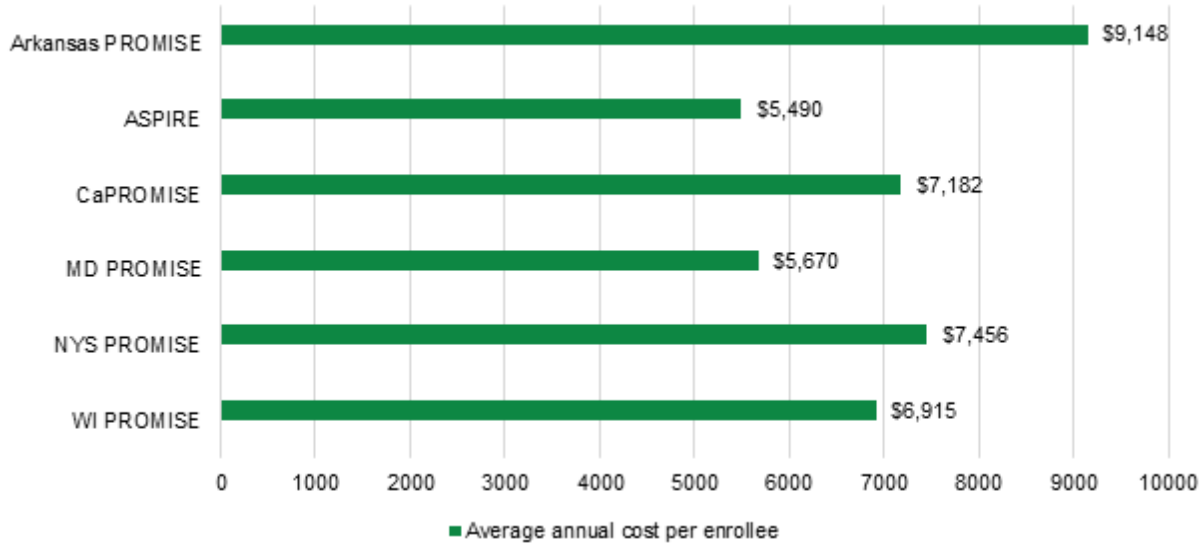


Source: PROMISE 18-month survey, SSA administrative records.
*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

E. Findings from the cost analysis

We analyzed the costs of PROMISE program services during a period when operations were in a relatively steady state—that is, after the programs had completed enrollment and were neither ramping up nor winding down services. Although we will not conduct a formal benefit-cost analysis of the PROMISE programs until the five-year impact findings are available, conducting the cost analysis now has allowed us to obtain the detailed cost and programmatic data needed for that analysis. The average annual cost per treatment group enrollee ranged from $5,490 for ASPIRE to $9,148 for Arkansas PROMISE (Figure ES.2). These costs include the estimated annual costs of providing services to both the youth and their family members. In addition, direct services delivered to youth and their families accounted for the majority of program costs for each PROMISE program, even though the share of costs accounted for by direct services varied across programs. Among direct services, case management services constituted the largest share of total costs in all programs, followed by career services and work-based learning experiences in most programs.

Figure ES.2. Annual costs per treatment group enrollee, by PROMISE program



F. Discussion of the evaluation findings

The positive short-term impacts of the PROMISE programs on youth's receipt of transition services, youth employment, and families' receipt of support services suggest that the programs have the potential for longer-term positive impacts on youth and family outcomes. We might also expect longer-term positive impacts if PROMISE service delivery continued to improve over time. All of the PROMISE programs experienced early implementation challenges, which they attempted to address as they gained more experience with their service models and the families on their caseloads. In addition, during the first two years of implementation, the programs focused heavily on recruiting and enrolling large numbers of families in the study, which might have limited the ability to provide services to early treatment group enrollees. These factors may have constrained some of the impacts we observe as of 18 months after enrollment. Furthermore, it might take additional time for services to translate into impacts for some youth

and family outcomes. The national evaluation's five-year impact analysis will indicate whether the important early impacts we identified translate into meaningful and persistent improvements in the employment and economic well-being of youth and families enrolled in the PROMISE programs and whether new impacts emerge. Below we highlight key findings across the programs and provide additional discussion of their significance and possible explanations for them.

Programs' impacts on services for youth and their families are in line with the core components of services required under the PROMISE initiative. All six PROMISE programs increased services to youth and their families, as intended. Even though each program varied in the way it delivered youth transition services and emphasized family support services, the impacts were largely consistent across programs for different types of services. Across programs, the impacts were more prominent for case management, employment-promoting services, benefits counseling, financial education, and parent training and information about youth's disability—all required as core services under PROMISE. Also, each program had a positive impact on youth's receipt of job-related training or training credentials, likely reflecting the fact that each program focused on engaging youth in work-based learning experiences. The impacts were more modest for education or training supports and employment-promoting services to parents and families, which were not part of the required core components of family services.

The lack of impacts on total hours of services received by youth and their families likely reflects relatively service-rich environments, conflated survey responses about school-based services, and the substitution of existing services for PROMISE services. No PROMISE program increased the total number of hours of transition services received by youth despite the increase in youth's likelihood of service receipt. Three factors potentially explain this lack of impact. First, youth and families in the control group reported receiving a relatively large number of hours of services available in their communities even without the program, suggesting a relatively service-rich environment, which usually reduces the chances of program impact on hours of services. Second, control group youth received more transition services in school settings, where survey respondents' reports of service hours are more likely to conflate hours spent specifically on transition services with those spent on usual school activities. Once we accounted for this possibility by excluding school-based service providers from our analysis, two programs—Arkansas and WI PROMISE—showed impacts on the hours of key transition services received by treatment group youth. Third, some youth and parents may have substituted PROMISE services for services and providers with which they would have engaged in the absence of the program. To the extent PROMISE programs were able to deliver high quality services more efficiently in fewer hours, they still might lead to longer-term improvements in youth and family outcomes, despite the lack of an impact on the number of hours of key services received.

Each program was effective in helping youth obtain paid work experiences, but mainly in short-term jobs. Each PROMISE program had positive impacts on youth's likelihood of having paid employment at some point during the 18 months after enrollment. The impacts reflect the programs' focus on career and work-based learning experiences. However, the programs either had no impact (ASPIRE and NYS PROMISE) or much smaller impacts (the remaining four programs) on the likelihood of youth paid employment at the time of the 18-month survey than their impacts on youth's paid employment at any time during the 18-month

period. This finding suggests that most of the employed youth had short-term jobs during the 18-month period after they enrolled in the evaluation, and supports the idea that the jobs were more program outputs than impacts. Because most of the youth were of school age at the time of the 18-month survey, we would not expect impacts on long-term employment.

The magnitude of impacts on youth employment and earnings varied across programs. Though all six programs had positive impacts on the youth's likelihood of having paid employment at some point during the 18 months after PROMISE enrollment, the magnitude of the impacts varied substantially across programs. Arkansas PROMISE had the largest impact on youth employment, increasing the likelihood of paid employment by 184 percent relative to the control group. NYS PROMISE and ASPIRE had the smallest impacts, each increasing the likelihood of paid employment by about 25 percent relative to the control group. Differences in the magnitudes might be related to a program's ability to meet key benchmarks. For example, NYS PROMISE fell substantially short of its benchmarks for referrals to unpaid and paid work experiences. ASPIRE set a goal of having 95 percent of youth engage in career exploration activities during each year of enrollment, but only about half of youth had done so by three years after enrollment began. Arkansas PROMISE was closer to achieving its service delivery benchmarks during that period. Impacts on earnings followed a similar pattern, with ASPIRE and NYS PROMISE having no measurable impact on earnings during the calendar year after random assignment (based on SSA data) and Arkansas PROMISE having the largest impact on earnings (164 percent of the control group mean). The other three PROMISE programs had positive impacts on youth earnings during the first calendar year after random assignment, and the magnitude of the impacts varied from 19 percent in MD PROMISE, to 45 percent in CaPROMISE, and 51 percent in WI PROMISE relative to the mean earnings among the corresponding control group youth in each program. Note that the extent to which the programs paid or subsidized youth wages may have contributed to the differences in earnings impacts; all programs except ASPIRE paid wages for at least some youth, with Arkansas PROMISE doing so most extensively.

Lack of impacts on youth self-determination might reflect the need for more time to pass for such impacts to manifest themselves, but could also reflect the limitations of our measure. No program had positive impacts on youth self-determination as measured using self-reported information related to autonomy, psychological empowerment, and self-realization—three of the four subdomains of the ARC Self-Determination Scale. Although the programs might simply have failed to affect this outcome, the finding is somewhat surprising because nearly all of the programs provided youth with services specifically intended to promote self-determination, although take-up of this service was low in some programs. Because we assessed the impacts on self-determination 18 months after youth enrolled in the evaluation, it is possible that changes in self-determination require more time to materialize. The lack of impact could also partly reflect the exclusion of the self-regulation subdomain from our measure. Nonetheless, we found no desirable impacts on the three subdomains of self-determination that were captured by our measure.

For the programs that increased youth income, the impacts were driven by increased earnings rather than SSA payments. Four of the six programs—Arkansas PROMISE, CaPROMISE, MD PROMISE, and WI PROMISE—had positive impacts on youth total income from earnings and SSA payments during the year before the 18-month survey. The income

increases were primarily driven by positive impacts on earnings, not by changes in SSA payments. For two of these programs—MD and WI PROMISE—we found no impacts on the likelihood or amount of SSA payments. CaPROMISE decreased the share of youth receiving SSA payments (but had no impact on the average payment amount), whereas Arkansas PROMISE reduced the average SSA payment amount (but had no impact on the share of youth receiving such payments). Because of the young ages of the youth, we did not expect the programs to affect their SSA payments within 18 months of enrollment; the large majority were enrolled in school and thus not able to fully engage in the labor market, thereby limiting the potential for substantially reducing the receipt of SSA payments.

There are a few likely explanations for the lack of impacts on outcomes in several other youth domains. Most PROMISE programs had no impact on youth outcomes related to school enrollment, health, health insurance coverage, Medicaid, and SSA payments. The absence of impacts on these outcomes is likely explained by the high prevalence of the outcome among control group youth, the ages of the youth, and the lack of program services that directly addressed the outcome. In most contexts, the control group achieved the outcomes at high rates even without the program (for example, school enrollment and health insurance coverage). For outcomes that might be affected by long-term employment (for example, Medicaid enrollment and SSA payments), youth were still too young to expect the program to have had any measurable effect at 18 months after enrollment when most were still attending school. For other outcomes—those related to the youth's health—the programs, by design, did not directly offer services that would improve youth outcomes.

Although some programs had different impacts for different subgroups, there was no clear pattern across programs. We found evidence of varying impacts on youth and parent outcomes, particularly by primary impairment and youth's age at enrollment. For example, ASPIRE's impact on youth's receipt of transition services and MD PROMISE's impact on youth's Medicaid expenditures differed by primary impairment. The impacts of both Arkansas PROMISE and CaPROMISE on youth's receipt of transition services differed by age. Although it is important to recognize the heterogeneity of the short-term impacts, there was no meaningful pattern across programs in the magnitude or direction of the impacts for any subgroup or outcome.

Across programs, measures of youth earnings based on survey data are higher than that based on administrative data; the opposite is true for parents' earnings. We measured the youth's and parents' earnings using data from two sources: the 18-month survey and SSA records. For all six programs, the level of the youth's annual earnings based on survey data was higher than the level of earnings based on SSA data (for both the treatment and control groups). The difference in the level of earnings between survey and SSA data may reflect the difference in the reference period—the year before the survey for the former and calendar year after random assignment for the latter. The difference might also reflect informal jobs that youth had and reported via the survey, but were not captured in the administrative records. In addition, recall and reporting error in the survey in terms of duration of jobs or hours worked could lead to over- or under-estimation of youth annual earnings. We measured parents' earnings for the month before the survey using the 18-month survey data and for the calendar year after random assignment using SSA data. For all six programs, the level of annual earnings based on survey data was lower than the level of annual earnings measured from SSA data. Although these

differences may reflect the difference in the reference period, they are also aligned with recent research indicating that earnings estimates were consistently higher in SSA data relative to survey data (Wittenburg et al. 2018). This research also suggests that such differences are particularly pronounced for people with low income, which aptly describes the population targeted for PROMISE.

Three factors potentially explain the variation we observed in the programs' average annual and total costs per treatment group enrollee. First, the variation across programs in the average annual cost per enrollee depended on the extent to which the program provided services directly versus leveraging existing services available in the community. Arkansas PROMISE delivered or paid for most of its services directly, and its average annual cost per enrollee was high compared with the other programs. ASPIRE leveraged existing services to a relatively large extent, and its annual cost per enrollee was low compared with the other programs. If we were to account for the costs of services received from other agencies (that is, the cost of the existing services the programs leveraged), all of the programs' costs would be higher than our estimates. Second, the variation in total cost per enrollee is partly due to differences in the estimated average duration of service receipt. NYS PROMISE had the lowest estimated duration of service receipt, at 34.8 months; MD PROMISE had the highest, at 40.4 months. Third, programs might have underspent their award funding, which would be reflected in the carryover funds they would have available for the one-year, no-cost extension of the award. We did not include the time enrollees might receive services during the carryover period in our calculations. The underspending might reflect either a situation in which program costs were lower than expected or that actual delivery of services was of a lower intensity than intended.

PROMISE program services represent a relatively large investment on top of the federal expenditures that already support youth with disabilities. Across the six PROMISE programs, the average annual cost per treatment group enrollee ranged from $5,490 to $9,148. To put these costs into context, in 2014 the federal government spent an estimated $5,000 per youth with disability (under age 18) on public programs and supports specific to them or that represented assistance programs used by many such youth (Shenk and Livermore 2019).[2] Thus, the average annual cost per enrollee across the PROMISE programs was roughly similar to or greater than the average annual cost of all federal programs currently available to youth with disabilities. Though the PROMISE program costs include services provided to the youth's family members, they nonetheless represent a substantial additional investment to support the successful transition of SSI youth to adulthood.

Although the PROMISE evaluation's random assignment design for the impact analysis is strong, three factors might affect the estimated impacts. General macroeconomic conditions, federal policy changes, and state-level systems changes during the period covered by the interim impact analysis may have indirectly influenced PROMISE impacts. The period between the start of PROMISE program enrollment and the end of the 18-month follow-up was a time of general economic expansion for the U.S. economy, with declining unemployment rates.

[2] The estimates include the costs of supports and programs that specifically target youth with disabilities (for example SSI, VR, and special education) as well as the proportional costs of selected other public assistance programs that provide support to youth (for example, TANF, housing, and child nutrition programs).

Furthermore, two federal policy changes that might have improved youth access to services went into effect during this period: in 2014, WIOA was enacted, and in 2016, SSA began mailing a brochure to SSI recipients age 14 to 17 with information about the age-18 redetermination process, SSA work supports, and programs relevant to youth with disabilities. Moreover, the interagency collaborations required by the PROMISE initiative together with WIOA may have prompted state-level systems changes that affected service delivery to all transition-age youth. The extent to which these factors influenced the estimated impacts of PROMISE is unclear. Because they could have influenced the likelihood of receiving transition services and other outcomes among both treatment and control group youth we cannot surmise the magnitude or direction of their influence on the estimated impacts. Nonetheless, it is important to keep these factors in mind when interpreting the impact analysis findings.

G. Implications for policy and practice

The implications of the PROMISE evaluation for policy and practice will not be fully known until findings from the five-year impact and benefit-cost analyses become available. It would be premature to draw broad policy implications based on short-term impacts on services and outcomes for two reasons. First, key outcomes related to employment and earnings at the 18-month point can be considered outputs of the program, given the focus on providing work-based learning experiences. Second, exploring impacts on key outcomes such as youth and their families' reliance on SSA, Medicaid, and other public assistance in the longer term will be more appropriate and meaningful than at this stage of the evaluation. Consequently, we will wait until the five-year impact findings are available to draw broader policy implications. In addition, the five-year impact findings will allow us to qualitatively assess whether implementation factors and the characteristics of youth and families served by each program correlate with longer-term impacts. Such assessments are likely to generate valuable information for policymakers and practitioners. Meanwhile, we can discuss the following three implications of the findings presented in this report.

Even in a relatively service-rich environment, policymakers and practitioners may need to focus on specific service areas in which they would like to engage youth to improve their outcomes. Although each PROMISE program operated in a relatively service-rich environment (as measured by the fact that nearly all control group youth in all programs received some transition services and the large average number of transition service hours they received), the required focus on the core PROMISE services resulted in a greater share of youth receiving those services. In all PROMISE programs, more than 90 percent of control group youth received some transition services during the period after they enrolled in the evaluation. This finding suggests that the "business as usual" environment (without the program) in these states provided youth with opportunities to engage in some type of transition services, particularly through the school system. Yet the areas in which the PROMISE programs made a difference in the short term are aligned with the core components of the PROMISE initiative—case management, career services and work-based learning, benefits counseling, and financial education. Similarly, there were few, if any, short-term impacts on more distal outcomes (such as health status and substance use) not directly addressed through program services. Altogether, the findings suggest that even in rich service environments, youth may not have access to or take advantage of some transition services considered effective in improving their outcomes. Thus, there is still room for programs and policies to focus on improving access to such services.

The interim impact findings support the need for better coordination across agencies that support transition-age youth with disabilities. The promulgation of Workforce Innovation and Opportunity Act is likely to improve interagency collaboration among federal, state, and local agencies serving youth with disabilities. The PROMISE initiative also promoted partnerships among service providers and agencies at the federal, state, and local levels. Our interim impact findings suggest that such collaborations were fruitful in connecting youth to services and increasing the likelihood that they received particular types of transition services and work-based experiences. Thus, the interim impacts of PROMISE programs provide ground for supporting such collaboration and indicate the prospect for improving outcomes for the youth.

The impact findings suggest the importance of state environments in influencing the effectiveness of federal programs and policies. The experiences of the six PROMISE programs highlight the importance of the state environment in influencing program implementation and impacts. All six programs implemented similar core program components, but the impacts across the programs varied. As described in the programs' process analysis reports, each had different challenges and experiences while implementing aspects of PROMISE, some of which were unique to their service environments, such as whether a state VR agency was in order of selection and the nature of the service delivery partnerships they developed. We found different impacts by ASPIRE state for several of the primary outcomes even though ASPIRE was essentially the same program in all six consortium states. The PROMISE programs' experiences remind us that the impacts of even a focused, well-funded program with standard core components will vary depending on how states implement the program and the state and local service environments in which it operates.

I. INTRODUCTION

Youth with disabilities—particularly those receiving Supplemental Security Income (SSI)—face individual, family, and systemic barriers to achieving education and employment outcomes that can undermine the foundation for their longer-term success. Nearly one-third of youth SSI recipients drop out of high school before reaching age 18, while 43 percent have problems in school that result in suspension or expulsion (Hemmeter et al. 2009). Youth receiving SSI also have lower rates of competitive employment and lower wages relative to the general population of youth (Honeycutt et al. 2017a; Honeycutt et al. 2017b).

Along with the challenges faced by youth with disabilities, the large number of children with disabilities who receive SSI generates concerns about the long-term fiscal burden on the federal government because many of these children will continue to receive SSI and other public assistance as adults. In December 2017, about 1.2 million children received SSI payments totaling about $9.3 billion in that year (Social Security Administration [SSA] 2017a, 2018a). The child SSI program is an important pathway to the adult SSI program. Individuals who enter the federal disability programs at a young age may go on to receive benefits for many decades. Although the eligibility rules for adults are more stringent than those for children, approximately 60 percent of youth SSI recipients go on to receive SSI as adults (Hemmeter and Gilby 2009). Adults who receive SSI payments for decades incur large lifetime disability program and other expenditures. One study estimated that individuals who enter SSI or Social Security Disability Insurance (DI) as adults before the age of 30 remain on benefits for an average of 33 years and incur average SSI, DI, Medicare, and Medicaid expenditures of about $600,000 during that period, about twice the average of all working-age disability beneficiaries (Riley and Rupp 2015). About one in four adult SSI recipients, and nearly two in three adult SSI recipients under the age of 30, first started receiving benefits as children (SSA 2018b). The estimates above, therefore, suggest a potentially large lifetime fiscal burden for many youth SSI recipients.

Over the past decade, federal policymakers have identified as a high priority not only the improvement in the education and employment outcomes of youth with disabilities but also the reduction in their long-term dependence on SSI. Numerous federal programs offer income, health, education, employment, and other types of assistance for transition-age youth with disabilities (Honeycutt and Livermore 2018).[3] But despite this assistance, the education and employment achievements of youth with disabilities, particularly among those on SSI, continue to lag behind their peers (Newman et al. 2011; Loprest and Wittenburg 2007; Wittenburg and Loprest 2007; Wittenburg 2011). These differences reflect, in part, the challenges that youth and families face in accessing services and supports from the myriad of existing programs. Such challenges include different program eligibility rules, a fragmented service system, a lack of information about and awareness of available supports, and other factors that limit or delay youth and family access to necessary services and supports (Honeycutt and Livermore 2018).

PROMISE—Promoting Readiness of Minors in SSI—was a joint initiative of the U.S. Department of Education (ED), SSA, the U.S. Department of Health and Human Services, and the U.S. Department of Labor (DOL) to address these and other critical issues related to

[3] "Transition age" is typically defined as including ages 16 to 24. Youth targeted by PROMISE include those younger than what has been traditionally considered transition age.

supporting youth with disabilities by funding and evaluating programs designed to promote positive change in the lives of youth who were receiving SSI and their families. Under cooperative agreements with ED, six state agencies across 11 states implemented model demonstration projects in which they enrolled SSI youth ages 14 through 16.[4] The programs intended to (1) provide educational, vocational, and other services to youth and (2) make better use of existing resources by improving service coordination between state and local agencies. ED announced the PROMISE cooperative agreements in September 2013, and the programs began enrolling youth from April to October 2014; enrollment continued through April 2016. All programs delivered PROMISE services through September 2018, and some will deliver services longer.[5] Under contract to SSA, Mathematica Policy Research is conducting the national evaluation of the following: how the programs were implemented and operated, their impacts on SSI payments and education and on employment outcomes for youth and their families, and their cost-effectiveness.[6]

This report presents the estimated impacts of the six PROMISE programs after 18 months on outcomes related to service receipt, education, employment, expectations, health insurance coverage, income, and youth self-determination, and on participation in SSA and other public assistance programs for youth and their families. It is important to note that for some of the outcomes we report, 18 months after PROMISE enrollment is too early to draw conclusions about the impacts of the program. Nonetheless, we include an assessment of these outcomes because it allows us to capture early changes in them that will help us interpret the findings from the planned five-year impact analysis. The impact analysis relies on an experimental design under which eligible youth who applied to the programs were randomly assigned to either a treatment group with an opportunity to receive PROMISE services or to a control group with access to the usual services available in the community other than those provided by PROMISE. We also present findings from an analysis of the costs of PROMISE program services and summarize findings from the implementation analysis.

A. The PROMISE conceptual framework

The inability of many youth with disabilities to overcome the challenges described above can limit their success as they become adults. The federal partners sponsoring PROMISE envisioned programs that would address many of these challenges in fundamental ways, including by providing services not just to the youth but to their families as well and by improving partnerships between the service-providing agencies at the federal, state, and local levels.

[4] Hereafter, we refer to the PROMISE model demonstration projects as "PROMISE programs."

[5] The PROMISE cooperative agreements were initially scheduled to end on September 29, 2018, but they were subsequently extended by up to one year, through September 29, 2019. With that extension, the service delivery period for some programs also changed—service delivery ended for Maryland (MD) and Wisconsin (WI) in September 2018. Service delivery will end for Achieving Success by Promoting Readiness for Education and Employment (ASPIRE) in March 2019, Arkansas and California in June 2019, and New York State (NYS) in August 2019.

[6] Each PROMISE program also conducted its own formative evaluation.

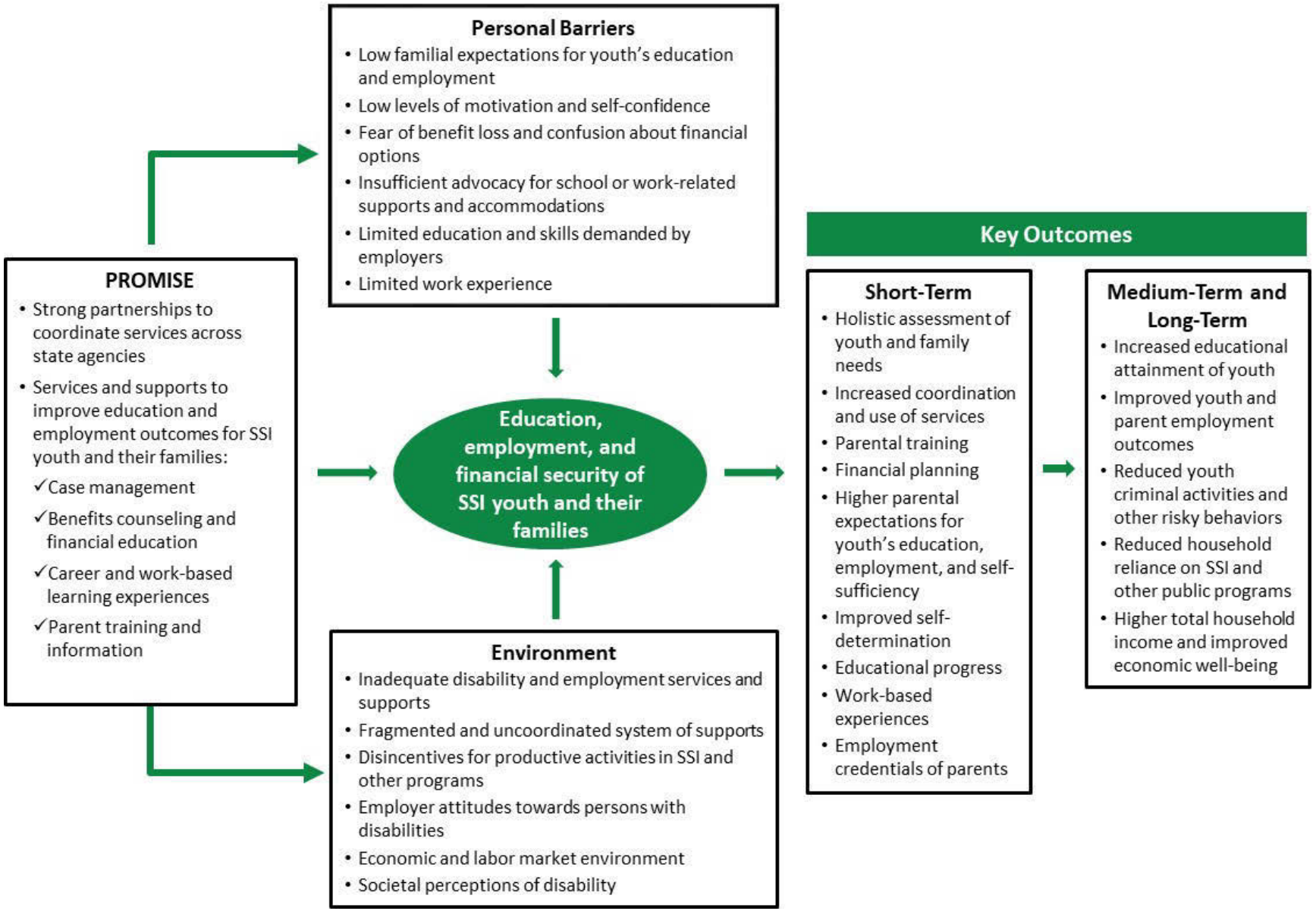
The federal partners expected that the entities awarded funding to implement the PROMISE programs would draw on their experiences with the target population and on evidence of best practices to identify innovative ways to provide services to improve the economic self-sufficiency of SSI youth and their families. Based on their review of the literature, input from the public, and consultation with subject-matter experts, the federal partners postulated that two main features of the PROMISE programs would make them more effective: (1) strong partnerships between the agencies that provide services to SSI youth and their families and (2) an individual- and family-centered approach to case management and service delivery. The federal partners also identified a set of services that could achieve the desired results and thus required the PROMISE programs to include the following core components (ED 2013a):

- **Formal partnerships between state agencies.** The PROMISE programs were required to have as partners the state agencies that were responsible for administering programs that provide the following services: state vocational rehabilitation (VR) services under Title I of the Rehabilitation Act, special education and related services under Part B of the Individuals with Disabilities Education Act, workforce development services under Title I of the Workforce Investment Act, Medicaid services under Title XIX of the Social Security Act, income assistance from Temporary Assistance for Needy Families (TANF) under the Personal Responsibility and Work Opportunity Reconciliation Act, and services provided by federally-funded state developmental disability and mental health services programs.
- **Case management.** The programs were required to provide case management to ensure that PROMISE services would be appropriately planned and coordinated, and to help participants navigate the broader service delivery system. In addition to service coordination, case management had to include transition planning to help participating youth to set post-school goals and to facilitate their transition to appropriate post-school services.
- **Benefits counseling and financial education.** The PROMISE programs were required to provide counseling for youth participants and their families on SSA work incentives, eligibility requirements of various programs, and rules governing earnings and assets. The programs were also required to provide financial education, which may cover a range of topics related to promoting families' financial stability, such as budgeting, saving and asset building, tax preparation, consumer credit, and debt management.
- **Career and work-based learning experiences.** The programs were required to ensure that participating youth had at least one paid work experience in an integrated setting while they were in high school. In addition, the programs were required to provide other work-based experiences in integrated settings, such as volunteer activities, internships, workplace tours, and on-the-job training.
- **Parent training and information.** The programs were required to provide information and training in two areas to the families of youth participants: (1) the parents' or guardians' role in supporting and advocating for their youth to help them achieve their education and employment goals and (2) resources for improving the education and employment outcomes of the parents or guardians and the economic self-sufficiency of the family.[7]

[7] Hereafter, we use "parents" to refer to parents and guardians.

Figure I.1 shows the conceptual framework underlying PROMISE. The core program components are in the far left box. They were intended to address the set of personal barriers for youth with disabilities shown in the red box at the top of the figure (for example, low familial expectations regarding education and employment, fear of benefit loss, and limited education and skills). These personal barriers and the mitigating effects of the PROMISE components on them influence the education, employment, and financial security of SSI youth and their families shown in the center oval. The PROMISE components were also intended to address some of the environmental factors, shown in the lowest box, that are important determinants of the education, employment, and financial outcomes of SSI youth and their families, including inadequate services, limited service coordination, and societal perceptions of disability. Last, the PROMISE components were intended to affect a variety of short- and long-term outcomes listed in the two boxes on the right side of the figure. We describe these outcomes in Chapter II.

Figure I.1. PROMISE conceptual framework



Source: Fraker et al. (2014a)

B. The PROMISE programs

In September 2013, ED announced that it awarded $211 million over five years to five individual states and one consortium of six states to design and implement PROMISE demonstration programs. ED subsequently increased the awards to $230 million over six years after awarding supplemental funding and an extension of the award period. These awards were issued in the form of cooperative agreements that entailed an ongoing working relationship between ED and the awardees to achieve the objectives of the PROMISE initiative and the agreements were signed by the states' governors. The awardees were state agencies that had formed partnerships with other agencies for the purpose of implementing PROMISE. They were selected through a competitive process that included a request for applications (ED 2013a), the preparation and submission of applications by state agencies, and a review of the applications by a panel of external peers convened by ED.

Given their substantial investment in PROMISE and the pressing needs of transition-age SSI youth and their families, the federal sponsors had three key requirements for the PROMISE programs (ED 2013a). First, they required that each of the programs enroll a minimum of 2,000 youth in the national PROMISE evaluation. Second, they required each program to include the initiative's four core service components that research suggests are the foundation for good transition programs: case management, benefits counseling and financial education, career and work-based learning experiences, and parent training and education (as described above in Section A). Third, consistent with the initiative's fifth core component, the sponsors required each program to develop partnerships with agencies responsible for providing services to SSI youth and their families.

The six PROMISE demonstration programs were implemented in Arkansas, California, Maryland (MD), New York State (NYS), Wisconsin (WI), and a consortium of six western states known collectively as Achieving Success by Promoting Readiness for Education and Employment (ASPIRE). These six states were Arizona, Colorado, Montana, North Dakota, South Dakota, and Utah. Among the 11 states implementing PROMISE programs, VR agencies were the lead agency in five states. The lead agencies in the remaining six states included state departments of education, public health, and mental health.

Each of the PROMISE programs reflected the required partnerships and implemented the core service components. Although the federal partners specified those components, they did not prescribe how they should be implemented; rather, each program proposed its own approach to each component. Each program also developed its own logic model that reflected the state's (or the consortium's) experience with SSI youth, its understanding of best practices for serving youth with disabilities, and its familiarity with transition environments. Each awardee was also free to specify its service delivery area and the structure of its proposed PROMISE program. All of the programs began enrolling families in 2014 and planned to deliver services to them until the cooperative agreements ended. For each PROMISE program, Table I.1 summarizes the enrollment period, the lead agency and award amount (including supplemental funding), selected partner agencies, and how the program implemented the initiative's four core service components as well as two additional ones: education services and other services. Note that the table shows only the partners that delivered PROMISE-specific services. The especially salient features of each program are described below.

Arkansas PROMISE delivered services to youth and their families in four multi-county regions of the state. The program was designed to provide youth with education- and employment-related services—including at least two summer work experiences of 200 hours each—through staff who are transition specialists and through local workforce programs. The program also offered education and training on transition and employment issues to youth and parents during monthly workshops, which were often held on college campuses. It also offered a summer camp that exposed youth to the environment of a college campus and provided training on academic readiness, careers, self-advocacy, and health and wellness. Also, case managers had access to discretionary funds that allowed them to address the urgent needs of youth and families, such as utility and telephone bills, transportation expenses, tuition and the costs of tutoring services, computers, and school supplies.

ASPIRE implemented the required service components in diverse settings—urban, rural, frontier, and Native American communities—in six states. In addition to the required components, ASPIRE offered self-determination training to youth. The program leveraged existing services to deliver the core ASPIRE services other than case management. Program services and staff training were standardized, and a centralized leadership team monitored implementation across the consortium states. However, implementation varied widely by state with respect to the agencies and staff delivering the services, the times at which specific services were made available to families, and the service delivery method.

CaPROMISE proposed a higher enrollment target and received more funding than the other PROMISE programs to serve more families (see Table I.1). The program operated in four regions of California, where local educational agencies (LEAs) served as local programs. Specifically, 20 LEAs formed 18 local programs, with one consortium program comprising three LEAs. The local program staff conducted outreach and recruitment, and CaPROMISE career service coordinators hired by the local programs provided the majority of program services. Local programs partnered with family resource centers and independent living centers to provide services to youth and families. The work of CaPROMISE staff was supported by technology in a number of areas, such as an informational website for participants, a web-based data management system for staff, video resumes for participants, and assistive technology supports (including smart touch-screen technologies for participants and family members).

MD PROMISE was implemented statewide and featured an assertive case management model in which multidisciplinary teams delivered person- and family-centric services in community-settings to program participants. One member of the team focused on providing employment-related services, including paid and unpaid work experience, job search services, and employer outreach services. The team referred participants both to benefits counseling provided by certified work incentives counselors and to financial education classes, financial counseling, and financial coaching provided by a contracted service provider. It also linked participants and their families to adult and postsecondary education services and otherwise supported youth in meeting their education goals.

Table I.1. The PROMISE programs and their key features

PROMISE program and enrollment period	Lead agency and award amount	Partners delivering PROMISE-specific services	Case management	Benefits counseling and financial literacy training	Career and work-based learning experiences	Parent training and information	Education	Other services
Arkansas PROMISE; September 2014 – April 2016	Arkansas Department of Education; $35,814,845	VR, workforce investment boards, ILC, postsecondary education, and University of Arkansas College of Education and Health Professions	Program staff provide case management services to participants and families; local monthly group training sessions for participants and families; participants develop plans for employment and education	Benefits counseling offered through ILC; financial training offered by program staff	Program staff provide employment supports and referrals to VR; participants receive two summer work experiences of 200 hours each with job coaching services (as needed)	Program staff offer case management, training, and other services, including referrals to parents; parents develop plans for employment and education	Program staff provide school supports, including attendance at IEP meetings and visits to postsecondary institutions	Self-determination and self-advocacy training offered by program staff through monthly group trainings; summer camp at college campus
ASPIRE; October 2014 – April 2016 (Enrollment started in October 2014 in South Dakota and Utah, November 2014 in Colorado, December 2014 in North Dakota, February 2015 in Arizona, and March 2015 in Montana)	Utah State Office of Rehabilitation; $36,287,500	*Arizona*: Governor's Office of Youth, Faith, and Families; education; and program service providers *Colorado*: VR and program service providers *Montana*: Division of Disability Employment and Transitions, education, and program service providers *North Dakota:* Minot State University and program service providers *South Dakota:* VR, Black Hills Special Services Cooperative, and program service providers *Utah:* VR and program service providers	Program staff, typically employed by the lead agency in each state, provide case management to participants and families, help participants set goals, and connect families to resources and employment opportunities	Benefits counseling offered mainly through WIPA programs; financial literacy training offered by program service providers	Program staff help participants access work experiences through existing resources, typically VR or school-based programs, assist with job applications, and arrange volunteer opportunities	Parent Training and Information Centers deliver parent training; program staff offer case management and linkages to resources to assist with parent education and employment goals	Program staff provide school supports, including attendance at IEP meetings, and assistance with postsecondary education exploration and support	Program staff or program service providers offer self-determination training to participants; program staff support other activities to build youth self-determination, leadership, and social skills

TABLE I.1 *(continued)*

PROMISE program and enrollment period	Lead agency and award amount	Partners delivering PROMISE-specific services	Case management	Benefits counseling and financial literacy training	Career and work-based learning experiences	Parent training and information	Education	Other services
CaPROMISE; August 2014 – April 2016	California Department of Rehabilitation; $55,077,500	San Diego State University Interwork Institute, LEAs, state universities, family resource centers, and ILCs	Program staff provide case management to participants and families; participants create a person-driven plan for services and an individual career action plan	Program staff hired by LEAs and trained as certified work incentives counselors provide benefits counseling and financial literacy training; use of Disability Benefits 101 online tool	Employment services, including paid and unpaid work experiences and targeted training activities, provided by program staff directly as well as by VR counselors dedicated to PROMISE; additional supports provided through specialized program staff (such as job developers and job coaches)	Program staff provide support to parents, including resources and referrals to VR and other programs; ILCs and family resource centers offer training and referrals	Program staff make referrals or provide school supports, including attendance at IEP meetings, advocacy for participants' needs, and drop-out prevention; postsecondary education linkages	Program staff make referrals for or provide (1) youth development and leadership training, including self-advocacy skills; (2) health behavior management and wellness services; (3) access to assistive technology assessments and devices; (4) training in independent living skills
MD PROMISE; April 2014 – February 2016	Maryland Department of Disabilities; $33,090,076	Program service providers	Program staff and family employment specialists hired by a program service provider deliver case management services for participants and family members, develop plans describing participants and family members' goals, and outline the steps to achieve them	Benefits and financial counseling and education offered by program service providers	Program staff hired by program service provider deliver employer outreach and job seeker services and arrange paid and unpaid work experiences	Program staff deliver case management and employment services to parents	Program staff provide secondary school supports, including attendance at IEP meetings, and postsecondary education linkages	None

TABLE I.1 *(continued)*

PROMISE program and enrollment period	Lead agency and award amount	Partners delivering PROMISE-specific services	Case management	Benefits counseling and financial literacy training	Career and work-based learning experiences	Parent training and information	Education	Other services
NYS PROMISE; October 2014 – April 2016	New York State Office of Mental Health and Research Foundation for Mental Hygiene $33,450,779	LEAs, parent centers, program service providers, and Cornell University K. Lisa Yang and Hock E. Tan Institute on Employment and Disability	Program staff, typically employed by LEAs, provide case management to youth, develop intervention plans, and make referrals for services	Benefits counseling and financial literacy training offered by program service providers	Community-based workplace assessments, career planning and preparation, and unpaid and paid work experiences and employment supports delivered by program service providers and employment specialists employed by the Research Foundation for Mental Hygiene	Parent centers provide case management to parents, develop intervention plans, make referrals, and deliver parent training	Program staff offer secondary school supports, including attendance at IEP meetings, and postsecondary school supports	Program maintains a website with resources related to self-determination and self-advocacy and offers day habilitation specialists to assist the independent living skills of youth with more severe disabilities
WI PROMISE; April 2014 – April 2016	Wisconsin Department of Workforce Development, Division of Vocational Rehabilitation; $36,084,681	Program service providers	VR counselors develop individualized plans for employment for youth, refer participants and parents to program services, and help participants develop resource teams	Work incentives counselors through multiple program service providers deliver benefits counseling; program service provider delivers financial literacy training and opens matched individual development accounts	Work experiences and employment supports offered through VR	Program service provider delivers parent training and refers parents to community resources	VR counselors provide school supports, including attendance at IEP meetings	VR counselors help participants complete health promotion and literacy training; program service providers deliver social skills training

Source: Honeycutt et al. (2018b); ED (2013b).

IEP = individualized education program; ILC = independent living center; WIPA = Work Incentives Planning and Assistance.

NYS PROMISE was implemented in three diverse geographic areas—western New York, the capital region (Albany), and New York City—representing rural, suburban, and urban areas of the state. Within these areas, seven research demonstration sites (RDSs) were recruited to participate in the program; their boundaries were determined by LEAs that were selected on the basis of previous statewide research and high scores on key transition indicators. The RDSs provided case management to youth; parent centers in the RDSs provided case management and training to parents; and service providers in those areas delivered employment and education services, benefits counseling, and financial literacy training to youth and parents. The RDSs issued electronic referrals for services to service providers registered in the New York Employment Services System, a multi-agency data management system focused on employment services and supports. Payments to service providers were outcome-based rather than fee-for-service. The program also assigned a case manager to each youth in the control group.

WI PROMISE was implemented statewide and established resource teams for all youth in the treatment group. The composition of a team varied with the needs of each participant; however, a team typically consisted of a school representative, a mental health case manager, a child welfare or TANF case manager, and a PROMISE Division of Vocational Rehabilitation counselor who also served as the team leader. As part of the program's financial education services, participating youth were offered the opportunity to open individual development accounts. The program also delivered soft skills training to youth to help with their employability. In addition, self- and family advocacy was part of the Wisconsin PROMISE service model, as well as the development of family service plans for family members.

C. The PROMISE evaluation

The federal sponsors of the PROMISE initiative are keenly interested in whether and how the PROMISE programs achieved their goals and whether the benefits of the programs outweighed their costs. In response to the interests of the program sponsors, the PROMISE evaluation was designed with the key research questions shown in Table I.2 in mind. These questions were initially presented in the PROMISE evaluation design report (Fraker et al. 2014b).

The evaluation is answering the key questions about PROMISE through the three analyses in Table I.2. First, we conducted a **process analysis** of each PROMISE program that analyzed the programs' activities during the first three years after they began enrolling participants. Each process analysis documented the program model and the context in which it was implemented, examined the relationships between the partner organizations, assessed program implementation and considered how well the intended intervention was delivered, identified features of the program that may have accounted for its impacts on youth and families, and described lessons for future programs with similar objectives (Anderson et al. 2018, Honeycutt et al. 2018a, Kauff et al. 2018, Matulewicz et al. 2018b, McCutcheon et al. 2018, Selekman et al. 2018).

Table I.2. Key research questions by evaluation component

Research question	Process analysis	Impact analysis	Benefit-cost analysis
1. How were the programs designed, implemented, and operated, and what factors contributed to the implementation experience?	X		
2. Did PROMISE participants receive more and better transition and supportive services than control group participants?	X	X	
3. Did the PROMISE programs achieve their intended outcomes with respect to educational attainment, employment credentials, employment, SSI payments, other public benefits, and total household income?		X	
4. Were the PROMISE programs more effective for some youth and families than for others?		X	
5. Which program features were associated with achievement of the goals of the PROMISE initiative?	X	X	
6. Were the benefits of the PROMISE programs, including increased employment and earnings and reduced benefit receipt, large enough to justify their costs?		X	X
7. How might programs similar to PROMISE be strengthened in the future?	X		

Source: Fraker et al. (2014b)

Second, through site-specific **impact analyses**, we are assessing the extent to which each program achieved the intended improvements in the short- and long-term outcomes shown in Figure I.1 for participants and their families. A subgroup analysis is assessing whether some groups of participants benefited more than others from the program services. The impact analysis is based on a rigorous random assignment design. The target number of youth voluntarily enrolled in the PROMISE evaluation was 2,000 for all of the programs except for the one in California, where the target number was 3,078. Half of the youth who enrolled in the evaluation of each program and who went through the random assignment process were placed in a treatment group, and the remainder, in a control group. Youth in the treatment group could receive PROMISE services, while those in the control group could receive only the services that were available in their communities independent of PROMISE. Through the impact analysis, we are assessing whether youth and families in the treatment group received more services and experienced better results than control group members with respect to education, employment, benefit receipt, economic well-being, and other outcomes.

Third, we are conducting a **benefit-cost analysis** to assess whether the benefits of each PROMISE program, including increased employment and reductions in benefit receipt, are large enough to justify its costs. We are conducting this analysis from a range of perspectives, including that of the participants, the federal government, state governments, SSA, and society as a whole. Interim findings from the impact analysis and the cost component of the benefit-cost analysis, based on data collected 18 months after youth enrolled in the evaluation, are presented in this report. Final findings, based on data to be collected five years after enrollment, will be presented in a report that is due to SSA in 2022.

We obtained data for the evaluation from a wide range of sources. For the process analysis, we relied on program documents, site visits, interviews with program managers and staff, and focus groups with youth and parents to document each program's service model, implementation, and engagement with enrolled youth and their families. We also examined data on service provision from each program's management information system. Data for the interim impact analysis are from the evaluation's 18-month follow-up survey of youth enrollees and their parents and from the administrative records of SSA, state VR agencies, and state Medicaid

agencies. The follow-up survey gathered information on youth and family characteristics and on outcome measures including, service use, education, employment, earnings, self-determination, expectations, income, and program participation. The overall survey response rate (completed combination of the parent and youth surveys) was 81 percent. Administrative records provided information on SSA payments, earnings, VR participation and service receipt, and Medicaid enrollment and expenditures. For the long-term impact analysis, we will use data from the evaluation's five-year follow-up survey and from SSA records. Data for the cost component of the benefit-cost analysis came from the programs' financial documents, their management information systems, and input from program staff.

D. Organization of the report

This interim report on the PROMISE evaluation presents estimates of the impacts of the PROMISE programs on the receipt of services by youth and their parents and outcomes in the areas of education and training, employment, earnings, income, expectations, and self-determination as of 18 months after enrollment. If the services provided by the programs were effective, then the enrolled youth who were randomly selected for the opportunity to receive those services (treatment group members) should have achieved better outcomes relative to the enrolled youth who had been randomly assigned to a control group that was ineligible for the PROMISE services.

This report also presents findings from an assessment of the cost of services delivered by the PROMISE programs. Based on data collected from each program, we conducted a rigorous, structured assessment of the resources that were used to deliver services during a one-year period that was generally free of start-up and close-out activities. For each program, that assessment yielded estimates of the total cost of the program, the costs of program services and administration, and the average cost per program enrollee. The findings from the cost analysis presented in this report will be used in the benefit-cost analysis of the PROMISE programs, which is an important future component of the national PROMISE evaluation.

The next chapter describes the approach we used to estimate impacts and costs. This description encompasses the data sources, samples, key measures, and analytical methods. Six program-specific chapters follow. Each includes an overview of the PROMISE program, a summary of findings from the process analysis report on the program, descriptive statistics on the sample for the 18-month impact analysis of services and short-term outcomes, findings from the impact analysis, and findings from the cost analysis. The final chapter of the report summarizes and compares the impact and cost findings across the six programs and presents general conclusions. An appendix to this report (included in a separate volume) presents technical discussions of the data and methods for the impact and cost analyses, as well as supplementary findings from the impact analysis.

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II. DATA SOURCES AND METHODS

Two key goals of the national PROMISE evaluation are to (1) generate rigorous evidence on program impacts and (2) calculate program costs. To that end, we used a random assignment design to conduct an impact analysis of each PROMISE program. The design allowed us to accurately infer whether the programs had any impacts on participating youth and their families. We also collected and analyzed data on the various costs associated with providing PROMISE services. The findings from these two analyses, together with findings from the process analysis of each programs' implementation,[8] will provide a sound basis for those considering the development of similar interventions. This chapter describes the data for, and the analytic approach to, the impact and the cost analyses.

A. Impact analysis

The PROMISE impact analysis is based on a random assignment design (Fraker et al. 2014a). PROMISE-eligible youth who agreed to participate in the evaluation were randomly assigned with equal probability to either a treatment group, which meant that they were eligible to receive PROMISE services, or to a control group, which meant that they were not eligible for PROMISE services but could receive other services available in their communities, independent of the PROMISE program.[9] Random assignment should lead to the creation of two groups of youth with similar pre-intervention experiences and characteristics, on average. As a result, we can attribute any observed differences in outcomes between the two groups to be an accurate estimate of the impacts of the program. The impact analysis findings presented in this interim report show whether each PROMISE program improved the outcomes of the youth and families who were offered PROMISE services 18 months after they enrolled in the program.

Because enrollment in PROMISE was voluntary, we should expect that families particularly interested in receiving the type of services that PROMISE offered may have been more likely to have volunteered to participate. Accordingly, youth and families who were randomly assigned to the control group, and therefore not eligible for PROMISE services, may have sought out similar types of services elsewhere in the community. Therefore, the estimated program impacts derived by comparing the outcomes of the two groups represent the effects of the PROMISE interventions relative to other services in the community that youth and families may have used, not to a counterfactual environment of "no services." The evaluation design allowed us to assess the extent to which the PROMISE programs affected participation in youth transition and family support services while accounting for the fact that similar services were available to the control group from other sources.

[8] The findings from the process analysis of each PROMISE program are presented in the program-specific process analysis reports (Anderson et al. 2018, Honeycutt et al. 2018a, Kauff et al. 2018, Matulewicz et al. 2018b, McCutcheon et al. 2018, Selekman et al. 2018).

[9] To be eligible for PROMISE, youth had to be age 14 through 16 at the time of enrollment, in SSI current pay status at some time during the PROMISE enrollment period (and not terminated from SSI before enrolling in the evaluation), living in a PROMISE program service delivery area, and not residing in an institution.

1. Data sources

The interim impact analysis relied on survey and administrative data. We collected data on key outcomes of SSI youth and their family members who enrolled in PROMISE via a survey that was conducted 18 months after each youth enrolled in the evaluation. For the ASPIRE program, we also used data from a baseline survey collected by the program for its formative evaluation. Finally, we relied on SSA administrative records for baseline and follow-up data and on data from state VR and Medicaid agencies. We briefly describe these sources below and provide additional details in Section II of the Appendix.

a. Youth and parent 18-month survey

We conducted a follow-up survey of youth and their parents 18 months after the youth enrolled in PROMISE. We developed detailed plans for collecting survey data at the outset of the evaluation (CyBulski et al. 2014). There were two survey instruments, one for the youth enrollees and the other for their parents. Although the target respondents for the youth survey were the youth themselves, they were sometimes helped by their parents, or proxies supplied their responses. The target respondent for the parent survey was the parent or guardian who was "most knowledgeable about the services received by the enrolled youth."

The survey was primarily conducted via computer-assisted telephone interviews; field staff used computer-assisted in-person interviews for sample cases that were difficult to contact by phone or required an in-person interview because of a disabling condition. For a small number of study enrollees in the ASPIRE program, for whom it was cost-prohibitive to deploy field staff because of the remote location of their households, we mailed abbreviated questionnaires designed to be self-administered, and families returned the completed questionnaires to us by mail. We show the survey administration timeline for each program in Appendix Table A.1. The PROMISE 18-month parent and youth survey response rates were high (over 78 percent for each program) and the differences in response rates between treatment and control group sample members were small, never exceeding 3.5 percentage points for any program.

The survey collected information that could not be obtained readily from administrative records or other sources and focused on outcomes that might reasonably be expected to have been affected by the programs in the 18-month time frame. Specifically, in the parent survey we asked questions about services received by the SSI youth and their family members during the 18-month follow-up period, employment experience and credentials obtained by the parents, parent's individual and family well-being (covering health and health insurance, income and program participation), parent expectations for the SSI youth, and the parent's demographic information. In the youth survey, we asked questions about youth's receipt of services, education, training, employment and work-based experiences, self-determination and expectations, and demographic information.

In five of the six PROMISE programs, all evaluation enrollees who were randomly assigned were eligible to be interviewed for the 18-month survey. CaPROMISE was the only exception where we sampled 2,000 of the 3,097 randomly-assigned enrollees for the survey. In the other five programs, all evaluation enrollees who were not deceased or withdrawn from the evaluation during the 18-month period were targeted for the survey. In California, we used stratified random sampling approach, using LEAs and treatment status to define the strata, so that the relative

distribution of sampled cases mirrored that of all study enrollees within each stratum (CyBulski et al. 2014). To account for the fact that we only sampled a subset of all youth and families enrolled in the evaluation in California, we used sampling weights when analyzing outcomes based on survey data.[10]

b. ASPIRE baseline survey

We used baseline data on youth and parents collected by the ASPIRE program at the time families enrolled in the evaluation. The program conducted a survey of all enrolled youth, which asked a series of questions designed to measure self-determination skills based on the American Institutes for Research self-determination scale (Wolman et al. 1994), health, employment, school enrollment, difficulties with activities of daily living or instrumental activities of daily living, expectations about their own future, and whether youth had talked to a parent/teacher/coworker about such things as managing money, postsecondary education or employment. ASPIRE also conducted a baseline survey of the enrolling parents of all enrolled youth, which asked about parents' expectations for the youth, a self-assessment of their ability to support youth's independent living, and a self-assessment of their financial knowledge.[11] We used these data to construct covariates for use in regression adjustments when analyzing the impacts of ASPIRE. None of the other PROMISE programs conducted a baseline survey of both treatment and control group youth and parents.

c. Administrative data

We relied on four sources of administrative data to conduct the interim impact analysis: the PROMISE random assignment system, SSA records, state Medicaid agency records, and state VR agency records. Administrative records provided data for all youth who enrolled in PROMISE and for a subset of parents (see text box).[12] Appendix Table A.2 summarizes the administrative data sources that were available for each state involved in PROMISE.

Parents identified in the interim impact analysis data sources:

- ASPIRE baseline survey: the enrolling parent or another parent or legal guardian
- PROMISE 18-month parent survey: the enrolling parent or another parent or legal guardian
- Random assignment system: the enrolling parent
- State Medicaid and VR agency data: the enrolling parent
- SSA data: If the enrolling parent was the youth's mother or father, we used the parent(s) documented on the SSI record; otherwise or if no parent was documented on the SSI record, we used the enrolling parent

[10] We calculated the sampling weights as the inverse of the probability of selection for the survey sample in CaPROMISE (Matulewicz et al. 2018a).

[11] The enrolling parent was the parent who completed the PROMISE enrollment forms and provided consent to participate in the evaluation.

[12] To enroll in PROMISE, youth had to provide a valid Social Security number (SSN), which allowed the various agencies to identify the relevant records for the youth. Parents of enrolled youth were encouraged to provide an SSN, but were not required to do so. For the Medicaid and VR data analyses, the parent sample consists of the parents who enrolled the youth in the PROMISE evaluation and who provided a valid SSN. For the SSA data analyses, the parent sample can include both parents (not just the enrolling parent), and those who did not provide SSNs at program enrollment because SSA data identify the parents associated with a youth's record in the month the youth was enrolled in PROMISE.

Random assignment system data. The random assignment system was a web-based system Mathematica designed and maintained to enroll youth in PROMISE and assign them either to a treatment or control group. It was accessible to authorized users with personal computers from any location. Program staff entered data about an enrolling youth and the enrolling parent into the random assignment system. The data included the name, date of birth, SSN, and sex for the youth and the enrolling parent and the parent's relationship to the youth. The random assignment system first validated the data against lists of eligible youth that SSA provided to Mathematica quarterly to verify that the fields required for program enrollment and random assignment were complete, the appropriate formats and value ranges were used, and the youth was eligible. It then randomly assigned youth according to algorithms customized for each PROMISE program. Data from the random assignment system used for the impact analysis includes the youth and parent data entered by program staff, the program name, the program region,[13] the youth's random assignment group, the date that assignment occurred, and an indicator of whether the youth was a research case.[14]

SSA data. SSA provided detailed information on SSA disability program payment amounts for the youth and their parents. SSA payment receipt and payment amounts are of particular interest for assessing SSA disability program savings. Information on SSI payments came from the Supplemental Security Record, while information on Old-Age, Survivors, and Disability Insurance (OASDI) program payments came from the Payment History Update System and the Master Beneficiary Record. These data sources provided monthly amounts paid to recipients. In addition, we used data from SSA's Master Earnings File, which contains annual earnings as reported by employers to the IRS, to estimate the impact of PROMISE on employment and earnings.[15] Finally, baseline information on youth's sex, age, and primary impairment came from SSA's Supplemental Security Record. We used this information to assess whether random assignment created two equivalent groups in each program and to construct control variables for use in the regression models for estimating PROMISE impacts.

Medicaid data. Each state involved in a PROMISE program, except for New York, provided Mathematica with data on youth and enrolling parent Medicaid enrollment between January 2014 and December 2017. Each extract contained monthly indicators for enrollment in Medicaid, the type of Medicaid coverage received (for example, comprehensive managed care), and detailed claims data during the reporting window.

VR data. Each state involved in PROMISE provided Mathematica data on youth and enrolling parent participation in state VR services between January 2014 and December 2017.

[13] For ASPIRE, the regions were the six states that comprised the consortium. For the other programs, the regions were sub-state areas chosen by each program for implementation purposes.

[14] The programs were permitted to nonrandomly assign up to 5 youth to the treatment group. Siblings of youth already enrolled in the evaluation were also nonrandomly assigned to the same group as the first-enrolled sibling. We considered nonrandomly assigned cases as nonresearch cases and excluded them from the impact analysis.

[15] Mathematica did not have direct access to the Master Earnings File. The evaluation team worked with SSA staff to analyze these data.

Each extract contained information on the date of application, services received, and case closure status.[16]

2. Analysis samples

The research sample comprises all evaluation enrollees who were randomly assigned to either the treatment or control group. The process for recruiting youth and their families and formally enrolling them in the evaluation is described in the evaluation's program-specific process analysis reports. In Table II.1, we show the research samples sizes by treatment status and program. The research sample in each program reflects the universe of PROMISE youth and families covered by the impact evaluation of that program. However, most of our follow-up data sources provide data for a subset of the research sample. Consequently, the analysis samples for the interim impact analysis in each program depend on the specific data source: the youth or parent 18-month surveys, or administrative records from SSA, Medicaid, and VR.

Table II.1. PROMISE research sample sizes, by program

Analysis sample	Arkansas PROMISE	ASPIRE	CaPROMISE	MD PROMISE	NYS PROMISE	WI PROMISE
Research sample						
Treatment	904	978	1,548	936	986	960
Control	901	975	1,549	930	981	946
Total	1,805	1,953	3,097	1,866	1,967	1,896
Analysis samples (as a percentage of the total research sample)						
18-month youth survey	81.4	79.9	52.8[a]	80.4	86.0	77.8
18-month parent survey	85.5	82.6	54.3[a]	84.5	89.6	82.8
SSA data – youth	100.0	100.0	100.0	100.0	100.0	100.0
SSA data – parents	98.2	91.5	84.9	93.9	94.6	96.6
Medicaid data – youth	97.1	27.8	99.5	99.7	n.a.	99.9
Medicaid data – parents	86.8	22.1	61.3	58.1	n.a.	91.2
VR data – youth	97.1	95.3	99.5	99.7	99.4	99.9
VR data – parents	86.8	66.9	61.3	58.1	84.3	91.2

Note: The sample sizes shown in the table include youth or parents who were randomly assigned at each PROMISE program and who were included in the analyses that were based on data from the specified source.

[a] In CaPROMISE, the percentages are lower because the survey research sample consisted of 2,000 youth and families.

n.a. = not available.

The analysis samples for the survey-based outcome measures depend on whether the measure is based on youth or parent survey data. Although all survey-based parent outcomes are based on parent survey data, some youth outcomes are based on the youth survey data and others are based on parent survey data. These parent and youth survey respondent samples are subsets of the research sample because of survey nonresponse (as well as survey sampling in the case of

[16] These data were from the states' general VR agencies. Three states involved in PROMISE—Arkansas, New York, and South Dakota—have a state VR agency for the blind, but we did not obtain data from those agencies. Less than 1 percent of youth in these states had a primary diagnosis of blindness.

CaPROMISE).[17] Further, because Mathematica administered the youth and parent surveys separately, in a small minority of cases only one of the surveys was completed.[18] Note that we consider our main analysis sample for the interim impact analysis to be the youth enrolled in the evaluation who completed the 18-month youth survey; we used this sample to assess differences in the characteristics of treatment and control group members in each program at the time of enrollment.

The analysis samples based on administrative data include more youth and families in the research sample than the 18-month survey samples (see Table II.1). We were able to obtain SSA data for all youth in the research sample. Medicaid and VR data for youth enrolled in PROMISE were available for nearly all of the youth in the research sample. Some youth and parents in the research sample withdrew from the evaluation and others died during the 18-month follow-up period. Coverage of withdrawn and deceased cases in the Medicaid and VR data varied across the programs (see Section III in the Appendix for details). We were not able to collect follow-up administrative data on the full research sample of parents enrolled in the evaluation. SSA records tracked most, but not all, parents of youth enrolled in the evaluation. Medicaid and VR data were only available for enrolling parents who had provided a valid SSN at the time of enrollment. Nonetheless, the administrative data generally captured a larger share of the youth and parents in the research sample than did the survey data.

3. Outcome measures

For the interim impact analyses, our primary focus was on assessing whether the PROMISE programs were successful in facilitating youth's and their families' (1) receipt of more and better transition services, (2) receipt of education and training credentials, and (3) attainment of employment and earnings. We also assessed the extent to which the PROMISE programs led to improvements in the well-being of the youth and their families while reducing their reliance on SSA disability benefits 18 months after they enrolled in the evaluation. The text box at right shows the seven youth and four parent and family outcome domains we examined in our analysis.

Outcome domains

Youth outcome domains

- Receipt of services
- Education and training
- Employment and earnings
- Self-determination and expectations
- Health and health insurance
- Use of Medicaid
- Economic well-being

Parent and family outcome domains

- Family members' receipt of services
- Parents' education and training
- Parents' employment and earnings
- Family's economic well-being

We grouped outcomes into the key domains mentioned above, and within each domain, we identified one or two primary outcome measures as well as supplementary outcome measures. We identified these outcomes based on what we could measure using available data sources, and described

[17] The sample sizes for survey-based outcomes exclude enrollees who died before completing the 18-month survey; we did not attempt to survey the families of deceased youth. They also exclude evaluation enrollees who withdrew from the evaluation before completing the 18-month survey; these enrollees were not contacted for the survey after their withdrawal. Treatment group enrollees who chose to stop receiving PROMISE services but who were willing to remain enrolled in the evaluation were contacted for the survey.

[18] In less than 0.5 percent of the cases, only the youth survey was completed, and in less than 5 percent of cases only the parent survey was completed.

them in an analysis plan shared with SSA before the research team reviewed any survey or administrative data. We selected outcomes that were relevant to the program goals and target population. We selected some of these outcomes—namely, receipt of services by youth and their family, youth education and training, and youth employment— because the PROMISE logic model suggested that they were likely to be affected by services at the 18-month follow-up. Others we selected were less likely to be affected at the 18-month follow-up, in part because of the youth's young ages at that time. An assessment of the impacts on these latter outcomes at 18 months allows us to capture any potentially early movement in these outcomes, and help us interpret and contextualize the findings from the planned five-year impact analysis. Analyzing these outcomes now also allowed us to develop the process for measuring them in preparation for the five-year impact analysis.

We use the impacts on the primary outcomes as the basis for evaluating the PROMISE program's effectiveness. We limited the number of primary outcome measures in order to avoid the statistical problem of "multiple comparisons" (Schochet 2008), which may arise when researchers estimate impacts on a large number of outcomes: at least a few of the estimates are likely to be statistically significant by chance, even if no true impacts occurred. The primary outcomes are the basis for tests of the main hypotheses related to the interim impacts of the programs. By restricting the number of main hypotheses being tested, we will reduce the likelihood of finding "significant impacts" by chance alone, without substantially undermining the evaluation's statistical power to detect true impacts. Although the impacts on the primary outcomes are the basis for evaluating PROMISE, we used the estimated impacts on supplemental outcomes to explain the primary impact findings and also to draw broader conclusions in some instances. If we found no impact on the primary outcome in a domain but found a consistent pattern of impacts on related supplementary measures, then we inferred that the program may have had an impact in the domain that was not captured by the primary outcome.

Below we summarize the outcome domains of interest, identify the primary outcome measures, and note the rationale for their selection. We also describe the supplementary outcome measures in each domain. Section IV in the Appendix presents a detailed description of all outcomes we assessed in the interim impact analysis. With separate sets of domains for youth and their families, our inferences about the impacts of PROMISE on primary outcomes for youth are not affected by tests conducted on primary outcomes in domains for their families, and vice versa. Note that some survey data measures of youth outcomes are based on responses to the parent survey instrument, while others are based on responses to the youth survey. All survey data measures of family outcomes are based on responses to the parent survey instrument.

a. Youth outcomes

Youth's receipt of transition services. A primary goal of PROMISE was to connect youth to services that would help them to make a more successful transition to adulthood. Our primary outcome for assessing whether PROMISE increased the youth's connections to services is *whether a youth received any transition services since random assignment*. We used a composite measure that indicates whether the youth received any services in the form of case management, school transition planning, employment-promoting services, benefits counseling, financial education, self-advocacy or self-determination training, life skills training, help with getting or using assistive technology, help with accessing education or training, and any other services to

help prepare the youth for work, school, or living independently during the 18 months since PROMISE enrollment. This measure is based on data from the 18-month parent survey.[19] We also examined supplementary measures of the youth's service receipt: types of services received; receipt of key services; intensity of services received; number of key service providers; whether any key service provider was rated somewhat or very useful; whether youth reported any unmet needs for services or supports; number and types of unmet service or support needs; whether youth applied for VR services, whether they received VR services, and types of VR services received; and time from random assignment to VR application

Youth's education and training. There is evidence that transition services can improve education outcomes for youth with disabilities (NYS Education Department 1999; Fraker et al. 2012). There is also strong evidence that adults with postsecondary education credentials earn nearly twice as much as those with less than a high school diploma and that they have lower rates of unemployment as well (Bureau of Labor Statistics 2018). Our primary outcome for testing whether PROMISE had an impact on the education of participating youth is *whether the youth was enrolled in any type of school or college at the time of the 18-month survey*. This measure is based on data from the 18-month youth survey. Because 18 months after enrollment most youth were under age 18, we would expect the large majority of participants to still be enrolled in high school and thus not find large impacts of PROMISE on this outcome. We also examined supplementary measures of the youth's education and training since random assignment: whether they ever enrolled in school; whether they received special education or had an individualized education program (IEP); whether they had a Section 504 plan; received a General Equivalency Diploma (GED), high school diploma, or certificate of completion; whether they received any training or any training credential; the type of school they attended; whether they received any education accommodation; had an unmet need for an education accommodation; and highest grade completed.

Youth's employment and earnings. One of the objectives of PROMISE was to put youth on a path toward consistent, long-term, paid employment. To facilitate this, the program model emphasized helping youth to gain employment experience. The primary outcome in this domain is *whether a youth was ever employed in a paid job in the 18 months following random assignment*. The measure includes self-employment as a type of paid job and is based on data from the 18-month youth survey. Having a paid job during the 18-month follow-up period can be considered, in part, a measure of service receipt because the PROMISE programs were meant to emphasize and facilitate paid work experience. Therefore, paid employment in the short term can be viewed as a program output as much as an outcome. Note that engagement in paid employment by 18 months after enrollment may be constrained by the young age of many study enrollees. Most were under age 18 as of 18 months after enrollment and still in high school. Moreover, the Fair Labor Standards Act and state laws limit the ability of youth under age 16 to engage in paid employment. We also examined supplementary employment outcomes: whether a youth was employed in a paid or unpaid job since random assignment; employment, hours, and

[19] For two of the services types queried, case management and help with assistive technology, responses could reflect services that are not transition-specific. The survey questions that asked about these services did not attempt to distinguish transition from other services. We expect that the extent to which the responses to these questions reflect services that are not related to youth transition is similar for treatment and control group members and so would not affect our estimates of the impact of PROMISE on the use of transition services.

earnings in the past year; employment, hours, and earnings at the time of the survey; and employment and earnings during the first calendar year after random assignment.

Youth's self-determination and expectations. PROMISE programs sought to promote independence, self-sufficiency, and self-advocacy in youth through trainings, workshops, and other activities. Accordingly, we hypothesized that the PROMISE interventions led to greater self-determination and improved expectations among youth and their parents about their future education and employment. We analyzed two primary outcomes in this domain that are based on responses to the youth survey. The first is a *youth's score on a composite self-determination scale*. The score is based on the youth's responses to 20 questions designed to capture the extent to which he or she acts autonomously, initiates and responds to events in a "psychologically empowered" manner, and acts in a self-realizing manner. The questions are based on the ARC Self-Determination Scale (Wehmeyer 1996).[20] The second primary outcome in this domain is *whether a youth expects to complete high school or receive a GED*. This measure indicates whether youth reported that their expected educational attainment was at least a high school diploma or a GED. It was constructed based on responses to a question administered to all youth, regardless of their educational attainment at interview, about the highest level of education they expected to obtain. As supplementary measures, we examined the following: youth's autonomy, psychological empowerment, and self-realization; youth's expectations about postsecondary education, future residential independence, future financial independence, and future employment at age 25; youth's reasons for not expecting to be employed at age 25; parent expectations about youth's education, future employment, future residential independence, and future financial independence at age 25; the importance of youth's independence to parents; and parents' current expectations about youth's household responsibilities.

Youth's health and health insurance. The PROMISE programs may have contributed to an improvement in the youth's health status by improving access to health insurance coverage. The benefits counseling services provided by the programs may have connected uninsured individuals to sources of public or other health insurance. Better access to health insurance may also have occurred through improved employment circumstances or income. The primary outcome in this domain is *whether the youth had any health insurance at the time of the survey.* This measure indicates whether each youth has any private or public health insurance coverage through, for example, Medicaid or the Children's Health Insurance Program. For most youth, this measure is based on responses to the parent survey; for the few youth who were living independently at the time of the survey interview, this measure is based on responses to the youth survey. Because most SSI youth are automatically eligible for Medicaid, we would not expect to find large impacts on this outcome at 18 months after PROMISE enrollment. At that time, most youth were under age 18 and so would be unlikely to have lost their eligibility for Medicaid because of the SSI age-18 redetermination, or because they were working and had earnings that made them ineligible. We also examined supplementary health outcomes: public or private health insurance coverage; coverage through an Affordable Care Act health exchange; self-assessed health status; difficulties with or help needed with activities of daily living;

[20] The survey questions did not address self-regulation, the fourth component of the ARC Self-Determination Scale. The questions from the ARC scale that measure self-regulation are not suitable for a telephone survey.

difficulties with or help needed with instrumental activities of daily living; smoking, alcohol, marijuana use, and other illicit drug use in the past 30 days.

Youth's use of Medicaid. The PROMISE interventions might affect Medicaid enrollment and expenditures by improving the youth's health, connecting youth to Medicaid waiver services, and replacing Medicaid with private coverage obtained through improved employment outcomes. The two primary outcomes in this domain are *the number of months that youth were enrolled in Medicaid* and *the total Medicaid expenditures on youth during the 18-month follow-up period*. Both outcomes are based on state Medicaid administrative data. Because most SSI youth are automatically eligible for Medicaid, we would not expect to find large impacts on Medicaid enrollment months as of 18 months after PROMISE enrollment; most participants were already enrolled Medicaid and because of their young ages, few would be expected to be working at levels that would replace Medicaid with employer-sponsored health insurance. Total expenditures are based on services received during the 18 months after random assignment, regardless of when the claim was actually paid. For reasons similar to those noted for Medicaid enrollment months, we would not expect large impacts on expenditures as of 18 months. If the programs increased connections to waiver services, we might find that PROMISE increased Medicaid expenditures. We also examined supplementary measures of the youth's use of Medicaid since random assignment: whether youth enrolled in Medicaid managed care, 1915(c) waivers, capitated behavioral health plans, and in both Medicare and Medicaid; monthly fee-for-service and capitated Medicaid expenditures; and payments on 1915(c) waivers, inpatient care, prescription drugs, or other care.

Youth's economic well-being. A key long-term objective of the PROMISE interventions is to improve the economic well-being of youth by increasing their earnings from employment and reducing their dependence on public assistance programs. The primary outcome in this domain is *youth's total income from employment and SSA payments,* which is the sum of youth's self-reported earnings from employment in the year preceding the survey interview and youth's total SSI and OASDI payments over the same period. This measure is based on data from the youth survey and SSA administrative data. For the reasons described above for youth employment and earnings, we would not expect to find large impacts on this outcome at 18 months after enrollment. We examined supplementary measures of youth's economic well-being: SSA disability benefit status, and amount and type of benefits since random assignment; total income in the first calendar year after random assignment; living arrangements; household income in the past year; and household's participation in public assistance programs (other than SSI).

b. Family outcomes

Family's receipt of support services. A primary goal of PROMISE was to connect families to services that would help improve their economic well-being. Our primary outcome for assessing whether PROMISE increased families' connections to services is *whether a family received any support services since random assignment*. We used a composite measure that indicates whether the family received any of the variety of support services during the 18 months after random assignment. These services include case management services, employment-promoting services, help with education, benefits counseling, financial education, parent training and information on disability or services/supports, parent networking, and other support services. This composite measure is based on data from the parent survey. We also examined

supplementary measures of the families' service receipt since random assignment: types of services received; receipt of key services; intensity of key services received; types and number of key service providers; whether any key service provider was rated somewhat or very useful; whether the parent reported any unmet needs for services or supports; number and types of unmet service or support needs; whether the parent applied for VR services, and whether the parent received VR services.

Parents' education and training. A goal of the PROMISE initiative's family-focused services was to support the families' economic stability by promoting parents' employment. Accordingly, PROMISE services supported the parents' pursuit of employment credentials such as degrees and certificates that could improve their labor market prospects. The primary outcome in this domain is *whether parents (or their spouse/partner) received any job skills training or education since random assignment.* This measure is based on responses to the parent survey. In this domain, the supplementary outcomes were highest educational attainment of either parent; whether either parent is currently attending any education or job skills training; and whether either parent received any postsecondary degree, certificate, or license since random assignment.

Parents' employment and earnings. The PROMISE interventions are intended to help parents obtain gainful employment by providing services such as job skills training or help finding and applying for jobs. The primary outcome in this domain is *whether parents (or their spouse/partner) were employed for pay since random assignment.* This measure is based on responses to the parent survey. We also examined supplementary measures of parents' employment: employment and earnings in the past month, earnings in the calendar year after random assignment, and whether either parent had access to health insurance through a job in the past month (without regard for actual participation).

Families' economic well-being. A key goal of the PROMISE model was to improve the economic well-being of families by increasing their income and reducing their dependence on public assistance programs. The primary outcome in this domain is the *total income of parents in the calendar year after random assignment.* This measure represents the sum of the monthly SSI and OASDI payments and earnings of parents and their spouse/partner during the calendar year after random assignment.[21] The measure is based on SSA administrative data. We also examined supplementary measures of families' economic well-being: SSA disability benefit status and payment amounts since random assignment, whether parents or their partners are covered by any kind of health insurance, Medicaid enrollment and expenditures since random assignment, and enrollment in Medicaid managed care or a 1915(c) waiver since random assignment.

4. Estimation approach

Our basic approach for estimating impacts is to compare average outcomes for the treatment and control groups while using a regression-based adjustment to control for baseline characteristics. When random assignment is successful, a simple comparison of mean values of outcomes between the treatment and control groups will yield unbiased estimates of program impacts. However, regression adjustment improves the statistical precision of the estimates and enables us to control for chance differences in baseline characteristics between treatment and

[21] Note that the parent outcomes measured using SSA administrative data represent two parents of a youth when such information was available.

control group members. All regression models included a core set of covariates, including the sex, race, and disability of the youth. For the ASPIRE program, we also included covariates derived from the ASPIRE baseline survey data. If we found any statistically significant differences in baseline characteristics for a particular program (based on the respondent sample in the 18-month youth survey), we included that characteristic as a covariate in the regressions for that program.[22] For ASPIRE and CaPROMISE, we also included state and region fixed-effects, respectively, to account for the stratified random assignment implemented for these programs, in which the strata were defined by state or region. The covariates used in the regression-adjusted impact estimates for each program are shown in Appendix Table A.11.

The interim impact analysis addresses the policy question: "What were the impacts of a PROMISE program on eligible youth and their families who were offered the opportunity to participate in the program?" Consequently, we estimated impacts for all youth and families in the analysis sample, covering all treatment group members regardless of whether they actually participated in PROMISE program services. In other words, we compared the outcomes of all youth and families randomly assigned to the treatment group to the outcomes of all youth and families randomly assigned to the control group—regardless of whether the treatment group members actually participated in program services. These estimates provide policy-relevant information because they show the effect of *offering* a voluntary program when not everyone in the target population will necessarily participate.

In estimating the impacts of PROMISE on youth and family outcomes, we used methods that depended on the nature of the outcome measure. We used ordinary least-squares regression models for continuous outcomes, logistic regression models for binary outcomes, and multinomial logit models for categorical outcomes.[23] When analyzing the survey-based outcomes for the CaPROMISE program, we used sample weights that accounted for the survey sampling design.

To provide a context for interpreting the impact estimates, we report the estimates along with the treatment group mean values of the outcome measure. In all tables presenting results from the impact analysis in the main report, the treatment group means reflect regression-adjusted means. The corresponding Appendix Tables A.12a–12f present additional statistics for each outcome measure, including standard errors, effect sizes, and sample sizes by treatment status. These tables also present estimated impacts based on a comparison of simple mean values for the treatment and control groups, that is, without any covariate adjustment. We tested the sensitivity of the estimated impacts to the use of regression adjustment or simple mean-comparison and found that for most of the outcomes, the impact estimates were robust with respect to the estimation approach.

[22] For each PROMISE program, we present the table with baseline characteristics and equivalence tests for the youth survey respondent sample in the program-specific chapters of this report. We present similar tables for the parent survey respondent sample and the full research sample for each program in Appendix Tables A.5 and A.6, respectively.

[23] We calculated robust standard errors (White 1980). See Section VII of the technical appendix for more information.

5. Estimating subgroup impacts

To understand whether the PROMISE programs had different impacts on different types of youth, we estimated impacts for several subgroups of enrollees that are both policy-relevant and large enough to provide sufficient statistical power for a subgroup analysis. To be responsive to the multiple comparisons problem, we estimated subgroup impacts on primary outcome measures only and restricted the number of subgroups examined. For each PROMISE program, we identified three sets of subgroups defined by the following characteristics of the youth when they enrolled in PROMISE: sex (females versus males), age (youth ages 14 and 15 versus 16), and primary impairment (intellectual or developmental disabilities, other mental impairments, and other impairments). For the ASPIRE program, we also analyzed three state subgroups: Arizona, Colorado, and the remaining four consortium states (Montana, North Dakota, South Dakota, and Utah).

To estimate each set of subgroup impacts, we modified the regression models to include an indicator for each subgroup as well as interaction terms between the treatment status indicator and the indicator variable for each subgroup.[24] We conducted tests to determine the statistical significance of the regression-adjusted impact estimate for each subgroup. We also conducted a joint test to determine whether the differences in the impact estimates between the subgroups were statistically significant. All subgroup results are shown in Appendix Tables A.13 through A.16.

6. Other analytic considerations

a. Survey nonresponse

Response rates to the 18-month surveys of youth and parents were high for all PROMISE programs and quite similar for the treatment and control groups (Table II.1). The rates were above 80 percent for both the youth and parent surveys except for WI PROMISE, for which the response rate for the youth survey was 78 percent. The parent survey response rates were typically greater than the rates for the youth surveys by up to 5 percentage points. The differences in response rates between sample members in the treatment and control group in each program was relatively small, never exceeding 3.5 percentage points in any program. This high overall response and low differential response between the treatment and control groups in each program alleviate concerns about potential nonresponse bias.

Even with relatively high response rates, if respondents differ systematically from nonrespondents, and we did not account for the differences, the estimated impacts could be biased in that they would not represent all youth who enrolled in PROMISE. We performed tests to compare baseline characteristics of survey respondents with nonrespondents. We found that in all programs, respondents differed from nonrespondents on a number of baseline characteristics. These differences varied by program, but key ones included the fact that respondents were less likely to report English as a preferred written or spoken language, more likely to live in their own

[24] In a few cases, we could not estimate the subgroup impact using a logistic regression model. In these cases (16 of 190 subgroup regressions), we used a linear probability model to estimate the subgroup impacts. All were for outcomes with a control group mean of nearly 100 percent (youth expects to complete high school or receive a GED, youth had any health insurance, youth received any transition services); if the control group mean is nearly 100 percent (or 0 percent) then a logistic regression cannot converge.

household, were on SSI for less time and were younger at SSI application, and had higher disability payments (see Appendix Table A.8). To account for the difference between respondents and nonrespondents, we used nonresponse weights that adjusted the impact estimates for all outcomes based on survey data. The weights made the respondent cases more representative of youth and families that enrolled in the evaluation and reduced the potential for nonresponse bias. In Section V of the Appendix, we describe how we calculated the nonresponse weights.

We also assessed the extent to which the lack of survey data for nonrespondents may have affected our estimates of program impacts. We compared how the estimated impacts on outcomes measured with administrative records changed when we included and excluded nonrespondents. The results, shown in Appendix Table A.9, suggest that nonresponse to the 18-month survey did not introduce substantial bias into the estimated impacts. This is not surprising, given the high response rates across the six PROMISE programs.

b. Missing data

For the baseline characteristics used in our analyses, only a small fraction of observations had missing data, which we replaced with imputed values to avoid having to exclude observations with missing data from the analyses. Because the baseline characteristics are drawn mainly from administrative records, there was very little missing data. For continuous and binary baseline measures with missing data, we replaced the missing values with the program-specific mean values of the measures calculated from the observations for which data were not missing. For categorical baseline measures, we added a category to indicate missing data.[25]

We typically excluded observations with missing data on an outcome from the analysis of that outcome. For example, data on some outcome measures based on the PROMISE 18-month survey were missing for some survey respondents because of item nonresponse, and we excluded these cases from the analysis of that measure.[26] However, for a handful of outcome measures, data were missing nonrandomly—that is, data were missing conditional on certain values of other outcome measures. Excluding these observations could lead to a biased measure. For example, some youth reported that they worked for pay in the year preceding the 18month survey, but did not provide information on their earnings for this work. Excluding these cases from the analysis of earnings would lead to an underestimate of average earnings. Moreover, because PROMISE programs could affect the likelihood of paid employment, excluding the cases with missing data conditional on paid employment could lead to biased estimates of impacts on earnings. To eliminate the risk of such bias when we analyzed outcomes for which information could only be missing conditional on another outcome, we used a multiple imputation procedure that allowed us to retain observations that had truly missing data on the outcome to be analyzed (see Appendix Section VI).

[25] A variable reflecting race and ethnicity was the only baseline covariate we used that was based on survey data. For this categorical variable, one category identified the cases for which the data were missing.

[26] For 30 parent cases and 33 youth cases in the ASPIRE program, data for certain outcomes were missing because the youth or parent responded to a self-administered version of the 18-month survey, which included a more limited set of questions.

7. Limitations of the impact analysis

Despite the strengths of the random assignment design, the impact analysis has three second-order limitations that we discuss below.

Representativeness of study enrollees. The youth who enrolled in PROMISE were volunteers who were not representative of all PROMISE-eligible youth in the areas served by each program. Hence, we cannot draw conclusions about the likely effects of a hypothetical PROMISE-like intervention that would be mandatory for all SSI youth based on the findings from this evaluation. However, future interventions for SSI youth are more likely to be voluntary than mandatory. The PROMISE interim impact findings can therefore be indicative of the likely effects of voluntary interventions.

Macroeconomic and policy changes. The general macroeconomic conditions and regulatory changes during the period covered by the interim impact analysis may have indirectly influenced PROMISE impacts. The period from April 2014, when the first youth enrolled in PROMISE, to October 2017, when the 18-month follow-up period ended for all enrollees, was a time of general economic expansion for the U.S. economy.[27] An important regulatory change affecting the environment for youth transition services happened during the same period: the Workforce Innovation and Opportunity Act (WIOA) was passed in 2014, and most of its elements were implemented beginning in 2015.[28] In addition, in 2016, SSA began mailing a brochure to SSI youth ages 14 to 17 that provides information about the age-18 redetermination process, SSA work supports, and federal and other programs that might be relevant to youth with disabilities (SSA 2018c). The strong economy and the regulatory changes may have influenced youth in both the treatment and control group in terms of their likelihood of receiving transition services, the types of services they received, and the likelihood of having paid employment or work-based experiences. The extent to which these events influenced the impacts of PROMISE is unknown, but the effect was probably small because both treatment and control group youth experienced it.[29]

Systems change prompted by PROMISE. ED required the PROMISE programs to develop formal partnerships between state agencies that were responsible for providing services to SSI youth and their families. These partnerships, in conjunction with the introduction of pre-

[27] Since June 2009, when the Great Recession ended, the U.S. economy has been expanding. During the study period for the impact analysis, the seasonally-adjusted national unemployment rate declined from 6.3 percent to 4.1 percent (Bureau of Labor Statistics n.d.).

[28] At the federal level, WIOA includes requirements intended to promote greater interagency collaboration between ED, DOL, and other agencies involved in overseeing services for youth with disabilities. At the state and local levels, WIOA affects the practices of VR agencies and workforce agencies, and there are additional implications for community rehabilitation providers and LEAs (Honeycutt and Livermore 2018).

[29] On the one hand, the estimated impacts of PROMISE could be larger because of these factors because, for example, the services better positioned treatment group youth to take advantage of the strong economy and newly available WIOA and SSA supports relative to the control group youth. On the other hand, the estimated impacts of PROMISE could be smaller as a result of these factors because, for example, control group youth might have benefited more from the stronger economy and other changes because they lacked the additional supports that were available to the treatment group youth.

employment transition services (Pre-ETS) and other provisions under WIOA, may have prompted system-wide changes that affected service delivery to all transition-age youth. Such systems change may have created more opportunities for control group youth to receive transition services that were similar to the treatment group, which would reduce the estimated impacts of PROMISE. However, PROMISE services may have better positioned the treatment group youth to take advantage of any systems changes, which in turn would increase the estimated impacts of PROMISE. Thus, the magnitude and direction of the effects of state-level systems changes on our estimates of the PROMISE impacts is unknown. Because system-wide changes were gradual and limited during the early years of PROMISE program implementation, we believe their influence on the 18-month impacts of most PROMISE programs is also likely to be limited.[30]

B. Cost analysis

The PROMISE cost analysis produced estimates of the economic cost to implement each PROMISE program, including the costs not directly incurred by the program, such as volunteer labor and donated facilities or supplies. These cost estimates represent the resources needed to implement a similar program and may differ from the funding that each PROMISE program received. We followed a seven-step analytic framework (see Appendix Table A.18) to compute five program cost statistics: (1) total cost, (2) costs by input category (categories are defined in Appendix Table A.19), (3) costs by program component (components are defined in Appendix Table A.20), (4) total cost per treatment group enrollee regardless of participation in PROMISE services, and (5) total cost per treatment group participant (treatment group members who actually engaged in PROMISE services).[31]

The cost analysis began with a PROMISE program submitting its itemized inputs and total costs for a specified 12-month steady-state period (see Appendix Table A.21 for the cost periods for each program). We classified each input by using a cost data collection guide that defined specific categories, such as labor and purchased services. We met with the staff of each PROMISE program to confirm the way we classified costs and to ensure that we captured all costs. Our team then mapped costs into four cost categories: labor, other direct, indirect, and unbudgeted.

We then calculated costs by program component. We identified nine components, six for service delivery and three for program administration (Appendix Table A.20). We attributed some costs, such as purchased employment services, to specific components. Other costs, such as those associated with program staff who have multiple roles, did not lend themselves to being assigned to individual components. To make it easier to allocate these costs, we used time-use data gathered from program staff, including staff who had provided contracted services. Appendix Table A.21 shows, for each program, when the time-use data were collected and the number of staff from whom the data were collected; these periods were either just before or during the period for which we collected program cost information. Selected program staff

[30] See the PROMISE evaluation process analysis reports for a discussion of state-level systems changes that occurred during the first three years of PROMISE program operations.

[31] As supplementary analyses, we also conducted a cost analysis by input category and program component; results are presented in Appendix Table A.22.

submitted estimates of their time spent on the nine program components during two one-week periods. The time-use data allowed us to calculate the proportion of staff time devoted to each component, which informed our allocation of program costs across components. When we could not directly assign the cost of a program input to a specific program component, we used a component allocation based on weighted averages of all staff hours across the nine program components. For example, we allocated utilities and office supplies across the nine program components based on weighted averages from the time-use data.

Finally, we calculated the costs per treatment group enrollee and per participant based on (1) the program's total cost during the period analyzed, (2) the total number of treatment group youth ever enrolled or the total number of program participants,[32] and (3) the average length of participation per youth in the treatment group. We used the total program cost from the 12-month steady-state period to calculate the average annual cost per enrolled youth or participant. We applied that average cost per enrollee to the average duration of program participation to compute the program's total cost per enrollee or participant. We calculated the average duration of program participation based on the time from a youth's enrollment date through the assumed program termination date of September 30, 2018 (the original ending date for all PROMISE cooperative agreements). The two statistics represent slightly different perspectives on program cost. The cost per enrollee indicates cost in the context of all youth and families who could have received program services; ostensibly, program staff conducted some outreach to families not involved throughout program implementation. Alternatively, the cost per participant reflects the average cost for youth and families who were actively involved in PROMISE.

An important caveat to the cost estimates is that they reflect the average service intensity observed during the accounting period. Youth and families might not have received services at that same intensity throughout their involvement in the program. In addition, by basing the average length of program participation on the period from enrollment to the end of the cooperative agreement, we may have overestimated the duration of participation (and thus underestimated the per-enrollee costs) because some youth stopped using services or died during the evaluation. In a more detailed accounting, we might see a shorter duration of participation and higher average program costs per year, but the total cost per enrollee and per participant would remain the same.

[32] For purposes of conducting the individual program process analyses, Mathematica considered a treatment group youth to be a participant in PROMISE if he or she had at least one substantive interaction with the program. The specific criteria used for each program to define a substantive interaction were determined based on conversations with each PROMISE program director and are described in each program's process analysis report (Anderson et al. 2018, Honeycutt et al. 2018a, Kauff et al. 2018, Matulewicz et al. 2018b, McCutcheon et al. 2018, and Selekman et al. 2018).

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III. ARKANSAS PROMISE

Summary of 18-month impacts and costs of Arkansas PROMISE

- Arkansas PROMISE expanded the share of youth who received transition services and made it more likely that their families would receive support services.
- It also increased the youth's receipt of job-related training, but did not affect youth's school enrollment.
- Arkansas PROMISE substantially increased the likelihood that youth had paid jobs and their earnings, and also had a positive impact on youth's total income while reducing the total amount of SSA payments they had received in the past year.
- The program had no impacts on (1) the number of hours of key services that the youth and families received, (2) the educational attainment of parents, (3) the youth's self-determination and expectations about their future, (4) the youth's health insurance status, and (5) the parents' employment, earnings, and income.
- Arkansas PROMISE's average annual cost per treatment group enrollee was $9,148, which included the costs of providing services to both the youth and their family members.

A. Program overview and a review of findings from the process analysis

This section provides an overview of the Arkansas PROMISE program and the findings from the process analysis. Detailed findings from the process analysis are available in the program's process analysis report (Honeycutt et al. 2018a). The process analysis report documented the program's structure and service model and described its implementation during the first three years of operations based on data from the Arkansas PROMISE program's management information system (MIS), site visits, and key informant interviews.

1. Program overview

Arkansas PROMISE operated in 25 of the state's 75 counties, which were initially grouped into four administrative regions. These regions consisted of one largely urban area containing almost half of all Arkansas PROMISE youth (central), one area described by staff as resource rich and economically advantaged relative to the other regions (northwest), and two rural areas that were relatively resource poor (eastern and southern).[33] The Arkansas Department of Education was the recipient of the cooperative agreement with ED. It contracted with the University of Arkansas College of Education and Health Professions to coordinate and implement Arkansas PROMISE. As the de facto lead agency, the University of Arkansas provided oversight and coordination of service delivery and partner involvement. The University of Arkansas contracted with five partner organizations that provided direct services to participating youth and families and received PROMISE funding. Four other organizations partnered with Arkansas PROMISE to support the program in targeted roles, but they did not receive funding for their participation.

The Arkansas PROMISE program model included four key elements: (1) intensive case management, (2) vocational evaluations and career readiness training, (3) two paid summer work experiences (including job coaching) of up to 200 hours each, and (4) benefits counseling and financial education. Case management services were provided by "connectors," program staff

[33] In 2017, the program subdivided the central region into two regions, one for Pulaski County (the county containing the state's capital city, Little Rock) and one for the remaining central region counties.

who exclusively served the treatment group youth and families. Services included periodic contacts with participants, identification and documentation of participants' goals, monthly trainings, a one-week summer camp for youth to promote academic readiness and social skills, and resource development. Monthly trainings covered a range of topics for youth and families, such as employment, SSI eligibility and payments, self-advocacy, and independent living. Connectors assisted youth and families with resource development in two ways: (1) by accessing the program's discretionary case management funds and (2) by making referrals to community resources. The program design called for each connector to have a caseload of no more than 20 youth. In practice, caseloads ranged from 14 to 30 youth.

Partner organizations delivered most Arkansas PROMISE services other than case management. The program contracted with the state's VR agency for transition specialists, who served program participants exclusively by providing career exploration services, related assessments, and work-based learning experiences. Transition specialists also provided education services by supporting youth in their efforts to graduate from high school and providing them with connections to postsecondary education opportunities. The program relied on local workforce investment boards to facilitate paid summer work experiences for youth, and the VR agency used non-PROMISE funds to cover the youth's wages. The program provided information about benefits and financial education to youth and their parents during monthly trainings. It also provided individualized benefits counseling through referrals to contracted community work incentive coordinators when youth encountered issues with their SSI payments or achieved milestones such as summer employment or the age-18 redetermination for SSI eligibility.

2. Summary of findings from the process analysis

Three years after the program began in August 2014, Arkansas PROMISE had engaged 92 percent of treatment group youth as participants in program services. To achieve this rate of participation, after the completion of recruitment and enrollment activities, the program had converted its recruitment staff to retention staff and tasked them with conducting outreach to youth and families who were not engaged in services. To encourage treatment group families' engagement in program services, particularly in the monthly trainings, the program also developed an incentive system under which youth and families earned points they could redeem for prizes by completing or attending program activities.

Treatment group youth who had ever participated in Arkansas PROMISE had high levels of engagement with the program. By the end of the third year of program operations, four-fifths of participating youth had attended at least one monthly training. On average, the youth attended almost one-quarter of the trainings that had occurred since their enrollment in the evaluation. About 59 percent of participants received case management funds subsequent to their enrollment. Nearly all participating youth had Arkansas PROMISE plans, which identified career and education goals as well as the steps needed to achieve them. Almost 30 percent had attended the program's summer camp. More than half had been referred to the state VR agency and other providers for services. Two-thirds of participating youth had started summer work experiences and about one-quarter had participated in work experiences for at least two summers. A little over 40 percent of those who started summer work experiences each year achieved the program's target of working 200 hours. With a year of the operational period remaining, program staff were

working toward the program's service goals of all youth having two summer work experiences, attending the summer camp, attending monthly trainings, and connecting with community services.

Although the Arkansas PROMISE staff worked primarily with participating youth, they also worked with parents and other family members to the extent that those individuals were receptive to the program's services. By the end of the third year of program operations, the parents of 87 percent of participating youth had developed their own Arkansas PROMISE plans, while the parents of 15 percent of participating youth had been referred to either education or employment services. Arkansas PROMISE viewed parent attendance at the program's monthly trainings as important to the families' ongoing engagement with the program; parents attended 19 percent of the monthly trainings offered, which was only slightly lower than the 22 percent of the monthly trainings attended by youth.

The process analysis suggested that conditions were favorable for observing positive impacts of the program on youth. Evidence in three areas implied a marked difference in the service experiences of treatment and control group youth. First, as already noted in this section, a large share of treatment group youth had actually participated in the program and most of them had received key services three years into program operations. Second, the program's intensive case management for youth and families (including modest financial supports and referrals to existing services) and the provision of summer work experiences for youth represented an intensive, individualized, and employment-focused service model—which the control group youth could not access. After the passage of the WIOA in 2014, the control group had more opportunities to receive services that were similar to those available to the treatment group; the state modeled the Pre-ETS provided under WIOA based on the Pre-ETS offered by Arkansas PROMISE. Although various services and work opportunities were available in the existing environment for control group youth, their take-up rates for those services and opportunities were likely low given the absence of facilitation through intensive case management. Third, there was virtually no risk that the control group youth received services from the program. The program staff served treatment group youth exclusively and had no way of identifying control group youth for the purpose of serving them if they had been so inclined.

B. Baseline characteristics of the youth survey respondent sample

The youth survey respondent sample for the interim impact analysis of Arkansas PROMISE comprised 1,469 randomly assigned youth who completed an 18-month follow-up survey.[34]

[34] Of the 2,000 youth enrolled in the Arkansas PROMISE evaluation, 1,805 youth were randomly assigned—904 youth to the treatment group and 901 youth to the control group. Random assignment occurred immediately after the youth and the family enrolled in Arkansas PROMISE. Of the remaining 195 youth, 194 youth had siblings already enrolled in the evaluation and so were purposively assigned to the same groups as their siblings (122 treatment cases and 72 control cases). The single remaining youth was purposively assigned to the treatment group at the request of Arkansas PROMISE. We did not include these 195 nonresearch cases in the impact analysis. Therefore, the full research sample for the impact analysis consisted of the 1,805 youth who enrolled in the evaluation and who were randomly assigned. These 1,805 youth—less 3 youth (all treatment) who had died within 18 months of enrollment—constituted the denominator for calculating the 18-month survey response rate for Arkansas PROMISE, which was 82 percent for the youth survey and 86 percent for the parent survey.

About one-third of the youth in the sample were female (Table III.1, Column A). At the time of random assignment, 39 percent of youth were age 14, 27 percent were age 15, and another 33 percent were age 16. Most youth (97 percent) expressed a preference for English as their written and spoken language. About 87 percent lived with their parents; 12 percent lived in their own households or alone at the time they had applied for SSI.[35] The largest racial and ethnic group was non-Hispanic black (58 percent), followed by non-Hispanic white (22 percent), non-Hispanic other or mixed race (8 percent), and Hispanic (8 percent). The racial-ethnic composition of the parents was roughly similar to that of the youth.

The youth's primary impairments, as recorded in SSA administrative data, were most commonly other mental impairments (45 percent) and intellectual or developmental disabilities (42 percent). The next largest condition groups were physical disability (9 percent); other or unknown disability (3 percent); and speech, hearing, or visual impairment (1 percent).

About 94 percent of youth in the sample received SSI payments during the month of random assignment. On average, nine years had passed since the time of their initial SSI eligibility. Their age at the time of most recent SSI application was 7 years, on average. About 15 percent of youth received OASDI payments in the month of random assignment, and youth received an average of $7,671 in SSA disability payments during the 12 months before the month of random assignment. About 28 percent of youth lived in a household with multiple SSI-eligible children. Less than 1 percent of youth had any earnings from employment in the year before random assignment; among parents, 70 percent had any earnings.

On average, most of these characteristics were similar for youth in the treatment and control groups, which was expected given that the youth were randomly assigned to these groups. We compared the two groups across 25 characteristics at the time of random assignment (Table III.1, Columns B and C) and found one statistically significant difference between the two groups: youth receipt of SSI payments at the time of random assignment. Over 90 percent of both groups received SSI payments, with a small estimated difference of about 3 percentage points. We expect to be able to identify unbiased estimates of program impacts by comparing the treatment and control groups while accounting for this difference in baseline characteristics through regression adjustment.

[35] In the SSA data, youth who are considered living in their own household or alone include youth living in a residential facility, foster care, another relative's household but paying a fair share of expenses, and one's own household.

Table III.1. Arkansas PROMISE: Baseline characteristics of the youth survey respondent sample (percentages, unless otherwise noted)

	All (A)	Treatment (B)	Control (C)	Difference (B-C)	*p*-value
Demographic characteristics					
Youth sex is female	33.9	33.6	34.2	-0.7	0.78
Youth age at RA					
14 years	39.4	38.4	40.4	-2.0	0.39
15 years	27.4	26.7	28.0	-1.3	
16 years	33.2	34.9	31.5	3.4	
Average age	15.4	15.4	15.3	0.1	0.23
Youth language preference at SSI application					
English is preferred written language	97.3	97.5	97.0	0.6	0.51
English is preferred spoken language	97.2	97.4	97.0	0.4	0.62
Youth living arrangement at SSI application					
In parents' household	86.5	85.6	87.5	-1.9	0.45
Own household or alone	12.4	13.1	11.7	1.4	
Another household and receiving support	1.0	1.3	0.8	0.5	
Youth race/ethnicity (from the 18-month survey)					
Non-Hispanic white	22.1	21.4	22.8	-1.3	0.70
Non-Hispanic black	58.4	59.0	57.8	1.2	
Hispanic	8.2	7.6	8.7	-1.1	
Non-Hispanic American Indian	0.9	0.8	1.1	-0.3	
Non-Hispanic other or mixed race	8.3	9.3	7.4	1.9	
Missing	2.1	2.0	2.2	-0.3	
Enrolling parent age at RA (from the RA system)	42.2	42.1	42.3	-0.2	0.64
Parent race/ethnicity (from the 18-month survey)					
Non-Hispanic white	26.6	26.0	27.2	-1.2	0.72
Non-Hispanic black	58.9	60.0	57.7	2.4	
Hispanic	6.1	5.7	6.5	-0.8	
Non-Hispanic American Indian	1.0	0.7	1.2	-0.6	
Non-Hispanic other or mixed race	5.9	6.3	5.6	0.7	
Missing	1.6	1.3	1.8	-0.5	
Disability					
Youth primary impairment					
Intellectual or developmental disability	42.1	42.5	41.6	0.9	0.95
Speech, hearing, or visual impairment	1.0	1.0	0.9	0.1	
Physical disability	9.3	8.8	9.9	-1.1	
Other mental impairment	44.6	44.4	44.8	-0.3	
Other or unknown disability	3.0	3.2	2.8	0.3	
SSA program participation					
Youth SSA payment status at RA					
Received SSI	93.8	92.4	95.3	-2.9	0.02**
Received OASDI	15.2	15.2	15.2	0.1	0.98
Years since youth's earliest SSI eligibility at RA	8.7	8.7	8.7	0.0	1.00
Youth age at most recent SSI application	7.0	7.1	7.0	0.1	0.65
Youth payments in the year before RA ($)					
SSI	7,225	7,200	7,251	-51	0.66
OASDI	446	447	445	1	0.99
Total SSI and OASDI	7,671	7,647	7,697	-50	0.60
Household had multiple SSI-eligible children	28.1	27.4	28.8	-1.4	0.55
Enrolling parent provided a valid SSN at RA	90.8	90.5	91.1	-0.7	0.65
Parents included in the SSA data analyses					
None	1.7	1.9	1.5	0.4	0.32
One parent	64.0	62.2	65.9	-3.7	
Two parents	34.2	35.8	32.6	3.2	
Parent SSA payment status at RA					
Any parent received SSI only	10.5	10.1	10.8	-0.6	0.92
Any parent received OASDI only	11.9	12.0	11.9	0.1	
Any parent received both SSI and OASDI	7.9	8.3	7.4	0.8	
No parent received any SSA payments	68.0	67.6	68.4	-0.8	
No parent was included in the SSA data analyses	1.7	1.9	1.5	0.4	
Earnings					
Youth had any earnings in the calendar year before RA	0.6	0.7	0.6	0.2	0.72
Youth earnings in the calendar year before RA ($)	8	3	13	-10	0.25
Parent had any earnings in the calendar year before RA	69.9	70.6	69.3	1.3	0.59
Parent earnings in the calendar year before RA ($)	14,481	14,962	13,980	982	0.26
Number of youth	1,469	750	719		

Source: SSA administrative records, PROMISE RA system, and PROMISE 18-month survey.

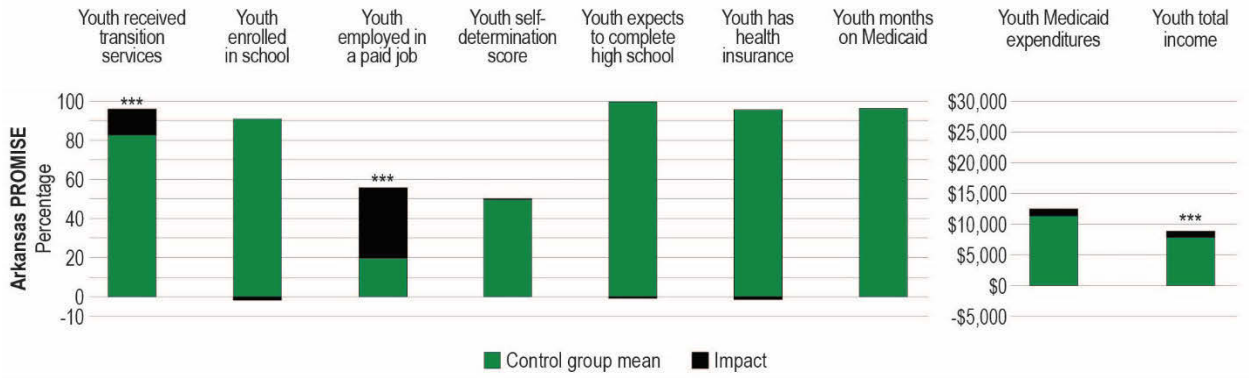
Note: The sample includes all youth who completed the PROMISE 18-month youth survey. We weighted statistics to adjust for survey nonresponse.

*/**/***Difference is significantly different from zero at the .10/.05/.01 levels using either a two-tailed *t*-test or a chi-square test.

C. Impacts on youth outcomes 18 months after enrollment

The findings in this section document whether the services provided by Arkansas PROMISE led to short-term impacts on youth outcomes in several domains (Figure III.1). The impact estimates revealed that the program increased the share of youth who received transition services, their receipt of job-related training and credentials, their likelihood of paid employment, their earnings and total income. The magnitude of the impacts was notably large in the employment and earnings domain, with both the likelihood of employment and the amount of earnings more than doubling for youth in the treatment group. The program had no impacts on youth's school enrollment, self-determination and expectations, likelihood of health insurance coverage, or Medicaid participation at 18 months after enrollment in Arkansas PROMISE.

Figure III.1. Arkansas PROMISE: Impacts on youth primary outcomes



*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

We also estimated impacts of Arkansas PROMISE for subgroups of youth defined by their sex, age, and primary impairments when they enrolled in the evaluation. The subgroup analyses focused on the primary outcomes in each domain. Arkansas PROMISE had differential impacts on the receipt of transition services by the youth's age.

1. Arkansas PROMISE connected more youth to transition services

Consistent with the intent of the PROMISE program model, Arkansas PROMISE increased the receipt of transition services among youth with disabilities. These services included case management, employment-promoting services, benefits counseling, help with financial education, and education and training supports (Table III.2). About 82 percent of control group youth received any transition services during the 18 months after random assignment; the program increased this share by 13 percentage points, representing a 16 percent increase relative to the control group.

The impacts on the likelihood of receiving transition services during the 18 months after random assignment differed by the youth's age (Appendix Table A.13a). Arkansas PROMISE had a larger impact on the receipt of any transition services among youth who were age 14 and 15 compared with youth who were age 16. This finding may reflect the fact that a greater share of control group youth in the older group received transition services (86 percent) than those in the younger (80 percent), so there was more room for Arkansas PROMISE to have an impact on this outcome for the younger subgroup.

Arkansas PROMISE had significant positive impacts on the youth's receipt of each type of service queried in the 18-month survey. About 27 percent of youth in the control group received case management services; the program increased this share by 46 percentage points. This impact was consistent with the program's design, which attempted to deliver intensive case management services to youth, including periodic contacts, identification and documentation of participants' goals, monthly trainings, summer camps, and resource development (Honeycutt et al. 2018a). The program also doubled the share of youth who received employment-promoting services (such as career planning, job skills training, help with a job search, and on-the-job supports). About 37 percent of control group youth received these services; the program increased this share by 38 percentage points. Arkansas PROMISE also increased the share of youth who received an array of other transition services, including school transition planning, benefits counseling, help with financial education, help accessing education or training, self-advocacy or self-determination training, life skills training, help with assistive technology, and other services.

We examined whether Arkansas PROMISE affected the youth's receipt of a subset of key transition services—case management, employment-promoting services, benefits counseling, and financial literacy—and estimated that the program significantly increased the share of youth who received such services. About half of the control group received key transition services during the 18 months following random assignment; the program increased this share by 35 percentage points. The program increased the average number of service providers that youth used by 0.8 providers, though much of this increase can be attributed to the increase in receipt of any key services. Despite the large impacts on the likelihood of receiving key transition services, Arkansas PROMISE had no impact on the hours of key services that youth received. On average, the total hours of key transition services received by control group youth—262 hours (or 3.4 hours per week on average during the 18-month follow-up period)—was not statistically different from that received by the treatment group youth. Further exploratory analysis revealed that the lack of impact on this outcome measure appears to be driven by control group youth receiving services in school settings, as survey respondents' reports of service hours are more likely to conflate hours spent specifically on transition services with hours spent in usual school activities. When we focus on services received from nonschool-based providers, the treatment group youth received significantly more hours of key transition services, on average, than the control group youth (see results in Appendix Table A.17).

Treatment group youth were more likely to report having received services that they perceived as somewhat or very useful. In the control group, 49 percent of youth received services that they considered to be somewhat or very useful; the program increased this share by 35 percentage points. This exactly offsets the 35 percentage-point reduction in the share of youth with no key services reported, implying that all youth who received key transition services found them somewhat or very useful.

Arkansas PROMISE also reduced the likelihood of youth reporting unmet needs for services or supports and the number of unmet needs: 30 percent of the control group had some unmet needs for services or supports; the program reduced this share by 11 percentage points (see Appendix Table A.12a). The program reduced the reports of unmet needs for almost all service and support types queried. The largest reductions in unmet needs were for other skills training,

employment-promoting services, education or training supports, and help with financial education.

Arkansas PROMISE increased the youth's participation in VR services as well (Table III.2), according to the state VR agency data. Among control group youth, 4 percent applied for VR services during the 18 months after random assignment; the program increased this share by 3 percentage points. These findings were consistent with the process analysis finding that connectors frequently referred participants to the state VR agency for services.[36] However, the program had no impact on the share of youth who received VR services, which was 1 percent in the control group. Despite the program's impact on VR applications, the generally low rates of VR involvement among treatment group youth reflected both the VR agency's policy of not serving youth until their final year of high school and the lack of many referrals to the agency by program staff during the early years of the program.

[36] Although Arkansas PROMISE contracted with the state VR agency to provide transition counselor services to its participants, these services were outside of the standard services provided by the agency. The agency did not open cases for individuals who received only these services and maintained no administrative data on them.

Table III.2. Arkansas PROMISE: Impact on the youth's receipt of transition services (percentages, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any transition services since RA	82.3	13.4	0.00***
Supplementary outcomes			
Types of services received since RA (italics indicate key transition services)			
Case management[a]	27.2	45.6	0.00***
School transition planning	61.1	7.1	0.00***
Employment-promoting services[a]	37.4	38.2	0.00***
Benefits counseling[a]	4.5	19.7	0.00***
Financial education[a]	21.2	26.8	0.00***
Self-advocacy or self-determination training	34.5	18.9	0.00***
Help accessing education or training	30.3	16.9	0.00***
Life skills training	41.5	18.3	0.00***
Help with assistive technology	19.8	9.5	0.00***
Other services	6.5	9.9	0.00***
Received any key transition services since RA	50.2	34.7	0.00***
Hours of key transition services received since RA	261.8	23.8	0.43
Number of key transition service providers since RA	0.8	0.8	0.00***
Usefulness of key transition services received since RA			
No key service reported	49.8	-34.7	0.00***
No service rated somewhat or very useful	1.6	-0.3	
Any service rated somewhat or very useful	48.6	34.9	
VR services (from state VR agency data)			
Applied for VR services since RA	4.2	3.2	0.00***
Received VR services since RA	1.1	0.0	0.95

Source: PROMISE 18-month follow-up survey and state VR agency data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of Arkansas PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12a for sample sizes for all outcomes. For outcomes measured with data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

[a]These services are identified as key transition services because they were required of the PROMISE programs. We asked more detailed questions about providers of these services in the PROMISE 18-month survey than providers of other transition services.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

2. Arkansas PROMISE had no impact on the youth's school enrollment but helped more youth receive training

Arkansas PROMISE had no impact on the primary outcome of the youth education domain—the youth's school enrollment at the time of the 18-month survey. About 91 percent of control group youth were enrolled in school at the time of the survey (Table III.3). In addition, 99 percent had ever been enrolled in school since random assignment. The program had no impact on the share of youth who received a GED, certificate of completion, or high school diploma since random assignment. Although the program did not affect school enrollment at the time of the survey interview, it did impact the highest grade completed by youth as of 18 months after random assignment: treatment group youth were more likely to have completed 12th grade and less likely to have completed only grades 9 through 11 (Appendix Table A.12a). Arkansas PROMISE had a particular emphasis on education. Almost all participating youth developed a

plan with an education goal. In addition, the program developed a staff role, the transition specialist, to provide educational supports to youth (Honeycutt et al. 2018a).

Arkansas PROMISE increased the youth's receipt of job-related training (Table III.3). In the control group, about 15 percent of youth had attended a training program or taken classes outside of school since random assignment to help them learn job skills or get a job. The program more than tripled this share, increasing it by 32 percentage points. Arkansas PROMISE also substantially increased the share of youth who had received job-related training credentials by 10 percentage points. The former finding might reflect the program's 10-hour job readiness training that youth received before beginning their summer work experiences.

Table III.3. Arkansas PROMISE: Impact on the youth's education and job-related training (percentages, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Enrolled in school at the time of the survey	90.8	-1.7	0.29
Supplementary outcomes			
Ever enrolled in school since RA	98.6	-0.4	0.59
Received GED, certificate of completion, or high school diploma since RA	8.5	1.3	0.38
Job-related training since RA			
Received any job-related training	14.7	32.3	0.00***
Received any job-related training credential	3.2	9.6	0.00***

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of Arkansas PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12a for sample sizes for all outcomes. For outcomes measured with data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

3. Arkansas PROMISE increased the youth's paid employment and earnings

Arkansas PROMISE had a sizeable impact on the proportion of youth who held a paid job during the 18 months after random assignment (Table III.4). About 20 percent of control group youth held a paid job during the 18-month follow-up period; the program increased it by 36 percentage points—a 184 percent increase relative to the control group. Having a paid job may be partly viewed as a measure of program service receipt given the program's emphasis on providing career exploration and paid work-based learning experiences. Arkansas PROMISE contracted with transition specialists—who provided career exploration services, related assessments, and work-based learning experiences, along with the education supports described above—and collaborated with local workforce investment boards to facilitate at least two summer work experiences for the youth (Honeycutt et al. 2018a). As noted in the process analysis, a large share of participants received these services.

Arkansas PROMISE also boosted paid employment during the year immediately before the 18-month survey. About 16 percent of control group youth reported having a paid job during that year; the program increased that share by 31 percentage points. Over the same period, control

group youth worked fewer than 2 hours per week in paid jobs on average (calculated including all youth, regardless of employment status). The program increased this average by 2.7 hours. Consistent with the higher rates of employment and greater average work hours, the program increased the youth's reported earnings from employment. Arkansas PROMISE increased the youth's earnings from all jobs during the year before the survey by $1,213—a 162 percent increase over the control group's average annual earnings ($747). This impact likely reflects the program's emphasis on providing summer work experiences of 200 hours, paid at the state's minimum wage ($8.50 per hour in 2017) (Honeycutt et al. 2018a).

Table III.4. Arkansas PROMISE: Impact on the youth's employment and earnings (percentages, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Ever employed in a paid job since RA	19.6	36.0	0.00***
Supplementary outcomes			
Employment in the year before the survey			
Any paid employment	16.2	30.6	0.00***
Weekly hours worked in paid jobs	1.6	2.7	0.00***
Total earnings from all jobs ($)	747	1,213	0.00***
Ever employed in the calendar year after RA (from SSA data)	15.4	40.6	0.00***
Earnings in the calendar year after RA (from SSA data) ($)	361	592	0.00***

Source: PROMISE 18-month follow-up survey and SSA administrative records.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of Arkansas PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12a for sample sizes for all outcomes. For outcomes measured with data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

When we examined employment and earnings at the time of the follow-up survey, we found a smaller positive impact on paid employment and earnings than we observed using the annual or 18-month measures (Appendix Table A.12a). About 8 percent of control group youth had a paid job at the time of the 18-month survey; the program increased this rate by about 5 percentage points. Arkansas PROMISE increased the likelihood of having a paid job at any time since random assignment by 184 percent, whereas it increased the likelihood of having a paid job at the time of the survey by 62 percent. These findings might be a result of most of the employed treatment group youth having had short-term jobs during the 18-month period after random assignment; among treatment group youth who had a paid job during the follow-up period, the average job tenure was less than 15 weeks (statistic not shown in the table).

Consistent with the findings based on survey data, our analyses of SSA data on earnings indicate that Arkansas PROMISE had positive impacts on the likelihood of the youth's employment and average earnings. Fifteen percent of control group youth had earnings from employment in the calendar year after random assignment. Arkansas PROMISE raised this share by 41 percentage points. Similarly, the average earnings of control group youth were $361 over that period. Arkansas PROMISE increased this by $592, a 164 percent increase relative to the control group. Though the impacts on earnings in the calendar year after random assignment

were smaller than those estimated for the year prior to the survey, the magnitudes of the impacts relative to the control group means were similar.

4. Arkansas PROMISE had no impact on the youth's self-determination or expectations for the future, but improved parents' expectations about the youth's future

Arkansas PROMISE had no impact on the youth's self-determination, as measured by our self-determination composite scale (Table III.5). Youth in the control group had an average score of 50 on a scale of 0 to 100. This did not differ from the treatment group average. We also separately examined three subdomains of self-determination—youth's autonomy, psychological empowerment, and self-realization—and similarly found no program impacts.

The 18-month survey asked youth about their expectations for the future regarding their education and independence at age 25. We found no program impact on our primary measure in the expectations domain of whether youth expected to complete high school or receive a GED. However, nearly all control group youth (over 99 percent) expected to meet this benchmark, so there was little room for Arkansas PROMISE to improve this outcome. The program also did not affect the youth's expectations regarding postsecondary education, financial independence, the likelihood of living independently, or having a paid job at age 25.

Although Arkansas PROMISE did not affect youth expectations, it had an impact on some of the parents' expectations for their youth. The program increased the share of parents who expected their youth to receive postsecondary education (by 10 percentage points), be employed at age 25 (by 3 percentage points), and be financially independent at age 25 (by 4 percentage points). The program had no impact on parents' expectations about youth living independently at the age of 25 or on the share of parents who believed it was important that the youth eventually become independent in some way. Other research suggests that higher parental expectations regarding youth's employment are predictive of better youth employment outcomes in the long-run (Carter et al. 2012; Doren et al. 2012). Thus, the program's positive impacts on parents' expectations for their youth may support improved longer-term outcomes for the youth.

Table III.5. Arkansas PROMISE: Impacts on the youth's self-determination and expectations (percentages, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcomes			
Self-determination score at the time of the survey (scale: 0 to 100)	49.6	0.4	0.36
Youth expected to complete high school or GED at the time of the survey	99.5	-0.7	0.16
Supplementary outcomes			
Scores on subdomains of self-determination at the time of the survey			
Autonomy (scale: 0 to 300)	153.3	3.8	0.24
Psychological empowerment (scale: 0 to 100)	88.9	0.5	0.64
Self-realization (scale: 0 to 100)	8.7	-0.4	0.63
At the time of the survey, youth expected to:			
Get postsecondary education	63.9	3.5	0.19
Live independently at age 25	76.9	2.6	0.26
Be financially independent at age 25	84.6	0.8	0.70
Be employed at age 25	94.0	0.6	0.66
At the time of the survey, parent expected youth to:			
Get postsecondary education	43.2	9.9	0.00***
Live independently at age 25	58.1	3.7	0.15
Be financially independent at age 25	69.6	4.4	0.05**
Be employed in a paid job at age 25	86.3	3.1	0.06*
Parent believed it important for youth to become independent in some way at the time of the survey	97.2	0.3	0.75

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of Arkansas PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12a for sample sizes for all outcomes. For outcomes measured with data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

5. Arkansas PROMISE had no impact on the youth's health insurance coverage

Arkansas PROMISE did not affect the likelihood that youth had health insurance at the time of the survey (Table III.6). About 96 percent of youth in the control group had health insurance. The program also had no impact on whether youth had public or private health insurance, nor on youth's smoking, use of alcohol, marijuana, or illicit drugs.

Arkansas PROMISE had an impact on the likelihood of youth reporting difficulties with certain activities of daily living. The program had no impact on the share of youth who needed help with or equipment for at least one activity of daily living, but it reduced the share who needed help with or equipment for at least one instrumental activity of daily living by 7 percentage points (Table III.6). Arkansas PROMISE also had a desirable positive impact (of 4 percentage points) on the share of youth who reported having no difficulty with the five activities of daily living queried, and it reduced the share experiencing difficulty with speaking or communicating with others by 5 percentage points (Appendix Table A.12a). In addition, it decreased the share of youth who had difficulty planning and carrying out activities to achieve a goal by 7 percentage points. This impact may be a result of the program's use of a self-advocacy curriculum to teach youth about planning and goal setting during its monthly meetings

(Honeycutt et al. 2018a). The program also decreased the share of youth who had difficulty getting around outside the home by 3 percentage points.

Table III.6. Arkansas PROMISE: Impact on the youth's health and health insurance (percentages, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Youth had health insurance at the time of the survey	95.5	-1.4	0.21
Supplementary outcomes			
Health insurance type at the time of the survey			
Public	94.1	-0.6	0.62
Private	6.5	0.5	0.72
Needed help with or equipment for at least one ADL at the time of the survey	23.1	0.8	0.70
Needed help with or equipment for at least one IADL at the time of the survey	45.3	-7.3	0.00***
Substance use in the 30 days before the survey			
Smoking	5.6	1.3	0.31
Alcohol	3.6	-0.5	0.62
Marijuana	3.4	0.8	0.43
Other illicit drug	0.9	-0.3	0.50

Source: PROMISE 18-month survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of Arkansas PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12a for sample sizes for all outcomes. For outcomes measured with data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

6. Arkansas PROMISE had no impact on the youth's Medicaid enrollment or expenditures

Arkansas PROMISE had no impact on the percentage of months that youth were enrolled in Medicaid or the total Medicaid expenditures during the 18 months after random assignment (Table III.7). On average, the control group youth had Medicaid coverage for nearly the entire 18-month period (96 percent)—virtually the same as that for youth in the treatment group. On average, control group youth had $11,307 in total Medicaid expenditures; the average for the treatment group did not differ significantly. Because SSI recipients in Arkansas are automatically eligible for Medicaid and we did not expect a large immediate shift in SSI eligibility (SSA 2017), we also would not expect a large shift in Medicaid enrollment during the 18 months after the youth's enrollment in Arkansas PROMISE as a result of any of the program's efforts. The program also had no impact on having any Medicaid payments or average monthly payments. Medicaid in Arkansas does not include comprehensive managed care plans, 1915(c) waivers, or capitated behavioral health plans, so outcomes measuring enrollment in these types of plans was not applicable.

Table III.7. Arkansas PROMISE: Impact on the youth's use of Medicaid (percentages, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcomes			
Percentage of months enrolled in Medicaid since RA	96.2	0.1	0.88
Total Medicaid expenditures since RA ($)	11,307	1,124	0.20
Supplementary outcomes			
Enrollment since RA			
Medicaid managed care	n.d.		
Medicaid 1915(c) waiver	n.d.		
Medicaid capitated behavioral health	n.d.		
Medicaid payments since RA			
Any Medicaid payments	99.0	0.4	0.32
Average monthly Medicaid payments ($)	628	62	0.20
Average monthly fee-for-service payments ($)	628	62	0.20
Average monthly capitated payments ($)	n.d.		

Source: State Medicaid data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of Arkansas PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12a for sample sizes for all outcomes. For outcomes measured with data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

n.d. = no data available.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

7. Arkansas PROMISE raised the youth's total income

Our primary measure of the youth's economic well-being was the total income they received during the year before the 18-month survey from paid jobs (based on survey data) and from SSA payments (based on SSA administrative data). Arkansas PROMISE increased the amount youth received from earnings and SSA payments by $993 over the $7,803 average received by control group youth during the reference period (Table III.8). We also measured the youth's annual income during the calendar year after random assignment by using annual earnings data (based on SSA administrative data) combined with SSA disability payments. The average annual income for the control group was $7,370. Arkansas PROMISE increased this by $402.

Arkansas PROMISE also had a positive impact on the distribution of the youth's household income. Based on a categorical measure of household income from the 18-month survey, we found that the program increased the share of youth who lived in a household with annual income over $30,000 by 4 percentage points.

Arkansas PROMISE had a negative impact on the amount of SSA disability payments the youth received. On average, control group youth received $10,930 in SSA disability payments over the 18-month follow-up period; the program reduced this amount by $259 for the treatment group. The reduction was driven by a reduction in SSI payments; the program had no impact on OASDI payments (Appendix Table A.12a). The proportion of the youth receiving any SSA disability benefits and types of benefits did not significantly differ between the treatment and control groups. Increases in youth earnings may have led to a reduction in SSI payments because every $2 increase in earnings reduces SSI payments by $1, though because nearly all youth are still in school (Table III.3), many should have been able to use the Student Earned Income

Exclusion (SEIE) to avoid reductions in benefits. However, there is some evidence that SSA does not apply the SEIE in all potentially eligible cases (Government Accountability Office 2017). The program also had no impact on the share of youth that resided with a parent or the share of youth who had at least one household member receive public assistance other than disability benefits (Table III.8).

Table III.8. Arkansas PROMISE: Impact on the youth's economic well-being (percentages, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Youth total income (earnings and SSA payments) in the year before the survey ($)	7,803	993	0.00***
Supplementary outcomes			
SSA payments in 18-month period since RA (from SSA data)			
Received any SSA payments	97.2	0.3	0.68
Total SSA payments ($)	10,930	-259	0.05**
Income in the calendar year after RA (from SSA data) ($)	7,370	402	0.00***
Youth resided with parent at the time of the survey	97.6	-0.4	0.59
Household income in the calendar year before the survey			
Less than $10,000	33.3	0.5	0.09*
$10,000 to $19,999	36.1	-4.8	
$20,000 to $29,999	20.1	0.6	
$30,000 or more	10.6	3.7	
Any household member who participated in non-SSA public assistance programs at the time of the survey	56.8	-2.6	0.30

Source: PROMISE 18-month follow-up survey and SSA administrative records.

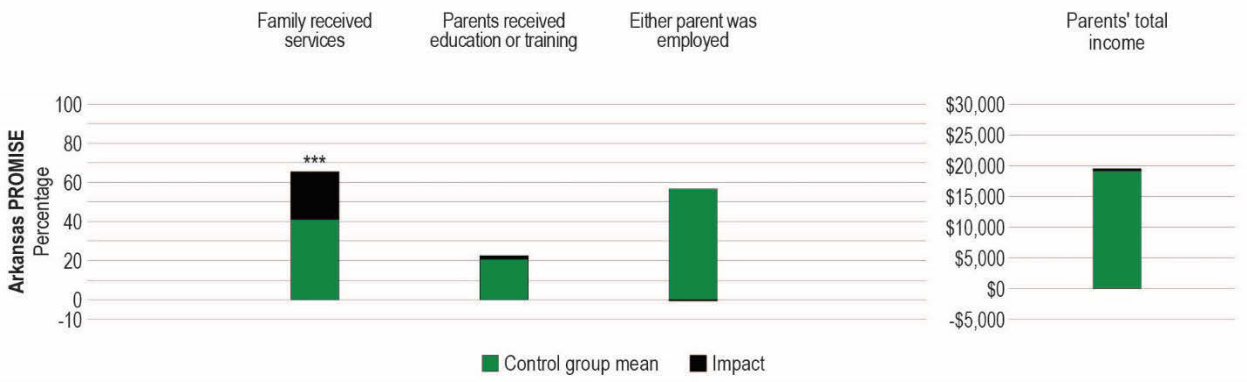
Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of Arkansas PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12a for sample sizes for all outcomes. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

D. Impacts on family outcomes 18 months after enrollment

The findings in this section document whether the services provided by Arkansas PROMISE led to short-term impacts on parent and family outcomes in four domains (Figure III.2). The impact estimates revealed that the program increased the receipt of support services by parents and family members other than the SSI youth, but had no impact on parents' education and training, rates of paid employment, or total income from earnings and SSA payments. Arkansas PROMISE had no differential impacts on the primary family outcomes by subgroups defined based on the youth's sex, age, and primary impairment.

Figure III.2. Arkansas PROMISE: Impacts on parent and family primary outcomes



*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

1. Arkansas PROMISE increased families' receipt of support services

Arkansas PROMISE led to increased receipt of support services among families assigned to the treatment group (Table III.9). In the control group, 41 percent of families had a family member other than the SSI youth who received services during the 18 months after random assignment. The program increased this share by 24 percentage points. It also increased the share of families who received an array of specific services, with particularly large positive impacts on the receipt of case management, benefits counseling, help with financial education, parent training and information on youth's disability, and parent networking support as well as smaller impacts on employment-promoting services and education or training supports. This finding is consistent with the program model. Connectors and other staff met and worked with family members as well as youth, developed Arkansas PROMISE plans for parents that included education and employment goals, and helped families access needed resources. In addition, family members were invited to and received incentives to attend the program's monthly trainings; their attendance rates were similar to those of the youth (Honeycutt et al. 2018a).

Additional exploratory analyses we conducted show that the impact on family receipt of support services was higher for families with multiple youth enrolled in PROMISE than for families with a single PROMISE-enrolled youth (results not shown). Although this suggests that some of the increased family service receipt reflects the Arkansas PROMISE program's services to multiple PROMISE-enrolled youth, the impact was positive and significant for families with a single PROMISE-enrolled youth.

We examined whether Arkansas PROMISE affected family members' receipt of a subset of key support services. About 26 percent of parents in the control group reported that their family members received at least some of these key services during the 18 months after random assignment. The program increased this share by 25 percentage points. Despite the large impact on the likelihood of receiving key services, the program had no impact on the average number of hours of services received by families. The program did increase the number of providers used by families by an average of 0.3 providers, though much of this increase can be attributed to the increase in receipt of any key services. The program also increased the proportion of families who said at least one of the services they received was somewhat or very useful, which is

primarily driven by families receiving key support services also rating those services somewhat or very useful.

Table III.9. Arkansas PROMISE: Impact on the families' receipt of services (percentages, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any family support services since RA	40.9	24.4	0.00***
Supplementary outcomes			
Types of family support services received since RA (italics indicate key support services)			
Case management[a]	11.7	15.9	0.00***
Education or training supports	8.4	3.6	0.02**
Employment-promoting services[a]	8.9	2.9	0.06*
Benefits counseling[a]	11.9	23.8	0.00***
Financial education[a]	9.4	16.9	0.00***
Parent training and information on youth's disability[a]	22.2	19.1	0.00***
Parent networking support	14.5	19.9	0.00***
Any key support services received since RA	26.4	24.7	0.00***
Hours of key support services received since RA	40.8	9.7	0.40
Number of key support service providers since RA	0.4	0.3	0.00***
Usefulness of key services received since RA			
No key service reported	73.6	-24.5	0.00***
No service rated somewhat or very useful	0.5	0.2	
Any service rated somewhat or very useful	26.0	24.3	
Enrolling parent's engagement with VR services (from state VR agency data)			
Applied for VR services since RA	2.4	0.1	0.94
Received VR services since RA	1.6	-0.0	1.00

Source: PROMISE 18-month follow-up survey and state VR agency data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of Arkansas PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12a for sample sizes for all outcomes. For outcomes measured with data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

[a]These services were required of the PROMISE programs. With the exception of parent training and information on youth's disability, we asked more detailed questions about providers of these services in the PROMISE 18-month survey than providers of other support services. The outcome measures related to key support services presented in this table reflect all required services except parent training and information on youth's disability.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

Arkansas PROMISE reduced the share of families with unmet needs for services or supports by 6 percentage points (17 percent of control group families reported this; Appendix Table A.12a). The program also affected the number and types of unmet family service or support needs. Treatment group families were less likely to have unmet needs for employment-promoting services, benefits counseling, financial education, referral services, transportation, health services, or other services.

Our examination of state VR agency data suggested that Arkansas PROMISE had no impact on the share of enrolling parents who applied for or received VR services during the 18 months after PROMISE enrollment. Though the process analysis found that most parents developed a

program service plan that included employment and education goals, parents' interests and goals might not have required the assistance of services from the VR agency.

2. Arkansas PROMISE had no impact on parents' education or training

Arkansas PROMISE did not affect the parents' education or training. In the control group, about 21 percent of parents reported that either they or their spouse had completed or attended school or job skills training during the 18 months after random assignment and this did not differ for the treatment group (Table III.10). The program had no impact on the parents' enrollment in education or job skills training at the time of the survey or their attainment of a diploma, GED, certificate of completion, or professional license since random assignment. The lack of impact on parental education contrasts with the program's intent to encourage family members' education and training. Program staff reported working with families to develop service plans related to education and to refer them to providers, such as colleges and VR agencies, to help family members achieve their goals (Honeycutt et al. 2018a). However, these efforts appear to have been insufficient to generate impacts as of 18 months after enrollment.

Table III.10. Arkansas PROMISE: Impact on the parents' education and training (percentages, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any education or job skills training since RA	20.8	1.6	0.46
Supplementary outcomes			
Either parent was enrolled in education or job skills training at the time of the survey	5.6	1.1	0.37
Either parent received a diploma, GED, certificate of completion, or professional license since RA	8.9	-1.3	0.36

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of Arkansas PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12a for sample sizes for all outcomes. For outcomes measured with data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

3. Arkansas PROMISE had no impact on parents' employment rates and earnings

Arkansas PROMISE did not affect the likelihood of parents being employed since random assignment (Table III.11). About 57 percent of parents in the control group reported that either they or their spouse had worked for pay since random assignment, and this did not differ for the treatment group. The program also had no impact on the share of parents reporting that they or their spouse had worked for pay in the month prior to the 18-month survey, nor on whether parents had access to health insurance through their jobs at the time of the 18-month survey.

The program had no impact on earnings measured from administrative data for the calendar year after random assignment, but it increased the parents' earnings from employment during the month before the survey interview. The control group parents had an average annual earnings of $16,083 based on administrative data, and the average for the treatment group was not statistically different. Analysis of earnings measured using survey data suggested that control

group parents and their spouse had earned $768 during the past month, and the program increased this amount by $110. The positive impact on parents' earnings based on survey data could partly be driven by the larger share of treatment group parents that had a spouse or partner at the time of the survey; 28 percent of treatment group parents had spouses or partners at the time of the survey compared with 23 percent of control group parents (supplementary analyses not shown).[37] We interpret the lack of impact on parents' employment and their annual earnings along with the positive impact on earnings in the past month from survey data being partly explained by the likelihood of having a spouse as a pattern of evidence that Arkansas did not have a positive impact on parents' earnings.

Table III.11. Arkansas PROMISE: Impacts on the parents' employment and earnings (percentages, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Either parent was employed since RA	56.6	-0.5	0.84
Supplementary outcomes			
Either parent was employed in the month before the survey	49.6	2.6	0.31
Parents' earnings from all jobs in the month before the survey ($)	768	110	0.04**
Parents' earnings in the calendar year after RA (from SSA data) ($)	16,083	222	0.66
Either parent was offered health insurance through a job held in the month before the survey	28.8	3.2	0.17

Source: PROMISE 18-month follow-up survey and SSA administrative records.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of Arkansas PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12a for sample sizes for all outcomes. For outcomes measured with data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

4. Arkansas PROMISE had no impact on parents' annual total income

We examined whether Arkansas PROMISE improved parents' economic well-being by assessing impacts on the sum of their earnings from employment and payments from the SSI and OASDI programs (for the enrolling parents and their spouses, if applicable). In the control group, the average parental income per household during the calendar year after random assignment was $19,094, and the program had no impact on this outcome (Table III.12). Arkansas PROMISE also had no impact on parents' receipt of SSA payments or Medicaid outcomes.

[37] Supplementary analyses suggested that the program had an impact on the share of parent survey respondents who reported having a spouse, even after controlling for the number of parents in the household at random assignment (based on SSA data). The process analysis findings did not indicate that the program had any particular focus on parents' spousal relationships, but the program might have indirectly influenced spousal relationships—for example, through improved youth well-being or the provision of parent networking support or other services. Controlling for the number of parents in the household at baseline did not affect the estimated program impact on parents' earnings. The program might have increased the likelihood of having a spouse at the time of the survey, which in turn contributed to the positive impact on combined parental earnings at that time.

Table III.12. Arkansas PROMISE: Impact on parents' economic well-being (percentages, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Parents' total income in the calendar year after RA (from SSA data) ($)	19,094	359	0.49
Supplementary outcomes			
Parents' SSA payments in 18-month period since RA (from SSA data)			
Received any payments	31.2	0.7	0.75
Total payments ($)	4,566	199	0.58
Medicaid enrollment and payments since RA (from state Medicaid program data)			
Enrolled in Medicaid	79.7	1.2	0.52
Enrolled in Medicaid comprehensive managed care	n.d.		
Enrolled in Medicaid 1915(c) waiver	n.d.		
Total Medicaid payments ($)	5,617	-188	0.61

Source: PROMISE 18-month follow-up surveys, SSA administrative records, and state Medicaid data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of Arkansas PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12a for sample sizes for all outcomes. For outcomes measured with data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

n.d. = no data available.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

E. Cost analysis results for Arkansas PROMISE

This section summarizes the findings from the cost analysis of Arkansas PROMISE, with a focus on cost by input category and program component as well as the cost per treatment group enrollee and cost per participant. The technical appendix describes our methods for this analysis.

The average annual cost of the resources used by Arkansas PROMISE to deliver services during the accounting period we targeted (October 1, 2016, through September 30, 2017) was $9,148 per treatment group youth enrollees and their families. We estimated the program's average cost per enrollee to be $30,028 over the entire service delivery period (October 1, 2014, through September 30, 2018).

1. Costs by input category

Table III.13 summarizes the costs of Arkansas PROMISE by input category during the accounting period. Other direct costs constituted the largest proportion (54 percent) of program costs. Purchased services accounted for the majority of costs in this category, with the Arkansas Department of Workforce Services accounting for the largest portion of purchased services costs. The Arkansas Department of Workforce Services contracted with local workforce investment boards and other work-related service providers to deliver summer work experiences to the youth and—in the first year of the program—job coaching services. Sources for Community Independent Living Services represented a smaller but substantial portion of the program's purchased services costs. The organization provided benefits counseling services individually and in groups through its community work incentives counselors and distributed the case management funds that participating families used to meet basic needs. Other purchased services included contracts with: the Arkansas Research Center for MIS development and maintenance, college campuses for planning and implementation of the summer camp, and a provider of work

experiences that replaced one of the Arkansas Department of Workforce Services boards. This finding aligned with the program's service delivery model, which funded staff through existing agencies (rather than hiring staff directly) to provide program services other than case management. Enrollee payments (that is, participant-specific costs such as graduation incentives, summer youth wages, and accommodation services) accounted for the remaining portion of other direct costs. Summer youth wages constituted the majority of these payments.

Labor costs constituted the second-largest share (33 percent) of Arkansas PROMISE's costs. The majority of the costs in this input category were the wage and fringe benefit costs of case managers (connectors). The remaining labor costs were wage and fringe benefit costs for administrative staff and regional directors who managed the program, and some staff who delivered program services through contracted agencies.

Indirect costs were the third-largest share (13 percent) of Arkansas PROMISE costs. These included operational costs such as meeting expenses, travel, facilities, and office supplies. Travel represented about one-third of the indirect costs, reflecting staff travel to meet with participants and convene events as well as the large geographic areas that some staff traveled to meet with the families on their caseloads.

The smallest share of costs was attributed to donated goods and services, which accounted for less than 1 percent of Arkansas PROMISE costs. This category captured in-kind contributions including access to and utilities for 12 offices and meeting spaces throughout the five regions.

Table III.13. Arkansas PROMISE costs by input category, October 2016 through September 2017

Category	Percentage of Arkansas PROMISE total cost	Cost amount
Other direct costs	53.7	$5,045,747
Labor costs	33.2	$3,121,216
Indirect costs	12.5	$1,172,644
Costs of donated goods and services	0.6	$55,218
Total	**100.0**	**$9,394,824**

Source: Arkansas PROMISE cost data.

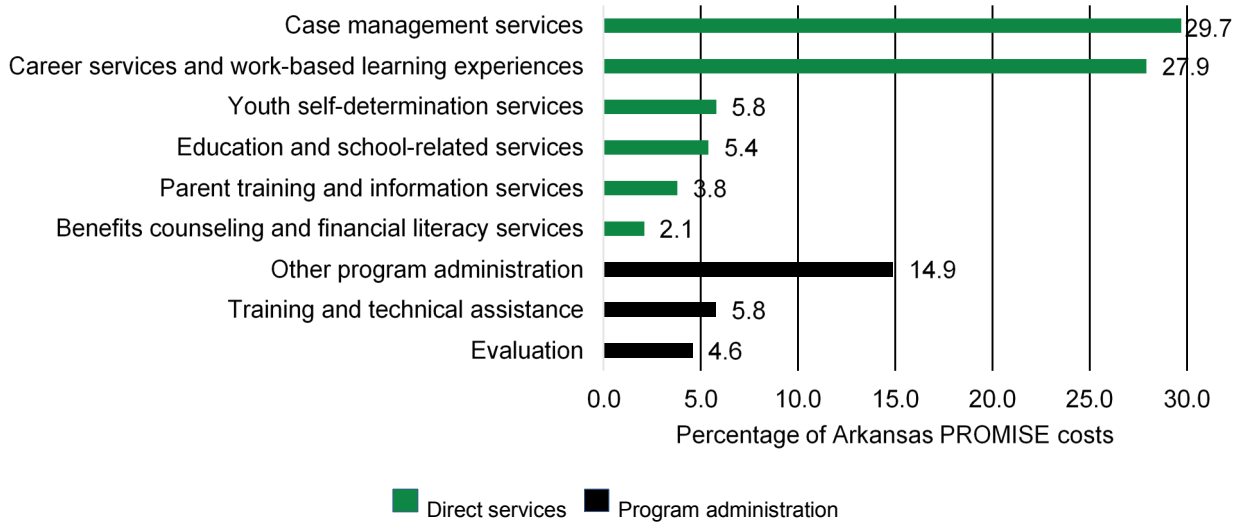
Note: The data reflect costs from October 1, 2016, through September 30, 2017. The total sum differs from the sum of figures in the table due to rounding.

2. Costs by program component

The six service components comprising direct services accounted for 75 percent of the total cost of Arkansas PROMISE during the accounting period (Figure III.3). Among the direct service components, case management represented the largest proportion of costs (30 percent) while career services and work-based learning experiences constituted the second largest (28 percent). This pattern aligned with the program's emphasis on intensive case management for the whole family and the provision of summer work experiences for youth participants. Youth self-determination services (6 percent) were the next largest proportion of direct service costs. Input costs for the program component included time spent by connectors and contracted program staff who led self-advocacy trainings for program youth, as well as a proportion of the costs

associated with holding the program's summer camp. In addition, education- and school-related services accounted for 5 percent and parent training and information services represented about 4 percent of program costs. Finally, the program had only a small percentage of service costs (2 percent) associated with benefits counseling and financial literacy training services.

Figure III.3. Arkansas PROMISE costs by program component, October 2016 through September 2017



Note: The data reflect costs from October 1, 2016, through September 30, 2017.

Program administration accounted for approximately 25 percent of the total cost of Arkansas PROMISE. Among the three components of program administration—evaluation, training and technical assistance, and other program administration—the other program administration component represented the largest share of these costs. Inputs for this component included program staff's time spent on tasks related to oversight, ED's reporting requirements, and general administration of the program. Training and technical assistance costs were the second-largest portion of program administration costs and included activities related to the receipt or delivery of staff training to improve knowledge and skills in working with youth, families, and the community. The program's evaluation costs comprised the smallest proportion of administration costs and constituted time spent providing oversight and support to the formative evaluator, as well as the Arkansas Research Center's purchased evaluation services.

3. Costs per treatment group enrollee and per participant

The treatment group included 1,027 youth (research and nonresearch cases). Of those, 940 participated in Arkansas PROMISE services during the first three years of program operations (Honeycutt et al. 2018a). For both enrollees and participants, we assumed an average duration of participation in the program of 3.3 years, which we estimated based on the average length of potential participation for enrollees from the random assignment date through September 30, 2018. Dividing the total program cost for the one-year accounting period by the number of enrolled and participant youth, we obtained an average annual program cost of $9,148 for enrolled youth and their families and $9,994 for participating youth and their families. Applying this annual program cost to the average duration of participation, we found a total program cost

of $30,028 per enrollee and $32,807 per participant in services, on average, over the program's entire service delivery period (not just the one-year accounting period). The costs per enrollee and participant included substantive services provided to family members and to youth.[38]

F. Summary of findings and discussion

Arkansas PROMISE had impacts on several of the primary outcomes considered in our analysis that were consistent with program expectations (Table III.14). Youth who were eligible to participate in the program were significantly more likely to receive transition services and work for pay since random assignment than youth in the control group. The program also increased the total income of treatment group youth from employment and the amount of SSA payments received. Family members in the treatment group were significantly more likely to receive support services. These impacts are important because the evaluation team had proposed these primary outcomes to be the main basis for evaluating the program's effectiveness.

Table III.14. Arkansas PROMISE: Summary of impacts on primary outcomes, by domain

	Domain	Primary outcome	Impact summary
Youth	Receipt of transition services	Receipt of any transition services	+++
	Education	Enrollment in school at the time of the survey	0
	Employment and earnings	Ever employed in a paid job since RA	+++
	Self-determination and expectations	Self-determination scale (0 to 100)	0
	Self-determination and expectations	Youth expects to complete high school/GED	0
	Health and health insurance	Youth has health insurance	0
	Use of Medicaid	Percentage of months enrolled in Medicaid since RA	0
	Use of Medicaid	Total Medicaid expenditure since RA ($)	0
	Economic well-being	Youth's total income in past year ($)	+++
Family	Receipt of services	Any family support services since RA	+++
	Parents' education and training	Any education or job skills training since RA	0
	Parents' employment and earnings	Either parent was employed for pay since RA	0
	Parents' economic well-being	Parents' income in calendar year after RA	0

Source: PROMISE 18-month follow-up survey and SSA administrative records.

Note: +/++/+++ The impact estimate is positive and statistically significant at the .10/.05/.01 level using a two-tailed *t*-test.
0 The impact estimate is not statistically different from zero at the .10 level using a two-tailed *t*-test.

The program also had impacts on several supplementary outcomes we considered in our analysis. For example, the program increased the youth's receipt of useful key services, job-related training and credentials, and employment and earnings. Impacts on the youth's employment and earnings were particularly large, with both more than doubling for youth in the

[38] The average annual and total program costs derived from the data presented in the text differ slightly due to rounding. These statistics were calculated based on an average monthly program cost of $762.32 for enrolled youth and their families and $832.87 for participating youth and their families and an average duration of participation of 3.3 years.

treatment group. The program also increased the families' receipt of useful key services and parents' expectations that the youth would pursue postsecondary education.

Arkansas PROMISE improved several short-term outcomes for youth that can be considered either program services or outputs, including the youth's receipt of transition services, job-related training, and paid employment. The pattern of impacts reflected the program's focus on delivering intensive case management and employment-promoting services. The impacts on these outcomes may also have been facilitated by the high treatment-control contrasts for these services—that is, the program focused on delivering intensive case management and employment-promoting services (Honeycutt et al. 2018a), which constituted the primary distinction between the services available to the treatment group versus the control group.

The lack of impacts on some primary outcomes might seem inconsistent with the goals of Arkansas PROMISE, but for some of these outcomes, including health insurance coverage and school enrollment, the control group mean might have been too high or the youth too young to expect the program to have any measurable effect at 18 months after enrollment. For other outcomes, the program developed and offered services that it expected to influence youth and families in positive ways; however, as of 18 months after enrollment we did not observe any impacts. For the youth's education, the program employed transition counselors to work with the youth and their families on school issues. For the youth's self-determination and expectations, the program implemented curricula through its monthly trainings and the service approaches used by case managers. For parents' education and training and for parents' employment and earnings, program staff developed service plans and referrals to service providers. For these outcomes, the 18-month observation period might have been too soon to observe an impact. Alternatively, the program services intended to affect the outcome may not have been delivered at a sufficient quality or intensity.

The positive short-term impacts that we found on the youth's service receipt, receipt of job-related training and credentials, and employment and earnings suggest that Arkansas PROMISE has the potential for long-term positive impacts on youth's employment, earnings, and total income. Our planned five-year impact analysis will shed light on whether these interim impacts will translate into meaningful and persistent economic gains in the long term for youth and their families.

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IV. ASPIRE

Summary of 18-month impacts and costs of ASPIRE

- ASPIRE increased the share of youth who received transition services and made it more likely that their families would receive support services.
- It also increased the youth's receipt of job-related training, but decreased their school enrollment.
- The program increased the likelihood that the youth had paid jobs, but did not affect their earnings.
- The program had no impact on (1) the number of hours of key services that the youth and families received, (2) the parents' educational attainment and employment, (3) the youth's self-determination and expectations about the future, (4) the youth's health insurance coverage, (5) the youth's and parents' reliance on benefits from SSA, and (6) the youth's and parents' total income.
- ASPIRE's average annual cost per treatment group enrollee was $5,490, which included the costs of providing services to both the youth and their family members.

A. Program overview and a review of findings from the process analysis

This section provides an overview of ASPIRE and the findings from the ASPIRE process analysis (Anderson et al. 2018). The process analysis documented the program's structure and service model and described its implementation during the first three years of operations based on data from ASPIRE's MIS, site visits, and key informant interviews.

1. Program overview

ASPIRE was implemented statewide in a consortium of six western states: Arizona, Colorado, Montana, North Dakota, South Dakota, and Utah. Members of the ASPIRE project leadership team—all of whom were employees of the Utah State Office of Rehabilitation, which entered into the PROMISE cooperative agreement with ED—provided overall leadership for the program and facilitated regular communication among and standardized trainings for the consortium states. Each consortium state had (1) a lead agency that the Utah State Office of Rehabilitation contracted to implement ASPIRE statewide and (2) its own ASPIRE site coordinator, who managed all aspects of program service delivery in that state and supervised case managers fully dedicated to ASPIRE. There were several types of state agencies among the lead agencies across the ASPIRE states, including three VR agencies, a state university, a department of public health, and a governor's office. Each had agreements with other agencies in their respective states to provide guidance and support to the program at the state level. In Arizona and Montana, the lead agency shared responsibility for the provision of PROMISE services with another state agency (the department of education in both instances). In South Dakota, the lead agency (a VR agency) subcontracted the entire PROMISE operation to a public education organization.

Intensive case management was the cornerstone of the ASPIRE approach to serving youth with disabilities. The program assigned treatment group youth, along with their families, to an ASPIRE case manager, who assisted them in identifying goals and accessing services, supports, and information to promote self-sufficiency. Case managers were responsible for meeting with the youth and their families in person for at least 30 minutes once per month and connecting them to four ASPIRE core interventions: (1) benefits counseling, (2) financial education, (3) training and information on advocacy and community resources to help parents support their

youth's successful educational and employment outcomes, and (4) self-determination training and support for youth to help them understand their strengths and limitations and build self-esteem. Case managers also were responsible for connecting youth and family members to career exploration activities and work-based learning experiences; educational services; and other community supports and resources such as assistance with housing, utilities, food, accessibility needs, or individual development accounts.

Subcontractors located in each state typically provided the core ASPIRE interventions other than case management. To maximize program fidelity and implementation consistency across the states, the ASPIRE project leadership team provided the consortium states with templates for the scope of work in the subcontracts for intervention service providers. Many of the subcontractors were organizations that already provided services similar to the ASPIRE interventions, although with other funding sources. The funds that ASPIRE provided to these subcontractors were intended to help the organizations build their capacity to serve the ASPIRE target population. Across the consortium states, some of the partners that delivered ASPIRE services changed over time, either because they did not meet the program's expectations or because the program's needs changed.

2. Summary of findings from the process analysis

About three years into program operations, ASPIRE had engaged 86 percent of treatment group youth as participants in the program but lagged in its goal to deliver intensive case management.[39] An intake meeting, during which program staff—usually a case manager—assessed service needs for a youth and his or her family, was generally the first ASPIRE activity to take place. On average, it took about two months after a youth's enrollment in the evaluation to complete the intake meeting, though the median amount of time was a little more than one month. Case managers participated in the required face-to-face monthly meetings with families in just under half (47 percent) of all months between intake and the end of the third year of program operations (October 2017), on average. Of all case management contacts that occurred (2.6 per family per month on average), most were less than 20 minutes in duration and occurred by telephone.

ASPIRE was on track to meet one of its two goals for providing career exploration and work opportunities to youth. Under the ASPIRE program model, at least 30 percent of youth were to have at least one paid work experience after reaching age 16 and nearly all youth were to engage in career exploration activities during each year of enrollment. ASPIRE had already met the former goal by the end of October 2017, with 31 percent engaged in competitive employment. It had not met the latter goal, however. By the end of the third year of program operations, only 51 percent of youth had participated in at least one career exploration or employment activity during each year of enrollment.

The program had engaged a nontrivial percentage of participants in the other core intervention services through October 2017, but fell short of its own performance measures in these areas. ASPIRE aimed to provide each treatment group family with six hours of training and information for parents per year, six hours of financial education per year, and six hours of self-

[39] The program began in September 2014 in South Dakota and Utah, in November 2014 in Colorado, in December 2014 in North Dakota, in February 2015 in Arizona, and in March 2015 in Montana.

determination training per year. Fewer than half of the families had received each service, but an even smaller minority (fewer than 10 percent of families) had received the intended level of service. The program intended to deliver benefits counseling to 80 percent of treatment group families for whom either employment or age 18 were imminent for the youth. By the end of the third year of operations, the program had provided benefits counseling to 46 percent of those families. Although the patterns varied by intervention, service take-up rates were consistently lower in Arizona, the state with the largest share of enrollees, than in the other consortium states. Program staff and administrators attributed low take-up rates to several factors: the challenges of serving participants in geographically dispersed and remote areas; family crises that compromised the parents' ability to participate in program services and maintain a focus on the transition-related needs of their youth with disabilities; and the belief by some families that the ASPIRE interventions were not relevant because of the age or other circumstances of their youth. In some of the consortium states, delays in implementing the interventions because of difficulties in identifying qualified service providers also reduced service take-up. Low take-up of the core interventions among treatment group families and disparities in take-up rates across consortium states may have weakened the program's capacity to show impacts.

At the same time, ASPIRE maintained the integrity of the random assignment evaluation by avoiding any control group contamination in the receipt of program services. There was virtually no risk that control group youth received case management services through ASPIRE. Although the ASPIRE case managers were also evaluation recruiters, they did not serve any clients other than the ASPIRE treatment group youth and their families and were trained on the importance of adhering to the experimental study design. There also was no systematic avenue through which control group families could unintentionally connect with ASPIRE after random assignment because the program operated independently from schools and other programs that served the target population. Intensive case management focused on the transition needs of youth with disabilities was not broadly available in the consortium states. Although most ASPIRE subcontractors did not limit their services to just treatment group participants, ASPIRE partners believed that in the absence of ASPIRE, few youth and families took-up these services because they either lacked awareness of them or were not motivated to seek them out. Therefore, the service experiences of treatment and control group youth were markedly different.

B. Baseline characteristics of the youth survey respondent sample

The youth survey respondent sample for the interim impact analysis of ASPIRE consists of 1,560 randomly assigned youth who completed an 18-month follow-up survey.[40] About one-third of the youth in the sample were female (Table IV.1, Column A). At the time of random assignment, about 38 percent of the youth were age 14, about 31 percent were age 15, and

[40] Of the 2,051 youth enrolled in the ASPIRE evaluation, 1,953 youth were randomly assigned—978 youth to the treatment group and 975 youth to the control group. Random assignment occurred immediately after the youth and the family enrolled in ASPIRE. The remaining 98 youth had siblings already enrolled in the evaluation and so were purposively assigned to the same group as their siblings (55 treatment cases and 43 control cases). We did not include these nonresearch cases in the impact analysis. The full research sample for the impact analysis consists of the 1,953 youth who enrolled in the evaluation and who were randomly assigned to either the treatment or control group. These 1,953 youth, less 9 youth (5 treatment and 4 control cases) who died within 18 months of enrollment, constituted the denominator for calculating the 18-month survey response rate for ASPIRE, which was 80 percent for the youth survey and 83 percent for the parent survey.

another 31 percent of the youth were age 16. More than 90 percent expressed a preference for English as their written and spoken language. About 84 percent lived with their parents and 14 percent lived in their own households at the time they had applied for SSI. The largest racial and ethnic group was Hispanic (35 percent), followed by non-Hispanic white (34 percent) and non-Hispanic black (11 percent). Among the parents, the largest racial and ethnic group was non-Hispanic white (43 percent), followed by Hispanic (32 percent) and non-Hispanic black (11 percent).

We grouped the youth's primary impairments, as recorded in baseline SSA administrative data, into five categories, the largest of which was intellectual or developmental disability (45 percent). The next largest group was other mental impairment (29 percent), followed by physical disability (19 percent); other or unknown disability (5 percent); and speech, hearing, or visual impairment (3 percent).

About 91 percent of the youth in our sample received SSI payments during the month of random assignment. On average, nine years had passed since the time of their initial SSI eligibility. Their age at the time of most recent SSI application was 7 years, on average. About 11 percent of the youth received OASDI payments. On average, the youth received $7,421 in SSA payments during the year before their month of enrollment in the evaluation and random assignment. About 18 percent of our sample youth also lived in a household with multiple SSI-eligible children. Only 2 percent of youth had any earnings from employment in the year before random assignment; among parents, 71 percent had any earnings from employment.

On average, most of these characteristics were similar for youth in the treatment and control groups, which was expected given that the youth were randomly assigned to these groups. We compared the two groups across 25 characteristics at the time of random assignment (Table IV.1, Columns B and C) and found one statistically significant difference between the two groups in the prevalence of OASDI payments. We expect to be able to identify unbiased estimates of program impacts by comparing the treatment and control groups while accounting for this difference in baseline characteristics through regression adjustment.

Table IV.1. ASPIRE: Baseline characteristics of the youth survey respondent sample (percentage, unless otherwise noted)

	All (A)	Treatment (B)	Control (C)	Difference (B-C)	*p*-value
Demographic characteristics					
Youth sex is female	32.6	32.5	32.8	-0.2	0.92
Youth age at RA					
14 years	37.9	37.5	38.3	-0.7	0.94
15 years	31.1	31.1	31.1	0.0	
16 years	31.0	31.3	30.6	0.7	
Average age	15.4	15.4	15.4	0.0	0.86
Youth language preference at SSI application					
English is preferred written language	91.6	91.4	91.8	-0.4	0.74
English is preferred spoken language	91.2	91.0	91.4	-0.5	0.74
Youth living arrangement at SSI application					
In parents' household	83.5	84.0	83.1	0.9	0.20
Own household or alone	13.7	14.0	13.4	0.6	
Another household and receiving support	2.8	2.1	3.5	-1.5	
Youth race/ethnicity (from the 18-month survey)					
Non-Hispanic white	34.3	35.2	33.4	1.7	0.47
Non-Hispanic black	10.9	9.5	12.3	-2.8	
Hispanic	35.1	36.0	34.1	1.8	
Non-Hispanic American Indian	6.9	6.9	6.9	0.1	
Non-Hispanic other or mixed race	7.5	7.6	7.3	0.3	
Missing	5.3	4.8	5.9	-1.1	
Enrolling parent age at RA (from the RA system)	43.9	43.8	44.0	-0.2	0.69
Parent race/ethnicity (from the 18-month survey)					
Non-Hispanic white	42.6	43.3	41.8	1.5	0.70
Non-Hispanic black	10.9	10.1	11.6	-1.5	
Hispanic	31.6	32.2	31.0	1.2	
Non-Hispanic American Indian	6.2	6.5	5.9	0.6	
Non-Hispanic other or mixed race	5.6	4.9	6.2	-1.2	
Missing	3.2	2.8	3.5	-0.6	
Disability					
Youth primary impairment					
Intellectual or developmental disability	44.7	46.5	43.0	3.5	0.30
Speech, hearing, or visual impairment	2.7	2.4	2.9	-0.5	
Physical disability	19.0	19.7	18.3	1.3	
Other mental impairment	28.8	26.5	31.2	-4.7	
Other or unknown disability	4.8	5.0	4.5	0.5	
SSA program participation					
Youth SSA payment status at RA					
Received SSI	91.4	91.4	91.4	-0.0	0.99
Received OASDI	10.6	11.9	9.2	2.7	0.09*
Years since youth's earliest SSI eligibility at RA	8.8	8.9	8.8	0.1	0.51
Youth age at most recent SSI application	7.2	7.0	7.3	-0.3	0.19
Youth payments in the year before RA ($)					
SSI	7,112	7,062	7,164	-102	0.39
OASDI	309	310	307	2	0.97
Total SSI and OASDI	7,421	7,372	7,471	-99	0.37
Household had multiple SSI-eligible children	18.1	18.9	17.3	1.6	0.41
Enrolling parent provided a valid SSN at RA	71.5	71.7	71.3	0.4	0.87
Parents included in the SSA data analyses					
None	8.5	7.8	9.2	-1.4	0.59
One parent	49.5	49.7	49.2	0.6	
Two parents	42.0	42.4	41.6	0.9	
Parent SSA payment status at RA					
Any parent received SSI only	9.2	8.8	9.6	-0.8	0.73
Any parent received OASDI only	9.8	10.5	9.2	1.3	
Any parent received both SSI and OASDI	4.3	4.4	4.2	0.2	
No parent received any SSA payments	68.1	68.5	67.8	0.7	
No parent was included in the SSA data analyses	8.5	7.8	9.2	-1.4	
Earnings					
Youth had any earnings in the calendar year before RA	1.6	1.9	1.4	0.5	0.47
Youth earnings in the calendar year before RA ($)	13	15	11	5	0.47
Parent had any earnings in the calendar year before RA	71.0	69.9	72.2	-2.3	0.34
Parent earnings in the calendar year before RA ($)	18,511	18,877	18,140	737	0.54
Number of youth	1,560	784	776		

Source: SSA administrative records; PROMISE RA system; PROMISE 18-month follow-up survey.

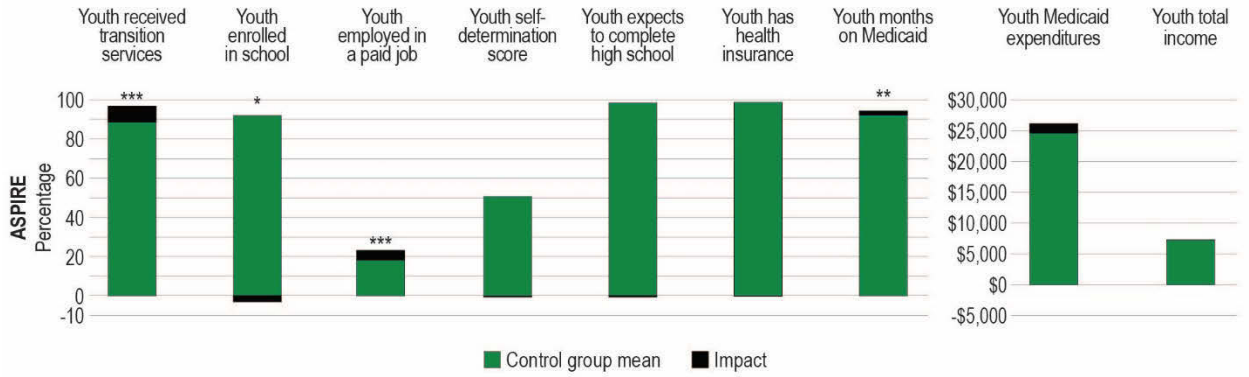
Note: The sample includes all youth who completed the PROMISE 18-month youth survey. We weighted statistics to adjust for survey nonresponse.

*/**/***Difference is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test or a chi-square test.

C. Impacts on youth outcomes 18 months after enrollment

The findings in this section show whether the services provided by ASPIRE led to short-term impacts on youth outcomes in seven domains (Figure IV.1). The impact estimates revealed that the program increased the share of youth who received transition services, their likelihood of paid employment, and the percentage of months youth were enrolled in Medicaid, but decreased the share of youth enrolled in school. The program had no impact on youth's earnings, self-determination and expectations, health insurance coverage, Medicaid expenditures, and total income from earnings and SSA payments at 18 months after enrollment in ASPIRE.

Figure IV.1. ASPIRE: Impacts on youth primary outcomes



*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

We also estimated impacts of ASPIRE for subgroups of youth defined by their sex, age, primary impairment, and their state of residence (Arizona, Colorado, and the remaining four consortium states together) when they enrolled in the evaluation. ASPIRE had differential impacts on youth's receipt of transition services and health insurance coverage by primary impairment; youth's total Medicaid expenditures by sex; and youth's school enrollment and educational expectations by age. The program also had differential impacts on youth's health insurance coverage by the youth's state of residence.

1. ASPIRE connected more youth to transition services

Consistent with the intent of the PROMISE program model, ASPIRE increased the receipt of transition services among youth with disabilities. These services included case management, employment-promoting services, benefits counseling, help with financial education, and education and training supports (Table IV.2). With 89 percent of control group youth receiving any transition services during the 18 months after random assignment, there did not appear to be large barriers to youth receiving at least some transition services in the ASPIRE states; nonetheless, the program increased this share by 8 percentage points.

Impacts on the receipt of transition services differed significantly by the youth's primary impairment (Appendix Table A.15b). ASPIRE had the smallest impact on receipt of transition services for youth with intellectual or developmental disabilities (5 percentage points) and the largest impact for youth with other impairments (13 percentage points). The impact for youth with other mental impairments was in between these two groups (9 percentage points). This finding may reflect the fact that a smaller share (84 percent) of control group youth with other

impairments received transition services, so there was more room for the program to improve the outcome for that subgroup.

The PROMISE 18-month survey also asked about the use of specific transition services. We found that ASPIRE had significant positive impacts on the youth's receipt of each type of service queried. ASPIRE increased the receipt of case management by 31 percentage points—consistent with the program model, which stressed intensive case management. The program also increased the share of youth who received an array of other transition services, including school transition planning; employment-promoting services (such as career planning, job skills training, help with a job search, and on-the-job supports); benefits counseling; help with financial education; self-advocacy or self-determination training; help accessing education or training; life skills training; and help with assistive technology. The program's impacts were largest for the services that were the focus of its model.

We also examined the youth's use of a subset of these services—designated as key transition services—and their intensity: case management, employment-promoting services, benefits counseling, and help with financial education. About 62 percent of control group youth received any of these key services during the 18 months following random assignment. ASPIRE increased the youth's receipt of these services by 21 percentage points. The program increased the average number of service providers that youth used by 0.7 providers, though much of this increase can be attributed to the increase in receipt of any key services. The lead agency in each ASPIRE state contracted with other organizations to provide ASPIRE services, so the program was designed to spread services across multiple providers (Anderson et al. 2018). Despite these positive effects, ASPIRE had no impact on the number of hours of key services that the youth received. On average, the total hours of key transition services received by control group youth—411 hours (or about 5.3 hours per week on average during the 18-month follow-up period)—was not statistically different from that received by the treatment group.

Treatment group youth were more likely to report having received services that they perceived as somewhat or very useful. In the control group, 59 percent of youth received services that they considered somewhat or very useful; the program increased this share by 22 percentage points. This offsets the reduction of 21 percent of youth with no key service reported, implying that nearly all youth who received key transition services found them somewhat or very useful.

ASPIRE did not affect the likelihood of youth reporting unmet needs for services or supports or the number of unmet needs: 23 percent of the control group had some such unmet needs; the share was similar in the treatment group (see Appendix Table A.12b). However, ASPIRE reduced unmet needs for employment-promoting services, benefits counseling, and education or training supports. These services and supports were among the primary ASPIRE service offerings to the youth. We found no differences between the treatment and control groups in unmet needs for other types of services or supports, including case management, help with financial education, self-advocacy or self-determination training, or several others. The findings with respect to case management and help with financial education are somewhat surprising given the program's relatively large impacts on the receipt of these services. But only a small share of families (5 percent or less) reported an unmet need for case management and help with financial education, and ASPIRE was unable to engage all treatment group families enrolled in the program in those services. The process analysis findings also suggested that ASPIRE's

financial education services were primarily targeted to parents, rather than youth, early in program implementation. As the youth aged, the program began referring them to these services as well (Anderson et al. 2018).

Analyzing data from the states' VR agencies, we found that ASPIRE increased the share of youth who applied for VR services by 15 percentage points and the share who received VR services by 9 percentage points. VR applications and receipt of services nearly tripled for members of the treatment group relative to the control group mean. The findings reflect the fact that VR was a primary avenue through which ASPIRE case managers sought to connect youth with career exploration and work-based learning experiences. Receipt of all types of VR services (education and training, career services, and other services) more than doubled for youth in the treatment group (Appendix Table A.12b).

Table IV.2. ASPIRE: Impact on youth's receipt of transition services (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any transition services since RA	88.5	8.3	0.00***
Supplementary outcomes			
Types of services received since RA (italics indicate key transition services)			
Case management[a]	41.1	30.5	0.00***
School transition planning	62.9	7.1	0.00***
Employment-promoting services[a]	46.0	11.7	0.00***
Benefits counseling[a]	4.7	14.3	0.00***
Financial education[a]	20.2	8.2	0.00***
Self-advocacy or self-determination training	38.3	8.6	0.00***
Help accessing education or training	26.2	13.5	0.00***
Life skills training	52.7	12.8	0.00***
Help with assistive technology	23.3	7.4	0.00***
Other services	8.5	5.3	0.00***
Received any key transition services since RA	62.1	20.8	0.00***
Hours of key transition services received since RA	411.3	-10.1	0.78
Number of key transition service providers since RA	0.9	0.7	0.00***
Usefulness of key transition services received since RA			
No key service reported	37.9	-20.8	0.00***
No service rated somewhat or very useful	3.5	-1.0	
Any service rated somewhat or very useful	58.6	21.8	
VR services (from state VR agency data)			
Applied for VR services since RA	7.8	15.1	0.00***
Received VR services since RA	4.7	9.4	0.00***

Source: PROMISE 18-month follow-up survey; state VR agency data from Arizona, Colorado, Montana, North Dakota, South Dakota, and Utah.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of ASPIRE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12b for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

[a]These services are identified as key transition services because they were required of the PROMISE programs. We asked more detailed questions about providers of these services in the PROMISE 18-month survey than providers of other transition services.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

2. ASPIRE reduced the youth's school enrollment but increased their receipt of job-related training credentials

ASPIRE had a negative impact on the primary outcome of the youth education domain: youth's school enrollment at the time of the 18-month survey. The majority of control group youth (92 percent) were enrolled in school at the time of the survey; ASPIRE decreased the share of treatment group youth enrolled in school by 3 percentage points (Table IV.3). An impact on high school completion does not appear to explain this finding; ASPIRE had no impact on the share of youth who had received a GED, certificate of completion, or high school diploma since random assignment (Table IV.3), nor did it affect the highest grade completed or the type of school attended (Appendix Table A.12b). ASPIRE also had no impact on the share of youth who were ever enrolled in school. The findings of the ASPIRE process analysis provided no insights about why the program might have negatively affected school enrollment, other than through the pointed focus of services on employment, which was common to all of the PROMISE programs. It is possible that contact with ASPIRE led some youth to find employment a more desirable option than continued schooling. The program's positive impact on the attainment of job-related training credentials is consistent with that hypothesis; treatment group youth were 7 percentage points (or about 50 percent) more likely to receive any job-related training than control group youth, and about 2 percentage points (or 135 percent) more likely to receive any job-related training credential than control group youth.

Table IV.3. ASPIRE: Impact on youth's education and job-related training (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Enrolled in school at the time of the survey	91.9	-3.0	0.05*
Supplementary outcomes			
Ever enrolled in school since RA	99.0	-0.6	0.29
Received GED, certificate of completion, or high school diploma since RA	6.4	1.4	0.30
Job-related training since RA			
Received any job-related training	14.0	6.9	0.00***
Received any job-related training credential	1.4	1.9	0.02**

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of ASPIRE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12b for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

Impacts on school enrollment at the time of the survey differed significantly by the youth's age (Appendix Table A.13b). For youth age 16 at random assignment, school enrollment declined by 8 percentage points from 81 percent enrollment for the control group. For youth ages 14 and 15, 97 percent of the control group youth were enrolled in school and the share did not differ for the treatment group. Therefore, the overall reduction is driven entirely by older youth. We also found that the impact on completion of schooling and on being ever enrolled in school

did not differ by age (results not shown). These findings lend further support to the hypothesis that ASPIRE induced some youth to forego schooling for employment.

3. ASPIRE increased the youth's paid employment but did not affect earnings

ASPIRE increased the share of youth who held a paid job during the 18 months after random assignment (Table IV.4). About 18 percent of youth in the control group reported having a paid job during the follow-up period; the program increased this rate by 5 percentage points. Having a paid job may be partly viewed as a measure of receipt of ASPIRE services because, as required by the federal partners, PROMISE programs were to ensure that youth had paid jobs while participating in the program. However, as noted previously, ASPIRE did not provide paid employment opportunities directly; instead, case managers facilitated paid employment experiences by assisting youth with job search and applications and connecting youth with generally available employment services. ASPIRE's goal was for 30 percent of youth age 16 and older who had been enrolled in the program for at least two years to have been competitively employed. Attainment of age 16 was a key milestone because in some of the ASPIRE states there were legal restrictions on the employment of youth under age 16.

Table IV.4. ASPIRE: Impact on youth's employment and earnings (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Ever employed in a paid job since RA	18.3	4.8	0.02**
Supplementary outcomes			
Employment in the year before the survey			
Any paid employment	17.1	4.3	0.03**
Weekly hours worked in paid jobs	1.7	0.1	0.85
Total earnings from all jobs ($)	781	33	0.83
Ever employed in the calendar year after RA (from SSA data)	14.2	2.8	0.07*
Earnings in the calendar year after RA (from SSA data) ($)	324	23	0.68

Source: PROMISE 18-month follow-up survey; SSA administrative records.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of ASPIRE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12b for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

ASPIRE also raised the rate of paid employment during the year immediately before the 18-month survey. About 17 percent of control group youth reported having a paid job during that year; ASPIRE increased the rate by 4 percentage points. Over the same period, ASPIRE had no impact on the number of hours worked per week in paid jobs or the total earnings from all jobs.

Consistent with the findings based on survey data, our analyses of SSA data on earnings indicate that ASPIRE had positive impacts on the likelihood of the youth's employment but no impact on average earnings. Fourteen percent of control group youth had earnings from employment in the calendar year after random assignment. ASPIRE raised this share by 3

percentage points. The average earnings of control group youth were $324 over that period; the average earnings of treatment group youth were not statistically different.

4. ASPIRE had no impact on the youth's self-determination or expectations for the future

ASPIRE had no impact on youth's self-determination as measured by our self-determination composite scale (Table IV.5). Youth in the control group had an average score of 51 on a scale of 0 to 100. This did not differ from the treatment group average. We also separately analyzed three subdomains of self-determination—autonomy, psychological empowerment, and self-realization. The program had a small negative impact on the psychological empowerment subdomain and had no impact on the other subdomains. Note that ASPIRE's own formative evaluation assessed the impact of the program on youth self-determination, measured using an alternative scale at baseline, 12 months, and 24 months after enrollment (Ipsen et al. 2019).[41] The study also found no differences between the ASPIRE treatment and control groups for the two components of self-determination studied at 12 and 24 months after enrollment, but found evidence that one of them improved more over time for the treatment group than for the control group. If such a trend persists, we might find impacts of ASPIRE on self-determination when we examine this outcome at 60 months after enrollment.

The 18-month survey asked the youth and parents about their expectations for the future regarding the youth's educational attainment and independence at age 25. Our primary measure in the expectations domain was whether the youth expected to complete high school or receive a GED. We found that 98 percent of control group youth expected to complete high school or receive a GED and that the program had no impact on this outcome. The program had no impact on the youth's expectations that they would pursue postsecondary education, live independently, be financially independent, or have a paid job at age 25.

Impacts on the youth's expectation of completing high school or receiving a GED differed by the youth's age at enrollment (Appendix Table A.13b). ASPIRE did not affect the expectations of treatment group youth who were age 14 or 15 when they enrolled, but it reduced the expectations of treatment group youth who were age 16 when they enrolled by about 4 percentage points. This impact is consistent with the negative impact on school enrollment noted above for older youth.

The impacts on parents' expectations were similar to those of the youth's expectations. ASPIRE also had no impact on whether parents believed it was important that the youth eventually become independent in some way—94 percent of parents in the control group held this belief even without the program.

[41]ASPIRE used the American Institutes for Research self-determination scale (Wolman et al. 1994) and has measured self-determination at 12, 24, and 36 months after enrollment. Because of the differences in how and when the data were collected, we will not be able to directly compare our 18- and 60-month findings with those from ASPIRE's formative evaluation.

Table IV.5. ASPIRE: Impacts on youth's self-determination and expectations (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcomes			
Self-determination score at the time of the survey (scale: 0 to 100)	50.6	-0.6	0.20
Youth expected to complete high school or GED at the time of the survey	98.4	-0.4	0.56
Supplementary outcomes			
Scores on subdomains of self-determination at the time of the survey			
Autonomy (scale: 0 to 300)	155.5	-3.8	0.25
Psychological empowerment (scale: 0 to 100)	90.1	-1.8	0.07*
Self-realization (scale: 0 to 100)	9.8	0.9	0.34
At the time of the survey, youth expected to:			
Get postsecondary education	59.8	-2.6	0.36
Live independently at age 25	62.3	0.8	0.76
Be financially independent at age 25	75.4	3.9	0.10
Be employed at age 25	92.7	-0.1	0.94
At the time of the survey, parent expected youth to:			
Get postsecondary education	45.4	1.9	0.41
Live independently at age 25	40.2	-0.9	0.71
Be financially independent at age 25	56.2	1.9	0.42
Be employed in a paid job at age 25	84.5	1.1	0.49
Parent believed it important for youth to become independent in some way at the time of the survey	93.6	-0.3	0.81

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of ASPIRE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12b for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

5. ASPIRE did not affect youth health insurance coverage

ASPIRE did not affect the likelihood that youth had health insurance at the time of the survey (Table IV.6). Nearly all control group youth had health insurance (99 percent), virtually the same rate as those in the treatment group. Because nearly all youth already had health insurance coverage, there was little room for improvement in this outcome.

We also found differential impacts for this outcome by primary impairment and by state. The program increased the likelihood that youth with other mental impairments had health insurance but had no impact on the health insurance status of youth with other impairments (Appendix Table A.15b). ASPIRE decreased the share of youth with health insurance in Arizona by 2 percentage points and did not affect the shares with coverage in Colorado and the other four consortium states (Appendix Table A.16).

ASPIRE had no impact on whether the youth needed help with or equipment for an activity of daily living or an instrumental activity of daily living. It also had no impact on youth's smoking, use of alcohol, marijuana, or illicit drugs. The program also had no impact on most of the activities of daily living and instrumental activities of daily living difficulties queried (Appendix Table A.12b), with one exception. It affected one instrumental activity of daily living

in an unexpected way: it increased the likelihood that youth reported difficulty with planning and carrying out activities to achieve a goal by 6 percentage points. Goal setting and providing assistance to help youth achieve their goals was a key component of ASPIRE's case management services (Anderson et al. 2018). The higher percentage of treatment group youth who reported difficulties in this area might be because, as ASPIRE prompted youth to set goals and engage in activities to achieve them, some came to realize their difficulties in this area more acutely.

Table IV.6. ASPIRE: Impact on youth's health and health insurance (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Youth had health insurance at the time of the survey	98.7	-0.2	0.78
Supplementary outcomes			
Health insurance type at the time of the survey			
Public	92.8	0.9	0.46
Private	15.2	0.2	0.89
Needed help with or equipment for at least one ADL at the time of the survey	35.9	1.5	0.49
Needed help with or equipment for at least one IADL at the time of the survey	50.1	1.6	0.51
Substance use in the 30 days before the survey			
Smoking	4.3	-0.7	0.47
Alcohol	2.2	0.7	0.40
Marijuana	2.9	0.8	0.34
Other illicit drug	0.8	0.0	0.98

Source: PROMISE 18-month survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of ASPIRE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12b for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

6. ASPIRE increased the youth's Medicaid enrollment but did not affect expenditures

ASPIRE increased the percentage of months that youth were enrolled in Medicaid during the 18 months after random assignment (Table IV.7). On average, the control group youth had Medicaid coverage for most of the 18-month period (92 percent); nonetheless, ASPIRE increased this share by 2 percentage points. Though the estimate is significant, the increase of 2 percentage points represents only about one-third of a month. ASPIRE had no impact on total Medicaid expenditures. On average, control group youth had $24,798 in total Medicaid expenditures; the average for the treatment group did not differ significantly.

Impacts on Medicaid expenditures differed by sex (Appendix Table A.14b). Total Medicaid expenditures increased by over $5,600 for female youth in ASPIRE, an increase of 22 percent relative to the control group mean of slightly more than $25,000. ASPIRE did not impact total Medicaid expenditures for males.

ASPIRE had a positive impact on the share of youth enrolled in Medicaid 1915(c) waivers, though did not affect the share of youth enrolled in comprehensive managed care and capitated

behavioral health plans (Table IV.7). There was also a small positive impact on average monthly fee-for-service payments, though no effect on the likelihood of having any payments or capitated payments.[42] All of the ASPIRE states included in the analysis had a variety of 1915(c) waivers that provided long-term supports, rehabilitation, and vocational services to youth and adults with significant disabilities (Centers for Medicare and Medicaid Services 2016). ASPIRE case management and benefits counseling services were intended to connect eligible youth and families to community supports. Some families may not have been aware of the 1915(c) services that their youth were eligible for without the ASPIRE services.

Table IV.7. ASPIRE: Impact on youth's use of Medicaid (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcomes			
Percentage of months enrolled in Medicaid since RA	92.1	2.1	0.04**
Total Medicaid expenditures since RA ($)	24,798	1,548	0.24
Supplementary outcomes			
Enrollment since RA			
Medicaid managed care	91.8	1.5	0.30
Medicaid 1915(c) waiver	4.4	1.9	0.05**
Medicaid capitated behavioral health	55.2	2.5	0.61
Medicaid payments since RA			
Any Medicaid payments	97.0	0.9	0.21
Average monthly Medicaid payments ($)	1,378	86	0.24
Average monthly fee-for-service payments ($)	354	107	0.07*
Average monthly capitated payments ($)	1,313	14	0.82

Source: State Medicaid data from Arizona, Colorado, Montana, North Dakota, South Dakota, and Utah.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of ASPIRE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12b for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

7. ASPIRE had no impact on the youth's total income

Our primary measure of youth's economic well-being was the total income they received during the year before the 18-month survey from paid jobs (based on the 18-month survey data) and from SSA payments (based on SSA administrative data). On average, the control group received $7,233 from earnings and SSA payments during the reference period (Table IV.8). The treatment group received a similar income. ASPIRE also had no impact on a self-reported categorical measure of youth household income from the 18-month survey. We also measured the youth's annual income during the calendar year after random assignment by based on SSA data on earnings and SSA disability payments. The average annual income for the control group ($6,550) was not statistically different from that of the treatment group.

[42] These supplementary Medicaid outcomes do not include participants in Colorado because the data provided by the state did not include necessary information to identify these supplementary outcomes.

ASPIRE had no impact on youth's likelihood of receiving SSA payments or the amounts they received. ASPIRE also had no impact on the share of youth that resided with a parent.

Table IV.8. ASPIRE: Impact on youth's economic well-being (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Youth total income (earnings and SSA payments) in the year before the survey ($)	7,233	71	0.72
Supplementary outcomes			
SSA payments in 18-month period since RA (from SSA data)			
Received any SSA payments	95.5	-0.3	0.71
Total SSA payments ($)	10,132	-21	0.89
Income in the calendar year after RA (from SSA data) ($)	6,550	50	0.66
Youth resided with parent at the time of the survey	97.4	-1.1	0.18
Household income in the calendar year before the survey			
Less than $10,000	26.8	-1.2	0.72
$10,000 to $19,999	26.8	1.4	
$20,000 to $29,999	19.8	1.5	
$30,000 or more	26.6	-1.7	
Any household member who participated in non-SSA public assistance programs at the time of the survey	55.9	-0.6	0.79

Source: PROMISE 18-month follow-up survey; SSA administrative records.

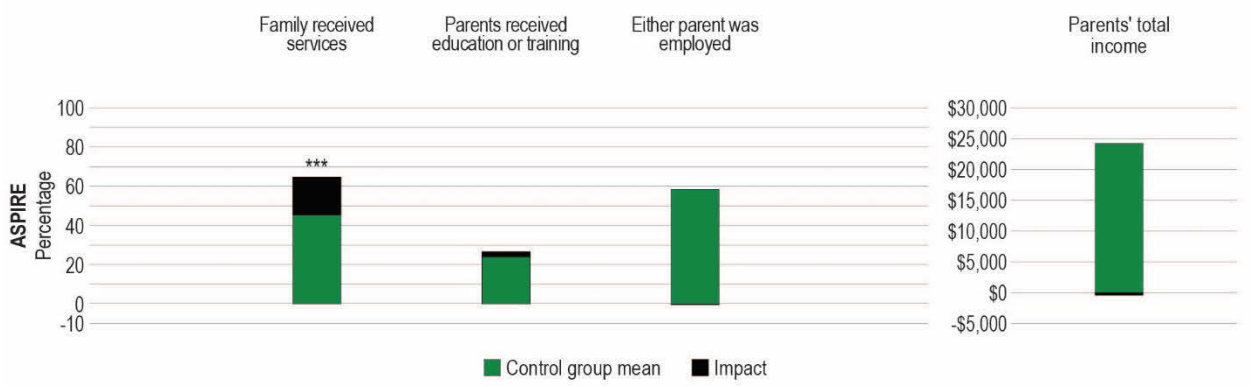
Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of ASPIRE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12b for sample sizes for all outcomes. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

D. Impacts on family outcomes 18 months after enrollment

The findings in this section show whether the services provided by ASPIRE led to short-term impacts on parent and family outcomes in four domains (Figure IV.2). The impact estimates revealed that the program increased the receipt of support services by parents and family members other than the SSI youth, but it had no impact on parents' education or training, employment and earnings, or total income from earnings and SSA payments. We also found that ASPIRE had differential impacts on families' receipt of support services by youth's sex, age at enrollment, and state. ASPIRE also had differential impacts on parents' total income by state.

Figure IV.2. ASPIRE: Impacts on parent and family primary outcome



*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

1. ASPIRE increased the families' receipt of support services

Consistent with its program model, we found that ASPIRE helped engage more families in support services (Table IV.9). In the control group, about 45 percent of all parents reported that a family member other than the SSI youth received services during the 18 months after random assignment. The program increased this share by about 19 percentage points. It also had positive impacts on families' receipt of an array of specific services, such as case management, education or training supports, benefits counseling, help with financial education, information on the youth's disability, and parent networking support. ASPIRE's key interventions for parents were benefits counseling, parent training, and financial education services. As shown in Table IV.9, the impact of the program on receipt of benefits counseling was particularly large (20 percentage points).

Impacts on families' use of support services differed significantly by the youth's sex, age at enrollment, and state of residence (Appendix Tables A.13b, A.14b, and A.16). ASPIRE increased service receipt among families of both male and female youth, though the impact on male youth was significantly higher (23 percentage points versus 12 percentage points). Nothing from the process analysis would explain this large differential. It could reflect cultural values that place a greater importance on the education and labor market success of males than females. ASPIRE parents of male youth may have had a greater willingness to invest their time in receiving services relative to the parents of females. It is also possible that ASPIRE parents of male youth had a greater need for services. Studies have found correlations between children's gender and other factors that influence family service needs, including family structure (MacInnes 2008; Dahl and Moretti 2008); parenting stress and depression (Boyle and Pickles 1997; Shin et al. 2006); marital intimacy (Padencheri and Russell 2004); and family cohesion, communication, and satisfaction (Iacolino et al. 2016). Although the propensity for families to engage in support services differed by the youth's sex, the average number of service hours received did not differ significantly between the families of male and female youth (statistics not shown).

Impacts for families of older youth were greater than for families of younger youth. ASPIRE increased the share of treatment group families who received support services by about 16 percentage points for youth who were age 14 or 15 when they enrolled and by about 27 percentage points for youth who were age 16 when they enrolled. Findings from the ASPIRE

process analysis did not suggest that the program targeted services to older youth, but they provided some qualitative evidence that parents were more willing to engage in support services related to their youth's transition to adulthood as youth grew closer to that transition.

Impacts on families' use of support services were larger for families of youth in the consortium states other than Arizona or Colorado (35 percentage points) than for families in Arizona (14 percentage points) and Colorado (11 percentage points). Variation in service take-up across the consortium states may have contributed to the differential impacts. Families from Arizona were the least likely to receive two of ASPIRE's three key interventions for parents (benefits counseling and parent training) and the second least likely to receive the other one (financial education). Families from Colorado were the second least likely to receive benefits counseling (Anderson et al. 2018).

We examined the likelihood of family members receiving a subset of these services—designated as key support services—and their intensity: case management, employment-promoting services, benefits counseling, and financial education. About 29 percent of parents in the control group reported that their family members received these services during the 18 months following random assignment. ASPIRE increased the share of treatment group families receiving key services by about 19 percentage points. Despite the large impact on the likelihood of receiving key services, the program had no impact on the hours of service receipt by families. Hours of key service use during the 18 months after random assignment were fairly low. Control group families received an average of 41 hours (or 2 hours per month, on average). The average for treatment group families did not differ significantly from this level. This finding was consistent with the possibility of a service receipt substitution effect; because parents or other family members may have had limited time to devote to family support services, ASPIRE's success in increasing the use of the services emphasized by the program may have decreased the use of other supports. The program did increase the number of providers used by families by an average of 0.4 providers, though much of this increase can be attributed to the increase in receipt of any key services.

ASPIRE enhanced the perceived usefulness of key services received by the families. The impact estimates for this outcome suggested that as the program increased the share of families that received key services, more families found those services to be somewhat or very useful. At the same time, the program had no impact on the likelihood or types of unmet needs for services or supports reported by parents (Appendix Table A.12b). The one exception was case management: ASPIRE decreased families' unmet needs by 2 percentage points. Although ASPIRE increased the likelihood that parents received services and perceived them as useful, the program may not have engaged all families with unmet service or support needs. Among those who were engaged, some may not have received the type or quantity of services and supports needed to reduce their unmet needs.

Based on administrative data from the states' VR agencies, we found that ASPIRE had no effect on the share of parents who applied for VR services during the 18 months after PROMISE enrollment. About 1 percent of control group parents applied for VR services after random assignment. Though the treatment group mean was 1 percentage point higher, the difference was not significant.

Table IV.9. ASPIRE: Impact on family's receipt of services (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any family support services since RA	45.3	19.3	0.00***
Supplementary outcomes			
Types of family support services received since RA (italics indicate key support services)			
Case management[a]	16.9	9.8	0.00***
Education or training supports	11.1	3.0	0.07*
Employment-promoting services[a]	12.3	-1.2	0.47
Benefits counseling[a]	12.1	20.3	0.00***
Financial education[a]	10.3	7.6	0.00***
Parent training and information on youth's disability[a]	26.3	16.0	0.00***
Parent networking support	13.2	11.2	0.00***
Any key support services received since RA	29.3	18.7	0.00***
Hours of key support services received since RA	40.7	10.1	0.41
Number of key support service providers since RA	0.4	0.4	0.00***
Usefulness of key services received since RA			
No key service reported	70.7	-18.3	0.00***
No service rated somewhat or very useful	1.0	-0.0	
Any service rated somewhat or very useful	28.3	18.3	
Enrolling parent's engagement with VR services (from state VR agency data)			
Applied for VR services since RA	1.2	1.1	0.12
Received VR services since RA	0.6	0.7	0.19

Source: PROMISE 18-month follow-up survey; state vocational rehabilitation agency data from Arizona, Colorado, Montana, North Dakota, South Dakota, and Utah.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of ASPIRE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12b for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

[a]These services were required of the PROMISE programs. With the exception of parent training and information on youth's disability, we asked more detailed questions about providers of these services in the PROMISE 18-month survey than providers of other support services. The outcome measures related to key support services presented in this table reflect all required services except parent training and information on youth's disability.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

2. ASPIRE had no impact on parents' education or training

About 24 percent of parents in the control group reported that either they or their spouse had completed or attended education or job skills training during the 18 months after random assignment. This outcome was nearly the same for the treatment group, indicating that ASPIRE had no impact on the primary outcome in the domain of parents' education and training (Table IV.10).[43] The program also had no impact on parents' enrollment in education or job skills training at the time of the survey or their attainment of a diploma, GED, certificate, or professional license. These findings were not surprising given that ASPIRE's education-related

[43] The estimated impacts on parents' receipt of education or job training since random assignment differed by state; however, the estimate was not significantly different from zero for any individual state (Appendix Table A.16).

services were targeted primarily to youth (Anderson et al. 2018). Parent training offered by ASPIRE focused on ways that parents could help promote the youth's transition to adulthood.

Table IV.10. ASPIRE: Impact on parents' education and training (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any education or job skills training since RA	24.0	2.5	0.26
Supplementary outcomes			
Either parent was enrolled in education or job skills training at the time of the survey	9.8	-1.1	0.46
Either parent received a diploma, GED, certificate of completion, or professional license since RA	8.9	1.4	0.36

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of ASPIRE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12b for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

3. ASPIRE had no impact on the parents' employment and earnings

ASPIRE did not connect more parents to paid jobs during the 18-month follow-up (Table IV.11). About 59 percent of parents in the control group reported that either they or their spouse had worked for pay at any point since random assignment. The program also had no impact on the share of parents reporting that they or their spouse had worked for pay in the month prior to the 18-month survey, earnings from all jobs in the month prior to the 18-month survey, nor on whether parents had access to health insurance through their jobs at the time of the 18-month survey.

The program also had no impact on earnings measured from SSA data for the calendar year after random assignment. Average parental earnings in the control group were $21,783; average earnings in the treatment group were similar. These findings were not surprising given that ASPIRE's employment services were targeted primarily to youth (Anderson et al. 2018).

Table IV.11. ASPIRE: Impacts on parents' employment and earnings (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Either parent was employed since RA	58.5	-0.1	0.98
Supplementary outcomes			
Either parent was employed in the month before the survey	59.0	0.5	0.82
Parents' earnings from all jobs in the month before the survey ($)	1,339	-43	0.58
Parents' earnings in the calendar year after RA (from SSA data) ($)	21,783	-197	0.77
Either parent was offered health insurance through a job held in the month before the survey	32.3	-0.6	0.81

Source: PROMISE 18-month follow-up survey; SSA administrative records.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of ASPIRE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12b for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

4. ASPIRE had no impact on parents' annual total income

We examined whether ASPIRE improved parents' economic well-being by assessing impacts on the sum of their earnings from employment and payments from the SSI and OASDI programs (for the enrolling parents and their spouses, if applicable). In the control group, the average parental income during the calendar year after random assignment was $24,203; the program had no impact on this outcome (Table IV.12). ASPIRE also had no impact on parents' receipt of SSA payments or Medicaid outcomes.[44]

Impacts on parents' total income in the calendar year after random assignment differed by state (Appendix Table A.16). In Arizona, ASPIRE increased parental income by $1,779, or an increase of 8 percent relative to the control group mean. Across the four smaller states, ASPIRE decreased parental income by $2,903, or a decrease of 11 percent relative to the control group mean. The program had no impact on parents' income in Colorado. The process analysis findings did not provide any insights that would explain the large differences in impacts on parents' total income between states.

[44] The estimates of ASPIRE parent Medicaid impacts are based on data from Colorado, Montana, North Dakota, South Dakota, and Utah. For more details, see Section II of the Appendix.

Table IV.12. ASPIRE: Impact on parents' economic well-being (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Parents' total income in the calendar year after RA (from SSA data) ($)	24,203	-373	0.58
Supplementary outcomes			
Parents' SSA payments in 18-month period since RA (from SSA data)			
Received any payments	26.0	-1.3	0.48
Total payments ($)	3,755	-125	0.68
Medicaid enrollment and payments since RA (from state Medicaid program data)			
Enrolled in Medicaid	63.9	0.8	0.81
Enrolled in Medicaid comprehensive managed care	38.5	3.5	0.57
Enrolled in Medicaid 1915(c) waiver	0.0	n.a.	
Total Medicaid payments ($)	6,322	849	0.31

Source: PROMISE 18-month follow-up surveys, SSA administrative records, and state Medicaid data from Colorado, Montana, North Dakota, South Dakota, and Utah.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of ASPIRE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12b for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

n.a. = not available.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

E. Cost analysis results for ASPIRE

This section summarizes our findings from the cost analysis of ASPIRE, with a focus on cost by input category and program component as well as the cost per treatment group enrollee and per participant. The technical appendix describes our methods for this analysis.

The average annual cost of the resources used by ASPIRE to deliver services during the accounting period we targeted (October 1, 2016, through September 30, 2017) was $5,490 per treatment group youth and their families. We estimated the program's average cost per enrollee to be $16,704 over the entire service delivery period (October 1, 2014, through September 30, 2018).

1. Costs by input category

Table IV.13 summarizes the costs of ASPIRE by input category during the accounting period. "Other" direct costs constituted the largest proportion (44 percent) of ASPIRE costs. Purchased services comprised the large majority of this category. Inputs in this cost category included contracted services by all six consortium states. The Arizona Department of Education accounted for the largest portion of purchased services costs, which included the wages and benefits for 12 to 14 case managers in Arizona. Enrollee payments (that is, participant-specific support costs such as travel reimbursements and interpreting services) accounted for a small portion of other direct costs.

Labor costs accounted for the second-largest proportion (41 percent) of ASPIRE costs. The majority of labor costs included the wage and fringe benefit costs of program management staff across the six consortium states as well as the five ASPIRE project leadership team staff within

the Utah State Office of Rehabilitation. The remaining portion of labor costs encompassed wage and fringe benefit costs of frontline staff across all consortium states except Arizona. These labor costs did not include those associated with Arizona's case managers, which as noted were included within the Arizona Department of Education's purchased services.

The smallest category of costs was for indirect costs, which accounted for 15 percent of ASPIRE costs. Inputs for this category included the operational costs for all six consortium states, such as meeting expenses, travel, and office supplies. The program reported no use of donated goods or services in directly serving enrolled youth.

Table IV.13. ASPIRE annual costs by input category, October 2016 through September 2017

Category	Percentage of ASPIRE total cost	Cost amount
Other direct costs	44.3	$2,511,171
Labor costs	40.7	$2,307,517
Indirect costs	15.0	$852,586
Costs of donated goods and services	0.0	$0
Total	**100.0**	**$5,671,276**

Source: ASPIRE cost data.

Note: Data reflects costs from October 1, 2016 through September 30, 2017. The total sum may differ from the sum of figures in the table due to rounding.

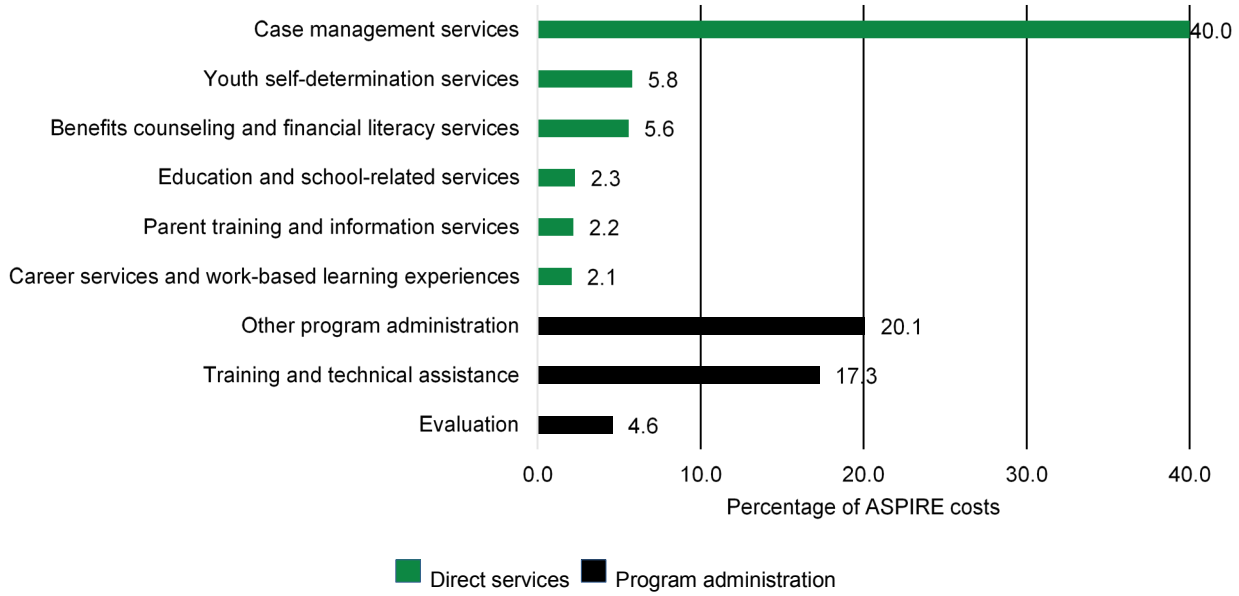
2. Costs by program component

The six service components accounted for approximately 58 percent of the total cost of ASPIRE during the accounting period (Figure IV.3). Among the direct service components, costs were largest for case management services (40 percent of total costs). This finding aligned with the program's intensive case management, which focused on the needs of both youth and their family members and the program's requirement of staff having at least monthly face-to-face contact with all participating treatment group families. Youth self-determination services was the next largest portion of direct service costs, followed by benefits counseling and financial literacy services. Each comprised 6 percent of total costs. Finally, only a small share of service costs were associated with education and school-related services, career services and work-based learning experiences, or parent training and information services. Costs in these categories each represented 2 percent of service costs. Education and employment-related services provided directly by ASPIRE were part of its case management activities; ASPIRE did not purchase or contract significant services in these areas. Parent training costs were low because in most ASPIRE states existing parent training centers were paid a relatively small stipend to prioritize the services they already delivered (funded through other sources) to ASPIRE participants and to cover travel costs.

Program administration accounted for 42 percent of the total cost of ASPIRE. Of the three components of program administration—evaluation, training and technical assistance, and other program administration—the other program administration component accounted for the largest share of these costs (20 percent of total costs). This component category included costs related to the management of ASPIRE, such as the supervision of staff and reporting to federal, state, and agency partners. Training and technical assistance costs (17 percent of total costs) included

activities related to the receipt or delivery of staff training to improve knowledge and skills in working with youth, families, and the community. Finally, the program's evaluation costs (nearly 5 percent of total costs) comprised time spent supporting the evaluation and the University of Utah's costs to conduct the program's formative evaluation. The program administration costs were consistent with our understanding of ASPIRE's management structure across all six consortium states in addition to the ASPIRE project leadership team.

Figure IV.3. ASPIRE costs by program component, October 2016 through September 2017



Note: Data reflects costs from October 1, 2016 through September 30, 2017.

3. Costs per treatment group enrollee and per participant

The treatment group included 1,033 youth (both research and nonresearch cases). Of those, 893 youth had participated in ASPIRE services as of October 2017 (Anderson et al. 2018). For both enrollees and participants, we assumed an average duration of participation in the program of three years, which we estimated based on the average length of potential participation for enrollees from the random assignment date through September 30, 2018. By dividing the total program cost for the one-year accounting period by the number of enrolled and participant youth, we obtained an average annual program cost of $5,490 for enrolled youth and their families and $6,351 for participating youth and their families. By applying this annual program cost to the estimated average duration of participation, we found a total program cost of $16,704 per enrollee and $19,322 per participant in services, on average, over the program's entire service delivery period (not just the one-year accounting period). The costs per enrollee and participant included substantive services provided to family members and youth.[45]

[45] The average annual and total program costs derived from the data presented in the text differ slightly due to rounding. These statistics were calculated based on an average monthly program cost of $458 for enrolled youth and

F. Summary of findings and discussion

ASPIRE had positive and statistically significant impacts on the primary outcomes that were most closely related to service delivery. However, with three exceptions, ASPIRE had no impact on other primary outcomes by 18 months after families had enrolled in the evaluation (Table IV.14). The program increased the likelihood that both youth and their family members received services, youth engaged in paid employment, and the percentage of months youth were enrolled in Medicaid. The program had a negative impact on youth enrollment in school. ASPIRE had no impact on youth self-determination and expectations, health insurance coverage, Medicaid expenditures, or total income. The program also had no impact on parents' education and training, employment, or income. We found that ASPIRE had differential impacts on several youth and family primary outcomes by the youth's state of residence. There was no consistent pattern to the differential impacts we observed by state.

Table IV.14. ASPIRE: Summary of impacts on primary outcomes by domain

	Domain	Primary outcome	Impact summary
Youth	Receipt of transition services	Receipt of any transition services	+++
	Education	Enrollment in school at the time of the survey	-
	Employment and earnings	Ever employed in a paid job since RA	++
	Self-determination and expectations	Self-determination scale (0 to 100)	0
	Self-determination and expectations	Youth expects to complete high school/GED	0
	Health and health insurance	Youth has health insurance	0
	Use of Medicaid	Percentage of months enrolled in Medicaid since RA	++
	Use of Medicaid	Total Medicaid expenditure since RA ($)	0
	Economic well-being	Youth's total income in past year ($)	0
Family	Receipt of services	Any family support services since RA	+++
	Parents' education and training	Any education or job skills training since RA	0
	Parents' employment and earnings	Either parent was employed for pay since RA	0
	Parents' economic well-being	Parents' income in calendar year after RA	0

Source: PROMISE 18-month follow-up survey and SSA administrative records.

Note: +/++/+++ The impact estimate is positive and statistically significant at the .10/.05/.01 level using a two-tailed *t*-test.
-/--/--- The impact estimate is negative and statistically significant at the .10/.05/.01 level using a two-tailed *t*-test.
0 The impact estimate is not statistically different from zero at the .10 level using a two-tailed *t*-test.

The 18-month findings on ASPIRE's impacts reflected the program's focus on delivering intensive case management to youth and families, connecting youth with employment opportunities, and connecting youth and parents to other services intended to improve the youth's transition outcomes. ASPIRE improved some short-term outcomes that can be considered either program services or outputs, including youth's and families' receipt of services and youth's paid employment. For many of the youth outcomes for which we found no impacts, 18 months after enrollment is likely too early to detect impacts.

their families and $530 for participating youth and their families and an average duration of participation of three years.

The findings also reflect low take-up and intensity of some of ASPIRE's core interventions, in particular financial education, parent training and information, and youth self-determination training. Through the third year of program operations, only a small minority of families had met the program's target for these interventions (Anderson et al. 2018). In addition, the program's prioritization of services for youth over those for families may explain the lack of impacts on parents' education and employment.

Although ASPIRE had few impacts on the primary outcomes at 18 months, the program was still evolving at the end of the analysis period and was scheduled to continue providing services for about another year. The process analysis findings also suggested that service take-up and intensity might increase in the latter period of operations because the program had addressed some key service delivery challenges by the third year of implementation. We will revisit most of the outcomes included in the 18-month impact analysis when we conduct the five-year analysis to determine whether the positive impacts endured and any additional impacts emerged.

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V. CaPROMISE

Summary of 18-month impacts and costs of CaPROMISE

- CaPROMISE expanded the share of youth who received transition services and made it more likely that their families would receive support services.
- The program also increased the youth's receipt of job-related training, and parents' engagement in education or job training programs.
- It increased the youth's employment, annual earnings, and decreased their likelihood of receiving SSA payments while increasing their total income (from earnings and SSA payments).
- The program had no impact on (1) the number of hours of key services that the youth and families received, (2) the youth's self-determination and expectations about their future, (3) the youth's health insurance status, (4) the youth's and parents' reliance on Medicaid, and (5) the parents' employment and total income.
- CaPROMISE's average annual cost per treatment group enrollee was $7,182, which included the costs of providing services to both the youth and their family members.

A. Program overview and a review of findings from the process analysis

This section provides an overview of CaPROMISE and the findings from the program's process analysis (Matulewicz et al. 2018b). The process analysis documented the program's structure and service model and described its implementation during the first three years of operations based on data from CaPROMISE's MIS, site visits, and key informant interviews.

1. Program overview

CaPROMISE operated in four regions of the state: Northern California, Greater Los Angeles, Greater Inland Empire, and Southern Coastal. The California Department of Rehabilitation (CDOR) was the lead organization for the program and the recipient of the cooperative agreement with ED. Representatives from five other state agencies served on a steering committee that supported and worked collaboratively with the program. CDOR contracted with 18 local sites and the San Diego State University Interwork Institute to implement CaPROMISE. All but one of the local sites were LEAs; the remaining site was run by a nonprofit organization for a consortium of three adjacent LEAs. The local sites provided services to the treatment group youth and families. The Interwork Institute performed four functions: (1) subcontracting with and overseeing 16 family resource centers, which provided additional program services to parents; (2) providing technical assistance and training to all program staff; (3) designing and maintaining the program's MIS; and (4) conducting a formative evaluation of the program. Midway through the first year of program operations, CDOR contracted with five state universities to hire students as interns to support local site staff. In the second year of program operations, CDOR reallocated program funds so that local sites could hire job developers and coaches. It also contracted with four independent living centers to provide youth with training on independent living skills and hired 10 rehabilitation professionals to provide them with traditional CDOR employment services.

The CaPROMISE local sites employed career service coordinators (CSCs), most of whom worked exclusively on the program, to provide case management services to the treatment group and serve as the program's primary points of contact with participants. Case management entailed the development of plans that identified participants' education, employment, and independent living goals (and steps to achieve them), and resource and service coordination. The

program expected CSCs to communicate with or deliver program services to youth every two weeks, either through telephone calls, mailings of program newsletters, or in-person meetings. The design for CaPROMISE specified CSC caseloads of 26 youth each. Actual caseloads averaged 28 youth, but fluctuated; at times, some CSCs had caseloads of more than 50 youth.

In addition to case management, CaPROMISE offered (1) benefits counseling and financial education services; (2) career exploration and work-based learning experiences; (3) parent training and information; (4) education services; and (5) other services, such as training on independent living, self-determination, and self-advocacy skills. CSCs delivered most of these services. The program required all CSCs to complete Cornell University's Work Incentives Practitioner Credentialing Training so that they could provide benefits counseling and financial education (which they wove into case management meetings and other activities). CSCs could also refer youth and families to job coaches, job developers, and rehabilitation professionals for career exploration and work-based learning experiences; family resource centers for parent training and information; and independent living centers for training on independent living. Given that LEAs served as local sites, addressing youth's educational needs was also a key focus of the program. As LEA staff, CSCs had access to the school records of treatment group youth and could collaborate with teachers and transition staff, attend IEP meetings, and meet with participants in their schools.

2. Summary of findings from the process analysis

Three years after the program began in August 2014, CaPROMISE had engaged 93 percent of treatment group youth as participants in program services. On average, CSCs made contact at least every two weeks in 85 percent of the months between participants' enrollment in the evaluation and August 2017; the median number of contacts per participant per month was 1.9. When program staff communicated with or delivered services to youth and their family members, they entered the interaction in the program's MIS as a program contact and associated it with one or more service types, such as benefits counseling or self-determination skill development. The MIS data did not distinguish program contacts in which communication about a service occurred from those in which services were delivered, and therefore provided limited insight into service take-up rates.

By the end of the third year of program operations, CSCs had communicated about or delivered most key program services to most treatment group youth. Almost all (99 percent) of participating youth had received program contacts associated with a career exploration and work-based learning service; on average, each had received 49 program contacts. In addition to contacts, CSCs recorded youth's participation in work experiences in the MIS and, as of August 2017, had records of paid or unpaid jobs since the time of their enrollment in the evaluation for 68 percent of youth. The families of 84 percent of participating youth had received program contacts associated with benefits counseling or financial education service; on average, each had received 19 program contacts. The parents of 90 percent of participating youth had received program contacts associated with a parent training and information service; on average, each had received 32 program contacts. Most of these families had contacts suggesting they had been referred to the family resource centers. About 92, 88, and 82 percent of youth had received program contacts related to youth development, independent living, and self-determination skill

development, respectively. The CaPROMISE MIS did not capture program contacts associated with education services.

The process analysis suggests that conditions were favorable for observing positive impacts of the program on youth. Evidence in three areas implied a marked difference in the service experiences of treatment and control group youth. First, as already noted, a large share (93 percent) of treatment group youth had participated in program services, and most of them had received program contacts associated with key services and participated in at least one work experience. Second, services provided by CaPROMISE were distinctive in that other programs in the state rarely served youth as young as those in the program were at enrollment, and rarely focused on the family unit as a whole. Also, although some other programs provided employment services to youth with disabilities, none also provided the high levels of case management and individualized support offered by CaPROMISE; take-up among the control group may have been low without facilitation through intensive case management and individualized support. Third, recruitment, enrollment, and service delivery in the program were structured to minimize the risk that control group youth would inadvertently receive services from the program.

B. Baseline characteristics of the youth survey respondent sample

The youth survey respondent sample for the CaPROMISE interim impact analysis consists of 1,634 randomly assigned youth who completed an 18-month follow-up survey.[46] About one-third of the youth in the sample were female (Table V.1, column A). At the time of random assignment, 35 percent of the youth were age 14, 31 percent were age 15, and 34 percent were age 16. Almost two-thirds expressed a preference for English as their written and spoken language. Most (77 percent) lived with their parents, and 21 percent lived in their own households at the time they applied for SSI. The largest racial and ethnic group was Hispanic (64 percent), followed by non-Hispanic black (18 percent), non-Hispanic other or mixed race (8 percent), and non-Hispanic white (7 percent). The racial-ethnic composition of the parents was roughly similar to that of the youth, though slightly more parents were non-Hispanic white than non-Hispanic other or mixed race.

We grouped the youth's primary impairment, as recorded in baseline SSA administrative data, into five categories, the largest of which was intellectual or developmental disability (48 percent). The next largest group was other mental impairment (24 percent), followed by physical

[46] Of the 3,273 youth enrolled in the CaPROMISE evaluation, 3,097 were randomly assigned—1,548 to the treatment group and 1,549 to the control group. Random assignment occurred immediately after the youth and the family enrolled in CaPROMISE. Of the remaining 176 youth, 171 had siblings already enrolled in the evaluation and so were purposively assigned to the same groups as their siblings (93 treatment cases and 78 control cases); the other 5 youth were purposively assigned to the treatment group at the request of CaPROMISE. We did not include these 176 nonresearch cases in the impact analysis. The full research sample for the impact analysis consists of the 3,097 youth who enrolled in the evaluation and were randomly assigned. From the full research sample, we selected a random sample of 2,000 youth to attempt to interview for the 18-month survey. These 2,000 youth, less 3 youth (2 treatment and 1 control cases) who had died within 18 months of enrollment, constitute the denominator for calculating the 18-month survey response rate for CaPROMISE, which was 82 percent for the youth survey and 84 percent for the parent survey.

disability (19 percent); other or unknown disability (7 percent); and speech, hearing, or visual impairment (3 percent).

About 94 percent of the youth in our sample received SSI payments during the month of random assignment. At that point, the time since their initial SSI eligibility was 9 years, on average. Their age at the time of most recent SSI application was 7 years, on average. About 7 percent of the youth received OASDI payments. On average, the youth had received $7,607 in SSA payments during the year before the month of random assignment. About 14 percent of the sample youth also lived in a household with multiple SSI-eligible children. Only 2 percent of youth had any earnings from employment in the year before random assignment; among parents, 74 percent had any earnings.

On average, most of these characteristics were similar for youth in the treatment and control groups, which was expected, given that the youth were randomly assigned to these groups. We compared the two groups across 25 characteristics at the time of random assignment (Table V.1, columns B and C) and found three statistically significant differences between them: youth duration of SSI eligibility, youth SSI payments, and youth OASDI payments, though the differences were small. We expect to be able to identify unbiased estimates of program impacts by comparing the treatment and control groups while accounting for the differences in baseline characteristics through regression adjustment.

Table V.1. CaPROMISE: Baseline characteristics of the youth survey respondent sample (percentage, unless otherwise noted)

	All (A)	Treatment (B)	Control (C)	Difference (B-C)	*p*-value
Demographic characteristics					
Youth sex is female	32.8	31.7	34.0	-2.4	0.32
Youth age at RA					
14 years	35.2	37.0	33.3	3.7	0.28
15 years	31.0	30.5	31.5	-1.0	
16 years	33.9	32.6	35.3	-2.7	
Average age	15.4	15.4	15.5	-0.1	0.24
Youth language preference at SSI application					
English is preferred written language	64.3	64.9	63.7	1.2	0.59
English is preferred spoken language	64.3	64.8	63.8	0.9	0.67
Youth living arrangement at SSI application					
In parents' household	76.5	74.8	78.3	-3.6	0.23
Own household or alone	20.8	22.2	19.2	3.0	
Another household and receiving support	2.7	3.0	2.4	0.6	
Youth race/ethnicity (from the 18-month survey)					
Non-Hispanic white	6.8	7.8	5.8	2.0	0.57
Non-Hispanic black	18.4	17.5	19.4	-1.8	
Hispanic	64.2	63.6	64.9	-1.3	
Non-Hispanic American Indian	0.8	0.7	0.8	-0.1	
Non-Hispanic other or mixed race	8.0	8.4	7.5	0.9	
Missing	1.8	2.0	1.6	0.4	
Enrolling parent age (from the RA system)	44.2	44.4	44.0	0.4	0.31
Parent race/ethnicity (from the 18-month survey)					
Non-Hispanic white	8.6	8.9	8.3	0.6	0.53
Non-Hispanic black	19.7	19.9	19.6	0.3	
Hispanic	62.2	61.4	63.1	-1.7	
Non-Hispanic American Indian	0.4	0.2	0.7	-0.4	
Non-Hispanic other or mixed race	7.1	7.1	7.0	0.1	
Missing	1.9	2.5	1.3	1.1	
Disability					
Youth primary impairment					
Intellectual or developmental disability	47.9	46.4	49.4	-3.0	0.12
Speech, hearing, or visual impairment	2.9	2.9	2.8	0.1	
Physical disability	18.7	17.5	20.0	-2.5	
Other mental impairment	23.6	25.1	22.2	2.9	
Other or unknown disability	6.9	8.1	5.6	2.5	
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.3	93.4	95.3	-1.8	0.12
Received OASDI	7.0	7.8	6.2	1.6	0.22
Years since youth's earliest SSI eligibility at RA	9.1	8.8	9.3	-0.5	0.02**
Youth age at most recent SSI application	6.8	6.9	6.7	0.2	0.27
Youth payments in year before RA ($)					
SSI	7,394	7,292	7,501	-209	0.05*
OASDI	212	262	160	102	0.03**
Total SSI and OASDI	7,607	7,554	7,661	-107	0.29
Household has multiple SSI-eligible children	14.1	14.3	13.9	0.5	0.80
Enrolling parent provided a valid SSN at RA	62.0	61.9	62.2	-0.3	0.87
Parents included in the SSA data analyses					
None	14.9	15.0	14.8	0.2	0.17
One parent	50.1	52.1	48.0	4.1	
Two parents	35.0	32.8	37.2	-4.4	
Parent SSA payment status at RA					
Any parent received SSI only	6.9	7.0	6.8	0.1	0.86
Any parent received OASDI only	6.7	7.2	6.1	1.1	
Any parent received both SSI and OASDI	3.1	3.3	2.8	0.5	
No parent received any SSA payments	68.4	67.5	69.5	-2.0	
No parent was included in the SSA data analyses	14.9	15.0	14.8	0.2	
Earnings					
Youth had any earnings in the calendar year before RA	2.4	2.9	1.9	1.0	0.19
Youth earnings in the calendar year before RA ($)	39	44	33	11	0.72
Parent had any earnings in the calendar year before RA	74.1	72.7	75.5	-2.7	0.25
Parent earnings in the calendar year before RA ($)	17,456	17,224	17,699	-475	0.64
Number of youth	1,634	834	800		

Source: SSA administrative records; PROMISE RA system; PROMISE 18-month follow-up survey.

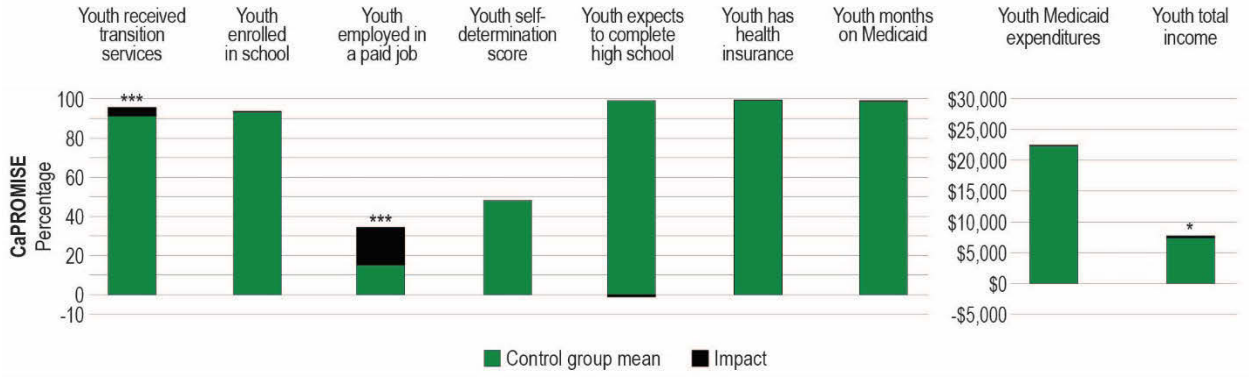
Note: The sample includes all youth who completed the PROMISE 18-month youth survey. We weighted statistics to adjust for survey nonresponse.

*/**/***Difference is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test or a chi-square test.

C. Impacts on youth outcomes 18 months after enrollment

The findings in this section show whether the services provided by CaPROMISE led to short-term impacts on youth outcomes in seven domains (Figure V.1). The impact estimates reveal that the program increased the share of youth who received transition services, their likelihood of paid employment and annual earnings, and their total income from paid employment and SSA payments. The program had no impact on youth's school enrollment, self-determination and expectations, likelihood of having health insurance, or Medicaid participation at 18 months after enrollment in CaPROMISE.

Figure V.1. CaPROMISE: Impacts on youth primary outcomes



*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

We also estimated impacts of CaPROMISE for subgroups of youth defined by the youth's sex, age, and primary impairment when they enrolled in the evaluation. The subgroup analysis focused on the primary outcomes in the seven youth domains. CaPROMISE had differential impacts on youth's receipt of transition services and youth's likelihood of health insurance coverage by age.

1. CaPROMISE connected more youth to transition services

Consistent with the objective of the PROMISE program model, CaPROMISE increased the receipt of transition services among youth with disabilities (Table V.2). With 91 percent of control group youth having received any transition services during the 18 months after random assignment, there did not appear to be large barriers to receiving some transition services in California; nonetheless, the program increased this share by 4 percentage points.

Impacts on the receipt of transition services differed by the youth's age (Appendix Table A.13c). CaPROMISE increased receipt of transition services for youth who were age 14 or 15 by 6 percentage points, but did not affect receipt of transition services for youth who were age 16. There was less room for the program to improve service receipt for those who were 16 because a large share of control group youth (94 percent) received any transition services.

The PROMISE 18-month survey also asked about the use of specific transition services. CaPROMISE increased the likelihood that youth had received each type of service queried. The program had the largest impacts on the receipt of case management and employment-promoting services (such as career planning, job skills training, help with a job search, and on-the-job supports), both of which it increased by about 30 percentage points. These findings reflect the

focus of the program model, which emphasized intensive family-centered case management and paid and unpaid work experiences for youth. The program also increased the share of youth who received an array of other transition services, including school transition planning, benefits counseling, financial education, self-advocacy or self-determination training, education and training supports, life skills training, help with assistive technology, and other services.

We also examined youth's use of a subset of key transition services and their intensity: case management, employment-promoting services, benefits counseling, and help with financial education. About one-half of control group youth received any of these services during the 18 months after random assignment; CaPROMISE increased the likelihood of receiving them by 28 percentage points. On average, treatment group youth received key services from 0.6 more providers than control group youth, though at least part of this increase can be attributed to the increase in receipt of any key services. The program contracted with other organizations to provide services, so it was designed to spread services across multiple providers (Matulewicz et al. 2018b). The total hours of key transition services received by control group youth was 282 hours (or 3.6 hours per week on average during the 18-month follow-up period); the program had no statistically significant impact on this outcome.

CaPROMISE enhanced the perceived usefulness of key services received by the youth. In the control group, 49 percent of youth reported receiving some key services that they considered to be somewhat or very helpful; the program increased the share of treatment group youth who reported the same by 29 percentage points. This offsets the 28 percentage-point reduction in the share of youth with no key services reported, implying that all youth who received key transition services found them somewhat or very useful.

The program reduced the share of treatment group youth who reported any unmet needs for services or supports by 8 percentage points and also reduced the number of unmet needs (Appendix Table A.12c). CaPROMISE reduced the reports of unmet needs for each type of service or support queried, with the exceptions of transportation, health services, accommodations, and other services. It had the greatest impacts on unmet needs for employment-promoting services and other skills training. These findings are consistent with the services that the program emphasized; it offered multiple types of employment-promoting services but provided no standardized services in the areas of transportation, health, and accommodations (Matulewicz et al. 2018b).

State VR agency data indicate that CaPROMISE greatly increased youth's participation in VR services (Table V.2). Only 4 percent of control group youth applied for VR services during the 18 months after random assignment; the program increased this rate by 21 percentage points. The program also increased the share of youth who received VR services by 13 percentage points. These findings are consistent with CaPROMISE's concerted efforts to connect youth with VR services, including, as previously noted, the VR agency's hiring of 10 rehabilitation professionals expressly to enroll treatment group youth in VR and deliver VR services to them.

Table V.2. CaPROMISE: Impact on youth's receipt of transition services (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any transition services since RA	91.3	4.3	0.00***
Supplementary outcomes			
Types of services received since RA (italics indicate key transition services)			
Case management[a]	31.0	31.1	0.00***
School transition planning	76.0	4.4	0.03**
Employment-promoting services[a]	36.0	29.9	0.00***
Benefits counseling[a]	6.5	11.1	0.00***
Financial education[a]	14.8	12.4	0.00***
Self-advocacy or self-determination training	36.2	9.9	0.00***
Help accessing education or training	28.2	18.2	0.00***
Life skills training	47.0	13.5	0.00***
Help with assistive technology	24.3	7.5	0.00***
Other services	4.3	4.4	0.00***
Received any key transition services since RA	50.8	28.4	0.00***
Hours of key transition services received since RA	282.2	48.7	0.12
Number of key transition service providers since RA	0.7	0.6	0.00***
Usefulness of key transition services received since RA			
No key service reported	49.2	-28.4	0.00***
No service rated somewhat or very useful	2.0	-0.4	
Any service rated somewhat or very useful	48.8	28.8	
VR services (from state VR agency data)			
Applied for VR services since RA	3.8	21.3	0.00***
Received VR services since RA	2.5	13.4	0.00***

Source: PROMISE 18-month follow-up survey; state VR agency data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of CaPROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12c for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

[a]These services are identified as key transition services because they were required of the PROMISE programs. We asked more detailed questions about providers of these services in the PROMISE 18-month survey than providers of other transition services.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

2. CaPROMISE had no impact on youth's school enrollment, but increased youth's receipt of job-related training and credentials

CaPROMISE had no impact on the primary outcome of the youth education domain: youth's school enrollment at the time of the 18-month survey (Table V.3). About 93 percent of control group youth were enrolled in school at the time of the survey, which did not differ from the treatment group. The program also had no impact on the share of youth who had ever enrolled in school or received a GED, certificate of completion, or high school diploma since random assignment.

CaPROMISE increased youth's receipt of job-related training. About 11 percent of the control group had attended a training program or taken classes outside of school since random assignment to help them learn job skills or get a job; the program increased this share by 22

percentage points. Similarly, the program increased the share of youth who had received job-related training credentials by 6 percentage points.

Table V.3. CaPROMISE: Impact on youth's education and job-related training (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Enrolled in school at the time of the survey	93.2	0.5	0.68
Supplementary outcomes			
Ever enrolled in school since RA	99.0	0.4	0.38
Received GED, certificate of completion, or high school diploma since RA	10.6	1.7	0.28
Job-related training since RA			
Received any job-related training	10.8	21.9	0.00***
Received any job-related training credential	1.7	6.0	0.00***

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of CaPROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12c for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

3. CaPROMISE increased the youth's paid employment and earnings

CaPROMISE more than doubled the likelihood that youth had held a paid job during the 18 months after random assignment (Table V.4). Among control group youth, 15 percent had held paid jobs; the program increased this rate by 19 percentage points. The treatment group youth's paid employment is in part a measure of receipt of program services because the program's CSCs were tasked with ensuring that all youth had at least one paid work experience before the end of the program.

CaPROMISE also increased the rate of paid employment during the year immediately before the 18-month survey; 10 percent of control group youth reported having a paid job during that year, and the program increased that share by 21 percentage points. Over the same period, control group youth worked less than one hour per week in paid jobs (based on all youth, regardless of employment status); CaPROMISE increased this average by 0.7 hours. Consistent with these impacts, we found that the program increased the youth's earnings from all jobs during the year before the survey by $343, a 77 percent increase over the control group's average annual earnings of $448.

When we examined employment and earnings at the time of the follow-up survey, we found a smaller positive impact on paid employment than we observed using the annual or 18-month measures. About 5 percent of control group youth had a paid job at the time of the 18-month survey; the program increased this figure by 6 percentage points (Appendix Table A.12c). These findings might be a result of most of the employed treatment group youth having had short-term jobs during the 18-month period after random assignment; among treatment group youth who had a paid job during the follow-up period, the average job tenure was 17 weeks (statistic not shown in the table).

Consistent with the annual employment findings based on survey data, our analyses of SSA data on earnings indicate that CaPROMISE had a positive impact on youth's employment and earnings during the calendar year after random assignment. About 13 percent of youth in the control group had any earnings from employment during that period; CaPROMISE increased this share by 20 percentage points. On average, youth in the control group earned $227 over this period; the program increased this amount by $102 (or 45 percent).

Table V.4. CaPROMISE: Impact on youth's employment and earnings (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Ever employed in a paid job since RA	15.0	19.4	0.00***
Supplementary outcomes			
Employment in the year before the survey			
Any paid employment	9.5	21.0	0.00***
Weekly hours worked in paid jobs	0.8	0.7	0.00***
Total earnings from all jobs ($)	448	343	0.02**
Ever employed in the calendar year after RA (from SSA data)	13.0	19.7	0.00***
Earnings in the calendar year after RA (from SSA data) ($)	227	102	0.01***

Source: PROMISE 18-month follow-up survey; SSA administrative records.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of CaPROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12c for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

4. CaPROMISE had no impact on youth's self-determination or expectations for the future

CaPROMISE had no impact on youth's self-determination as measured by our self-determination composite scale (Table V.5). Control group youth had an average score of 48 on a scale of 0 to 100; the score was the same for treatment group youth.[47] We also separately analyzed youth's scores in three subdomains of self-determination—autonomy, psychological empowerment, and self-realization. The program had no impact on any of these outcomes.

The lack of an impact on youth self-determination is somewhat surprising, given the program's large impact on the receipt of self-advocacy or self-determination training described above. However, the process analysis suggests that the intensity of CaPROMISE's self-determination services was low; three years into program operations, treatment group families had received few program contacts for self-determination services relative to other types of services (Matulewicz et al. 2018b).

The 18-month survey asked youth and parents about their expectations about the youth's education and independence at age 25. Our primary measure in this domain was whether youth

[47] The estimated impacts on self-determination differed both between male and female youth and between youth ages 14 or 15 and youth age 16 at enrollment. In both instances, the impact estimate was not significantly different from zero for either individual group (Appendix Table A.13c and Appendix Table A.14c).

expected to complete high school or receive a GED. Almost all control group youth (99 percent) expected to complete high school or receive a GED, and there was no significant difference between the two groups (Table V.5). The program also did not affect youth expectations regarding the pursuit of postsecondary education, independent living, financial independence, or having a paid job at age 25.

Similarly, we found no impacts on parent expectations, except with respect to their expectations about the likelihood their youth would have a paid job at age 25; the program increased this outcome by 3 percentage points (Table V.5). The success of the program in helping youth obtain paid employment opportunities described previously might have contributed to the program's positive impact on parents' expectations in this area. CaPROMISE had no impact on whether parents believed it was important that the youth eventually become independent in some way.

Table V.5. CaPROMISE: Impacts on youth's self-determination and expectations (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcomes			
Self-determination score at the time of the survey (scale: 0 to 100)	48.0	0.1	0.86
Youth expected to complete high school or GED at the time of the survey	99.1	-1.1	0.12
Supplementary outcomes			
Scores on subdomains of self-determination at the time of the survey			
Autonomy (scale: 0 to 300)	132.7	5.4	0.13
Psychological empowerment (scale: 0 to 100)	89.5	-0.8	0.47
Self-realization (scale: 0 to 100)	10.5	-1.1	0.29
At the time of the survey, youth expected to:			
Get post-secondary education	72.3	0.2	0.95
Live independently at age 25	58.1	4.4	0.14
Be financially independent at age 25	82.8	-2.5	0.29
Be employed at age 25	91.5	1.3	0.44
At the time of the survey, parent expected youth to:			
Get post-secondary education	56.2	1.6	0.51
Live independently at age 25	32.9	-1.0	0.68
Be financially independent at age 25	63.0	3.5	0.15
Be employed in a paid job at age 25	82.6	3.0	0.09*
Parent believed it important for youth to become independent in some way at the time of the survey	95.9	0.7	0.48

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of CaPROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12c for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

5. CaPROMISE did not affect the likelihood that youth had health insurance

CaPROMISE did not affect the share of youth who had health insurance at the time of the 18-month survey (Table V.6). Almost all control group youth (more than 99 percent) had health insurance even in the absence of the program. Impacts on the share of youth with health

insurance differed by the youth's age at enrollment; CaPROMISE reduced the share with health insurance for youth ages 14 or 15 at enrollment, but had no effect on health insurance coverage for youth age 16 at enrollment (Appendix Table A.13c). CaPROMISE had no impact on youth's type of health insurance coverage. Most control group youth (97 percent) were covered by public health insurance.

The program had no impact on whether the youth needed help with or equipment for an activity of daily living or an instrumental activity of daily living. It also had no impact on youth's smoking, use of alcohol, marijuana, or illicit drugs.

Table V.6. CaPROMISE: Impact on youth's health and health insurance (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Youth had health insurance at the time of the survey	99.2	0.2	0.63
Supplementary outcomes			
Health insurance type at the time of the survey			
Public	97.2	-0.2	0.80
Private	6.6	0.3	0.82
Needed help with or equipment for at least one ADL at the time of the survey	44.9	-0.7	0.78
Needed help with or equipment for at least one IADL at the time of the survey	59.2	-3.6	0.14
Substance use in the 30 days before the survey			
Smoking	1.9	0.1	0.89
Alcohol	2.3	-0.2	0.80
Marijuana	2.0	0.5	0.51
Other illicit drug	0.2	0.4	0.15

Source: PROMISE 18-month survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of CaPROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12c for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

6. CaPROMISE had no impact on youth's Medicaid enrollment or expenditures

CaPROMISE had no impact on the percentage of months that youth were enrolled in Medicaid or the total Medicaid expenditures during the 18 months after random assignment (Table V.7). On average, the control group youth had Medicaid coverage for nearly the entire 18-month period (99 percent)—virtually the same as that for youth in the treatment group. Control group youth incurred an average of $22,294 in Medicaid expenditures; this amount did not differ significantly for the treatment group. SSI recipients in California are automatically eligible for Medicaid (SSA 2017). We did not expect to find an impact on Medicaid enrollment within 18 months of youth's enrollment in CaPROMISE. The program also had no impact on the likelihood of youth enrollment in particular Medicaid plans or programs (comprehensive managed care, 1915(c) waiver programs, and capitated behavioral health plans), dual eligibility with Medicare, or average Medicaid payments overall and for specific payment types (fee-for-service and capitated payments).

Table V.7. CaPROMISE: Impact on youth's use of Medicaid (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcomes			
Percentage of months enrolled in Medicaid since RA	98.7	0.3	0.31
Total Medicaid expenditures since RA ($)	22,294	158	0.85
Supplementary outcomes			
Enrollment since RA			
Medicaid managed care	92.8	1.3	0.14
Medicaid 1915(c) waiver	36.2	1.9	0.23
Medicaid capitated behavioral health	n.d.		
Medicaid payments since RA			
Any Medicaid payments	99.3	0.3	0.20
Average monthly Medicaid payments ($)	1,239	9	0.85
Average monthly fee-for-service payments ($)	601	9	0.84
Average monthly capitated payments ($)	638	-0	0.96

Source: State Medicaid data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of CaPROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12c for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

n.d. = no data available.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

7. CaPROMISE increased youth's total income

Our primary measure of youth's economic well-being was the total income they received during the year before the 18-month survey from paid jobs (based on the 18-month survey data) and SSA payments (based on SSA data). The control group received $7,362 on average during the reference period; CaPROMISE increased this amount by $330 (or 4.5 percent) (Table V.8). We also measured youth's annual income during the calendar year after random assignment based on SSA data on earnings and SSA payments; the program had no impact on this measure of income. The difference in impacts between the two income measures is explained by smaller impacts on earnings during the calendar year after random assignment (based on administrative data) than in the year preceding the survey (see Table V.4), and by differences in reference period for these measures; the measure for the calendar year after random assignment may span a period earlier or later in a youth's tenure in the program, relative to the measure for the year preceding the survey.

CaPROMISE decreased the proportion of youth receiving any SSA payments during the 18 months after random assignment. About 97 percent of the control group received such benefits over the reference period; the program decreased this share by 1 percentage point. The effect is primarily driven by reductions in SSI participation. However, the program had no impact on the amount of SSA payments received; on average, the amount of SSA payments received was not different between the treatment and control group.

The program had no impact on the percentage of youth who were living with their parents at the time of the 18-month survey. The program also had no impact on a categorical measure of

youth's household income, or whether anyone in the household participated in public assistance programs other than SSI and OASDI.

Table V.8. CaPROMISE: Impact on youth's economic well-being (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Youth total income (earnings and SSA payments) in the year before the survey ($)	7,362	330	0.05*
Supplementary outcomes			
SSA payments in 18-month period since RA (from SSA data)			
Received any SSA payments	96.8	-1.0	0.10*
Total SSA payments ($)	10,732	-26	0.81
Income in the calendar year after RA (from SSA data) ($)	7,114	72	0.40
Youth resided with parent at the time of the survey	99.2	-0.9	0.10
Household income in the calendar year before the survey			
Less than $10,000	22.8	-2.9	0.33
$10,000 to $19,999	34.5	0.9	
$20,000 to $29,999	24.1	-0.7	
$30,000 or more	18.7	2.8	
Any household member who participated in non-SSA public assistance programs at the time of the survey	54.9	-0.3	0.88

Source: PROMISE 18-month follow-up survey; SSA administrative records.

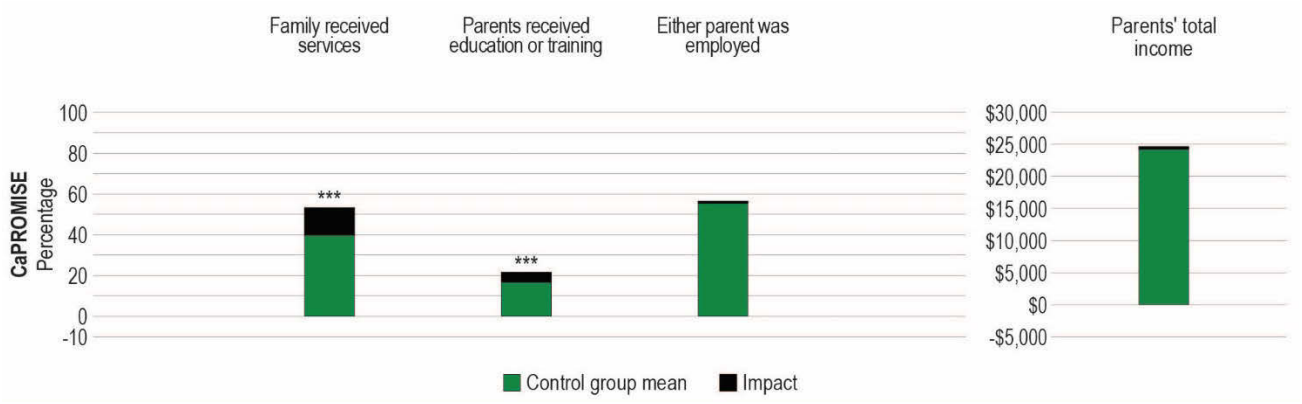
Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of CaPROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12c for sample sizes for all outcomes. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

D. Impacts on family outcomes 18 months after enrollment

The findings in this section show whether the services provided by CaPROMISE led to short-term impacts on parent and family outcomes in four domains (Figure V.2). The impact estimates reveal that the program increased the receipt of support services by parents and family members other than the SSI youth—as well as parents' education and training and earnings from employment—but had no impact on parents' total income from earnings and SSA payments. The subgroup analyses found that CaPROMISE had differential impacts on families' receipt of support services by youth's primary impairment. We found no other differences in the program's impacts on the primary family outcomes by youth age, sex, or impairment.

Figure V.2. CaPROMISE: Impacts on parent and family primary outcomes



*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

1. CaPROMISE increased families' receipt of support services

Consistent with its program model, CaPROMISE increased the likelihood that families received support services (Table V.9). In the control group, 40 percent of parents reported that a family member other than the SSI youth received support services during the 18 months after random assignment. The program increased this share by 14 percentage points. It also increased families' receipt of an array of specific services, including case management, benefits counseling, financial education, training and information on youth's disability, and parent networking support. The program had no impact on family members' receipt of education supports or employment-promoting services. Although CSCs could refer family members other than the youth to community resources for education and employment services, the provision of such services to family members was not as common as other activities conducted by the program (Matulewicz et al. 2018b). The impacts on families' receipt of support services differed by the youth's primary impairment (Appendix Table A.15c). CaPROMISE increased service receipt among families of youth with other mental impairments (by 21 percentage points) and youth with intellectual or developmental disabilities (by 16 percentage points), but had no impact on families of youth with other impairments.

We examined the likelihood of family members receiving a subset of these services—designated as key support services—and their intensity: case management, employment-promoting services, benefits counseling, and financial education. About 23 percent of control group parents reported that their family members had received at least one of these key services during the 18 months after random assignment; CaPROMISE increased this outcome by 14 percentage points (Table V.9). The program also increased the number of providers that families used by 0.2 providers, but had no impact on the average hours of services families received. Average hours of key service use during the 18 months after random assignment were low; control group families received 26 hours (fewer than 2 hours per month, on average, during the 18-month follow-up period), and this average did not differ from that of treatment group families.

CaPROMISE increased by 14 percentage points the likelihood that families reported at least one of the services they received as somewhat or very useful. This offsets the 14 percentage-point reduction in the share of families with no key services reported, implying that all families

that received key support services found them somewhat or very useful. The program also reduced the likelihood of family unmet needs for services or supports by 4 percentage points and reduced the number of unmet needs reported (Appendix Table A.12c). CaPROMISE also reduced the likelihood of reporting an unmet need for all of the specific types of services and supports queried in the survey except case management.

Based on analysis of state VR agency data, CaPROMISE had no impact on parents' application for or receipt of VR services during the 18 months after PROMISE enrollment. Although youth referrals to VR was a core CaPROMISE service component, the program had no particular focus on referring parents to VR services (Matulewicz et al. 2018b).

Table V.9. CaPROMISE: Impact on family's receipt of services (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any family support services since RA	39.7	13.5	0.00***
Supplementary outcomes			
Types of family support services received since RA (italics indicate key support services)			
Case management[a]	9.8	8.7	0.00***
Education or training supports	9.8	0.6	0.69
Employment-promoting services[a]	7.3	1.6	0.25
Benefits counseling[a]	12.8	10.9	0.00***
Financial education[a]	5.5	4.7	0.00***
Parent training and information on youth's disability[a]	23.0	10.3	0.00***
Parent networking support	15.9	6.3	0.00***
Any key support services received since RA	22.9	13.5	0.00***
Hours of key support services received since RA	25.9	6.2	0.51
Number of key support service providers since RA	0.3	0.2	0.00***
Usefulness of key services received since RA			
No key service reported	77.1	-13.6	0.00***
No service rated somewhat or very useful	0.9	-0.3	
Any service rated somewhat or very useful	22.0	13.9	
Enrolling parent's engagement with VR services (from state VR agency data)			
Applied for VR services since RA	0.6	0.0	0.95
Received VR services since RA	0.5	0.0	0.96

Source: PROMISE 18-month follow-up survey; state vocational rehabilitation agency data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of CaPROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12c for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

[a]These services were required of the PROMISE programs. With the exception of parent training and information on youth's disability, we asked more detailed questions about providers of these services in the PROMISE 18-month survey than providers of other support services. The outcome measures related to key support services presented in this table reflect all required services except parent training and information on youth's disability.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

2. CaPROMISE had a positive impact on parents' education or training

CaPROMISE increased by 5 percentage points the share of parents reporting that they or their spouse had completed or attended education or job skills training during the 18 months after

random assignment (Table V.10). Although the program had no impact on families' receipt of education and employment-promoting services (discussed above), and the process analysis indicated that these services were less common than others, parents' interactions with CSCs might have encouraged them to seek education or job skills training. The program had no impact on parents' enrollment in education or job skills training at the time of the survey, or attainment of a diploma, GED, certificate, or professional license since random assignment.

Table V.10. CaPROMISE: Impact on parents' education and training (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any education or job skills training since RA	16.5	5.0	0.01***
Supplementary outcomes			
Either parent was enrolled in education or job skills training at the time of the survey	6.8	0.2	0.88
Either parent received a diploma, GED, certificate of completion, or professional license since RA	5.8	0.4	0.77

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of CaPROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12c for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

3. CaPROMISE had no impact on parents' likelihood of employment, but increased their earnings

CaPROMISE had no impact on the share of parents who had been employed for pay since random assignment (Table V.11). About 55 percent of control group parents reported that either they or their spouse had worked for pay since random assignment; this percentage did not differ from that of the treatment group. The program also had no impact on the percentage of parents employed at the time of the survey interview or their access to health insurance through their jobs.

Although CaPROMISE had no impact on the likelihood of parents' employment, it increased parents' earnings measured using data from the survey. Control group parents reported that they and their spouse had combined earnings averaging $1,108 during the month before the survey; the program increased this by $122. However, the program had no impact on parents' earnings based on SSA records for the calendar year after random assignment. The different findings may reflect the different reference periods for each measure (the month preceding the survey versus calendar year after random assignment). Because the impact estimates are positive for both measures (but statistically significant for only the survey-based measure), we believe the evidence suggests that the program had a positive impact on parental earnings.

Table V.11. CaPROMISE: Impacts on parents' employment and earnings (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Either parent was employed since RA	55.3	1.1	0.65
Supplementary outcomes			
Either parent was employed in the month before the survey	55.7	2.8	0.24
Parents' earnings from all jobs in the month before the survey ($)	1,108	122	0.07*
Parents' earnings in the calendar year after RA (from SSA data) ($)	22,380	467	0.38
Either parent was offered health insurance through a job held in the month before the survey	25.9	0.9	0.67

Source: PROMISE 18-month follow-up survey; SSA administrative records.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of CaPROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12c for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

4. CaPROMISE had no impact on parents' annual total income

We examined whether CaPROMISE improved parents' economic well-being by assessing impacts on the sum of their earnings from employment and payments from the SSI and OASDI programs during the calendar year after random assignment (for the enrolling parents and their spouses, if applicable). In the control group, the average parental income during this year was $24,160. There was no significant difference in this outcome between the treatment and control group (Table V.12).[48]

We found no impacts of CaPROMISE on other supplementary outcomes in this domain, including parents' receipt of SSA payments, SSA payment amounts, the likelihood of Medicaid enrollment, or Medicaid expenditures.

[48] The estimated impacts on parents' income differed by the youth's age at enrollment; however, the estimate was not significantly different from zero for youth ages 14 and 15 or youth age 16 at enrollment (Appendix Table A.13c).

Table V.12. CaPROMISE: Impact on parents' economic well-being (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Parents' total income in the calendar year after RA (from SSA data) ($)	24,160	463	0.38
Supplementary outcomes			
Parents' SSA payments in 18-month period since RA (from SSA data)			
Received any payments	19.0	-0.1	0.96
Total payments ($)	2,705	66	0.78
Medicaid enrollment and payments since RA (from state Medicaid program data)			
Enrolled in Medicaid	83.9	0.6	0.70
Enrolled in Medicaid comprehensive managed care	75.7	-2.2	0.25
Enrolled in Medicaid 1915(c) waiver	0.8	-0.1	0.86
Total Medicaid payments ($)	5,581	-303	0.28

Source: PROMISE 18-month follow-up surveys; SSA administrative records; state Medicaid data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of CaPROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12c for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

E. Cost analysis results for CaPROMISE

This section summarizes our findings from the cost analysis of CaPROMISE, with a focus on cost by input category and program component as well as the cost per treatment group enrollee and per participant. The technical appendix describes our methods for this analysis.

The average annual cost of the resources used by CaPROMISE to deliver services during the accounting period we targeted (July 1, 2016 through June 30, 2017) was $7,182 per treatment group youth and their families. We estimate the program's average cost per enrollee to be $23,186 over the entire service delivery period (October 1, 2014 through September 30, 2018).

1. Costs by input category

Table V.13 summarizes the costs of CaPROMISE by input category during the accounting period. The majority of the program's costs (82 percent) were for other direct costs. All of the costs in this input category related to purchased services delivered to PROMISE youth and their families or for program evaluation. LEAs accounted for most of the purchased services costs. These agencies served as the program's local sites and employed the CSCs who provided case management, employment services, benefits counseling, and other services to youth and their families. Services provided by the family resource centers, independent living centers, and state university interns, and evaluation activities conducted by the Interwork Institute accounted for the other portion of costs in the input category.

Labor costs constituted the second largest proportion (12 percent) of CaPROMISE costs. The majority of the costs in this category included wage and fringe benefit costs of the rehabilitation professionals employed by CDOR, who provided career exploration and work-based learning experiences to PROMISE youth. The remainder of labor costs involved the wage and fringe benefit costs of program management staff within CDOR. We do not account for

CDOR's cost to deliver traditional VR services (that is, services other than those delivered by the dedicated CaPROMISE rehabilitation professionals) to PROMISE youth and their families. These services were part of CDOR's usual services (and so could have been received by members of the control group) and were not paid for by CaPROMISE funds. The labor costs associated with LEA, family resource center, independent living center, and Interwork Institute staff, and the state university interns were captured in the purchased services inputs.

The third largest proportion of CaPROMISE costs (6 percent) comprised indirect costs, including operational costs, such as meeting expenses, travel, and office supplies. This category also included the 22.6 percent indirect rate that CDOR applied to all line items, including salary, benefits, and operating expenses. For the LEA contracts, the indirect rate was applied to the first $25,000 for each contract. The program reported no use of donated goods or services in serving enrolled youth.

Table V.13. CaPROMISE costs by input category, July 2016 through June 2017

Category	Percentage of CaPROMISE total cost	Cost amount
Other direct costs	82.2	$9,716,474
Labor costs	12.1	$1,434,002
Indirect costs	5.7	$670,982
Costs of donated goods and services	0.0	$0
Total	**100.0**	**$11,821,458**

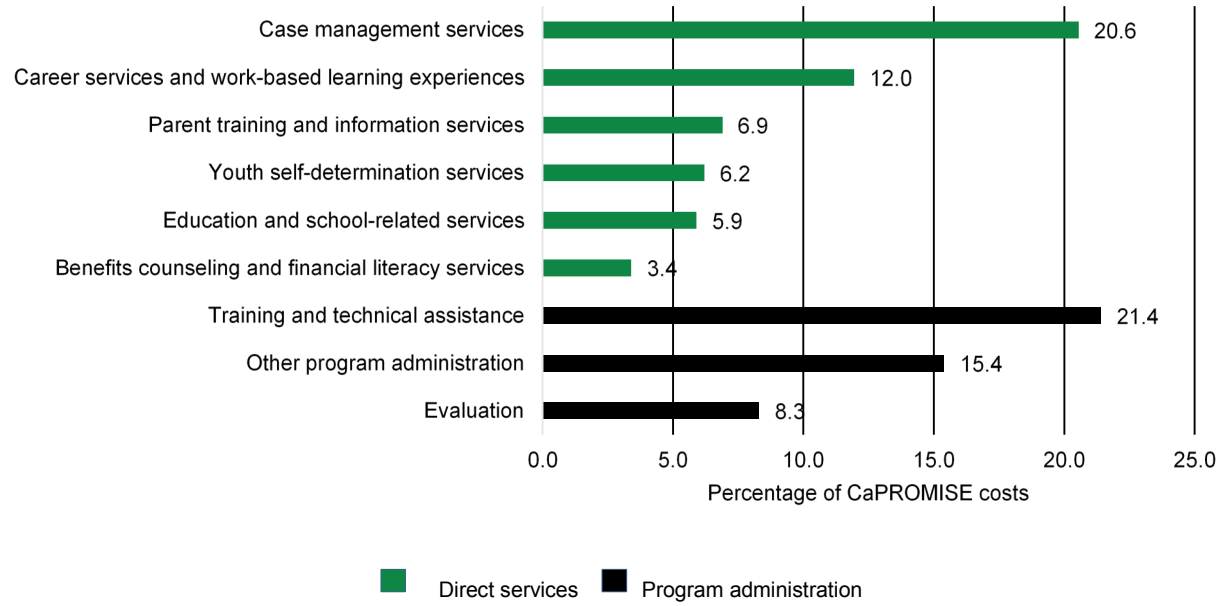
Source: CaPROMISE cost data.

Note: Data reflect costs from July 1, 2016 through June 30, 2017. The total sum may differ from the sum of figures in the table due to rounding.

2. Costs by program component

The six service components comprising direct services accounted for approximately 55 percent of the total cost of CaPROMISE during the accounting period (Figure V.3). Among the direct service components, costs were largest for case management services (21 percent of total costs). This finding aligns with the program's intensive case management, which focused on the needs of both youth and their family members. Career services and work-based learning experiences represented 12 percent of total costs, the second largest portion of direct service costs. CaPROMISE expected each youth to have at least one paid work experience and provided individualized support to help youth obtain employment. Parent training and information services was the third largest proportion of direct service costs, comprising 7 percent of costs. These costs included the Interwork Institute's subcontracts with the family resource centers to provide services to parents, as well as parent services delivered by CSCs. Additionally, youth self-determination services, and education and school-related services each represented 6 percent of total costs. Youth self-determination service costs included CDOR's contracts with the independent living centers to deliver training on independent living skills and the empowerment services delivered by the CSCs. Finally, the program had few service costs associated with benefits counseling and financial education. CSCs reported that they often integrated the delivery of benefits counseling and financial education into other program activities, such as case management, career services, and work-based learning experiences.

Figure V.3. CaPROMISE costs by program component, July 2016 through June 2017



Note: Data reflect costs from July 1, 2016 through June 30, 2017.

Program administration accounted for 45 percent of the total cost of CaPROMISE. Of the three components of program administration—training and technical assistance, other program administration, and evaluation—the staff training and technical assistance accounted for the largest share of these costs (21 percent of total costs). This component included activities related to the receipt or delivery of staff training to improve knowledge and skills in working with youth, families, and the community. Other program administration costs (15 percent of total costs) included costs related to the program's steering committee and general administration of the program and its staff. Finally, the program's evaluation costs (8 percent of total costs) comprised time spent supporting evaluation efforts and the Interwork Institute's costs to conduct the formative evaluation.

3. Costs per treatment group enrollee and per participant

The treatment group included 1,646 youth (research and nonresearch cases); of those, 1,530 participated in CaPROMISE services. For both enrollees and participants, we assumed an average duration of participation in the program of 3.2 years, which we estimated based on the average length of potential participation for enrollees from the random assignment date through September 30, 2018. Dividing the total program cost for the one-year accounting period by the number of enrolled and participant youth, we obtained an average annual program cost of $7,182 for enrolled youth and their families, and $7,726 for participating youth and their families. Applying this annual program cost to the average duration of participation, we calculated an average total program cost of $23,186 per enrollee and $24,944 per participant over the

program's entire service delivery period. The costs per enrollee and participant include substantive services provided to family members and youth.[49]

F. Summary of findings and discussion

CaPROMISE had positive impacts on the primary outcomes most closely related to service delivery but, with two exceptions, had no impact on other outcomes by 18 months after youth and families had enrolled in the evaluation (Table V.14). The program increased the likelihood that youth and their family members received services, youth engaged in paid employment, and parents engaged in education and training, and increased youth's total income. CaPROMISE had no impact on youth's school enrollment, self-determination and expectations, likelihood of having health insurance, and use of Medicaid. It also had no impact on parents' employment or income.

Table V.14. CaPROMISE: Summary of impacts on primary outcomes, by domain

	Domain	Primary outcome	Impact summary
Youth	Receipt of transition services	Receipt of any transition services	+++
	Education	Enrollment in school at the time of the survey	0
	Employment and earnings	Ever employed in a paid job since RA	+++
	Self-determination and expectations	Self-determination scale (0 to 100)	0
	Self-determination and expectations	Youth expects to complete high school/GED	0
	Health and health insurance	Youth has health insurance	0
	Use of Medicaid	Percentage of months enrolled in Medicaid since RA	0
	Use of Medicaid	Total Medicaid expenditure since RA ($)	0
	Economic well-being	Youth's total income in past year ($)	+
Family	Receipt of services	Any family support services since RA	+++
	Parents' education and training	Any education or job skills training since RA	+++
	Parents' employment and earnings	Either parent was employed for pay since RA	0
	Parents' economic well-being	Parents' income in calendar year after RA	0

Source: PROMISE 18-month survey and SSA data.

Note: +/++/+++ The impact estimate is positive and statistically significant at the .10/.05/.01 level using a two-tailed *t*-test.
0 The impact estimate is not statistically different from zero at the .10 level using a two-tailed *t*-test.

The 18-month findings on CaPROMISE's impact reflect the program's focus on delivering intensive family-centered case management and work experiences for youth. It improved several short-term outcomes that can be considered either program services or outputs, including youth's and families' receipt of services and youth's paid employment. The findings also reflect the program's prioritization of services for youth over those for other family members. This approach may have contributed to the finding that the program had no impact on the hours of key services that families received or parents' employment and income. In addition, the low intensity

[49] The average annual and total program costs as derived from the data and presented in the text differ slightly due to rounding. We calculated these statistics based on an average monthly program cost of $598 for enrolled youth and their families and $644 for participating youth and their families, and an average duration of participation of 3.2 years.

of CaPROMISE's self-determination services may explain the lack of impact on youth self-determination.

Although CaPROMISE had few impacts on the primary outcomes at 18 months, the program was still evolving at the end of the analysis period and was scheduled to continue providing services for approximately another year. For many of the youth outcomes we analyzed, 18 months after enrollment is too early to detect meaningful impacts. We will revisit most of the outcomes included in the 18-month impact analysis when we conduct the five-year analysis to determine whether the positive impacts endure and any additional impacts emerge.

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VI. MD PROMISE

Summary of 18-month impacts and costs of MD PROMISE

- MD PROMISE expanded the share of youth who received transition services and made it more likely that their families would receive support services.
- It also increased the youth's receipt of job-related training, but did not affect youth's school enrollment.
- The program increased the likelihood that youth had paid jobs, and raised their earnings and total income.
- The program had no impact on (1) the educational attainment of parents, (2) youth's self-determination and expectations about the future, (3) parents' employment and total income, and (4) the youth's reliance on benefits from Medicaid.
- MD PROMISE's average annual cost per treatment group enrollee was $5,670, which included the costs of providing services to both the youth and their family members.

A. Program overview and a review of findings from the process analysis

This section provides an overview of MD PROMISE and the findings from the program's process analysis (Kauff et al. 2018). The process analysis documented the program's structure and service model, and described its implementation during the first three years of operations, based on data from MD PROMISE's MIS, site visits, and key informant interviews.

1. Program overview

The Maryland Department of Disabilities, a distinct cabinet-level state agency created in 2004, was the lead agency for the MD PROMISE program. Representatives from six other state agencies participated on a PROMISE steering committee, which supported and worked collaboratively with the program. The Maryland Department of Disabilities contracted with three organizations to provide services to treatment group members statewide and a fourth organization to provide technical assistance to program staff.

Case managers and family employment specialists were paired in teams to assist youth and their family members in developing plans for their education, employment, and related activities, and implementing those plans.[50] The design for MD PROMISE specified average caseloads of 35 youth (in addition to their family members) per team at any given time. At any point, however, 25 to 50 percent of youth on each team's caseloads typically were not active in the program. Initially, the team was responsible for re-engaging these youth, but in practice, the team focused the majority of their attention on active cases. MD PROMISE initially anticipated a 16-month intervention in which youth would achieve milestones in a linear fashion. However, it became evident early on that a 16-month timeframe was insufficient because engagement was not a consistent, linear process. To account for this and ensure ongoing engagement, midway through the program MD PROMISE hired additional staff whose exclusive responsibility was to conduct outreach to disengaged youth and families, and engage or reengage them in services.

[50] Information from the intake interview was the basis for the family plan, which outlined youth and family goals and their plans for achieving them. The idea was for these plans to be continuously updated.

2. Summary of findings from the process analysis

Three years into program operations, MD PROMISE had engaged 92 percent of treatment group youth as participants in the program and had provided key services to a substantial number of them. Almost two-thirds had participated in an unpaid work experience and almost half in a paid work experience. At least half (and perhaps as many as four-fifths) of program participants had received some type of benefits counseling, though the intensity of that counseling tended to be low—typically a single in-person or telephone consultation. In addition, 29 percent had received financial education services. The program had facilitated linkages to adult service providers for more than one-third of participating youth (surpassing its goal of providing linkages for 20 percent of them) and linkages to postsecondary services or opportunities for an equal number. The program expected its case managers to make at least 8 to 10 contact attempts per week to youth on their caseloads, their family members, or others to facilitate linkages to community resources or otherwise meet the needs of participants as specified in their service plans; case managers met this expectation. However, in a typical month, neither case managers nor family employment specialists made any contact attempts to reach one-quarter of the youth on their caseloads. MD PROMISE hired supplemental staff to reach out to disengaged youth, who may have taken on responsibility for these cases.

The design for MD PROMISE also called for the program to assist family members of treatment group youth in becoming more self-sufficient, more engaged in their communities and work, and more optimistic about addressing their challenges. Program staff provided many case management services to family members, but our analysis of MD PROMISE MIS data revealed that the program provided other services, such as employment and education services, to the parents, guardians, and other family members of very few participating youth.

The process analysis suggested that conditions were favorable for observing positive impacts of the program on youth. Evidence in three areas implied a marked difference in the service experiences of treatment and control group youth. First, as already noted in this section, a large share of treatment group youth had actually participated in the program, and most of them had received key services three years into program operations. Second, control group youth had only limited access to services similar to the assertive case management and employment services that MD PROMISE provided. The case management available to youth with disabilities through other statewide programs was generally of lower intensity, and case management that resembled what PROMISE provided was available only in certain localities through programs that did not explicitly target youth with disabilities. Although control group youth, in principle, had access to benefits counseling and employment services similar to (albeit less intense than) those the program offered, these youth had no single entity facilitating their access to those services, coordinating the efforts of multiple providers, or networking with providers and employers on their behalf. Third, there was virtually no risk that control group youth received MD PROMISE services; program staff served treatment group youth exclusively and had no way of identifying control group youth. However, given that the MIS data revealed the parents of very few treatment group youth received employment services, the process analysis concluded that the prospects for impacts on parents were less favorable.

B. Baseline characteristics of the youth survey respondent sample

The youth survey respondent sample for the interim impact analysis of MD PROMISE consists of 1,501 randomly assigned youth who completed the 18-month follow-up survey.[51] Except for data on youth's and parents' race and ethnicity, all baseline characteristics are based on data from SSA administrative records. Slightly more than one-third of youth in the sample were female (Table VI.1). At the time of random assignment, about one-quarter of the youth were age 14, about one-quarter were age 15, and just under half were age 16. Approximately 96 percent of the youth expressed a preference for English as their written and spoken language. About 86 percent of youth lived with their parents; another 11 percent lived in their own households at the time they applied for SSI. The largest racial and ethnic group was non-Hispanic black (61 percent), followed by non-Hispanic white (19 percent). The racial-ethnic composition of the parents was roughly similar to that of the youth.

We grouped youth primary impairments recorded in baseline SSA administrative data into six categories, the largest of which was other mental impairment (48 percent). The next largest group was intellectual or developmental disability (37 percent), followed by physical disability (11 percent); other or unknown disability (3 percent); and speech, hearing, or visual impairment (2 percent).

About 95 percent of youth in our sample received SSI payments during the month of random assignment. At that point, the time since their initial SSI eligibility was just over 8 years, on average. Their age at the time of most recent SSI application was just under 8 years, on average. About 11 percent of the youth received OASDI payments. On average, the youth received $7,630 in SSA disability program benefits during the year before their month of enrollment and random assignment. About 17 percent of the youth in our sample lived in a household with multiple SSI-eligible children. Only 5 percent of youth had any earnings from employment in the year before random assignment; among parents, 67 percent had any earnings.

On average, most of these characteristics were similar for youth in the treatment and control groups, which was expected, given that the youth were randomly assigned to these groups. We compared the two groups across 25 characteristics at the time of random assignment (Table VI.1, columns B and C) and found three statistically significant differences between the two groups: sex of the youth, SSI payment amount in the year before the month of random assignment, and total SSA disability benefit amount in the year before the month of random assignment. We expect to be able to identify unbiased estimates of program impacts by comparing the treatment and control groups while accounting for the differences in baseline characteristics through regression adjustment.

[51] Of the 2,006 youth enrolled in the MD PROMISE evaluation, 1,866 were randomly assigned—936 to the treatment group and 930 to the control group. Random assignment occurred immediately after the youth and the family enrolled in MD PROMISE. The remaining 140 youth had siblings already enrolled in the evaluation and so were purposively assigned to the same groups as their siblings (61 treatment cases and 79 control cases); we did not include these nonresearch cases in the impact analysis. The full research sample for the impact analysis consists of the 1,866 youth who enrolled in the evaluation and were randomly assigned to the treatment or control group. These 1,866 youth, less 6 youth (3 treatment and 3 control cases) who had died within 18 months of enrollment or had withdrawn from the evaluation, constitute the denominator for calculating the 18-month survey response rate for MD PROMISE, which was 81 percent for the youth survey and 85 percent for the parent survey.

Table VI.1. MD PROMISE: Baseline characteristics of the youth survey respondent sample (percentage, unless otherwise noted)

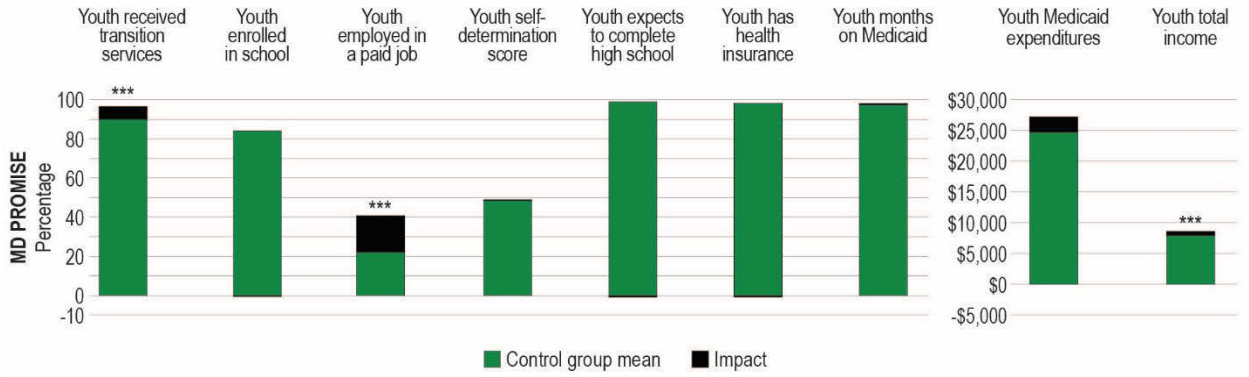
	All (A)	Treatment (B)	Control (C)	Difference (B-C)	*p*-value
Demographic characteristics					
Youth sex is female	35.5	33.3	37.6	-4.3	0.08*
Youth age at RA					
14 years	25.8	24.2	27.4	-3.2	0.32
15 years	25.9	26.9	24.8	2.1	
16 years	48.3	48.9	47.8	1.1	
Average age	15.8	15.8	15.7	0.0	0.35
Youth language preference at SSI application					
English is preferred written language	96.7	96.4	97.1	-0.7	0.43
English is preferred spoken language	96.4	96.1	96.7	-0.6	0.55
Youth living arrangement at SSI application					
In parents' household	85.8	85.2	86.4	-1.2	0.64
Own household or alone	10.7	11.5	10.0	1.5	
Another household and receiving support	3.5	3.3	3.6	-0.2	
Youth race/ethnicity (from the 18-month survey)					
Non-Hispanic white	18.7	18.7	18.6	0.1	0.61
Non-Hispanic black	61.0	59.6	62.4	-2.8	
Hispanic	8.5	9.7	7.3	2.3	
Non-Hispanic American Indian	1.8	1.6	2.0	-0.5	
Non-Hispanic other or mixed race	7.7	8.1	7.4	0.7	
Missing	2.3	2.4	2.2	0.2	
Enrolling parent age (from the RA system)	43.3	43.2	43.5	-0.3	0.53
Parent race/ethnicity (from the 18-month survey)					
Non-Hispanic white	23.3	22.3	24.4	-2.1	0.61
Non-Hispanic black	61.1	60.5	61.8	-1.2	
Hispanic	6.9	7.6	6.1	1.4	
Non-Hispanic American Indian	1.2	1.3	1.1	0.3	
Non-Hispanic other or mixed race	5.2	5.7	4.7	1.0	
Missing	2.2	2.6	1.9	0.7	
Disability					
Youth primary impairment					
Intellectual or developmental disability	36.8	36.4	37.2	-0.8	0.72
Speech, hearing, or visual impairment	1.5	1.7	1.3	0.4	
Physical disability	10.7	9.9	11.6	-1.8	
Other mental impairment	48.0	49.2	46.8	2.5	
Other or unknown disability	2.9	2.8	3.0	-0.3	
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.9	95.4	94.5	0.9	0.44
Received OASDI	11.3	12.1	10.5	1.7	0.31
Years since youth's earliest SSI eligibility at RA	8.3	8.2	8.4	-0.2	0.39
Youth age at most recent SSI application	7.9	8.1	7.8	0.3	0.17
Youth payments in year before RA ($)					
SSI	7,274	7,380	7,165	214	0.08*
OASDI	356	368	344	24	0.70
Total SSI and OASDI	7,630	7,748	7,509	238	0.03**
Household has multiple SSI-eligible children	16.8	16.9	16.6	0.3	0.88
Enrolling parent provided a valid SSN at RA	59.5	60.1	58.9	1.2	0.63
Parents included in the SSA data analyses					
None	6.1	5.9	6.3	-0.4	0.52
One parent	69.7	68.6	70.7	-2.1	
Two parents	24.3	25.5	23.0	2.5	
Parent SSA payment status at RA					
Any parent received SSI only	8.1	8.6	7.6	1.0	0.17
Any parent received OASDI only	8.4	9.7	7.1	2.6	
Any parent received both SSI and OASDI	5.0	5.8	4.2	1.6	
No parent received any SSA payments	72.4	70.0	74.8	-4.8	
No parent was included in the SSA data analyses	6.1	5.9	6.3	-0.4	
Earnings					
Youth had any earnings in the calendar year before RA	4.6	5.1	4.1	0.9	0.39
Youth earnings in the calendar year before RA ($)	39	45	33	12	0.28
Parent had any earnings in the calendar year before RA	66.9	67.3	66.4	1.0	0.70
Parent earnings in the calendar year before RA ($)	14,754	14,362	15,155	-793	0.46
Number of youth	1,501	759	742		

Source: SSA administrative records; PROMISE RA system; PROMISE 18-month follow-up survey.
Note: The sample includes all youth who completed the PROMISE 18-month youth survey. We weighted statistics to adjust for survey nonresponse.
*/**/***Difference is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test or a chi-square test.

C. Impacts on youth outcomes 18 months after enrollment

The findings in this section show whether the services provided by MD PROMISE led to short-term impacts on youth outcomes in seven domains (Figure VI.1). The impact estimates indicate that MD PROMISE increased the share of youth who received transition services, their likelihood of paid employment, annual earnings, and their total income from paid employment and SSA payments. The program had no impact on their school enrollment, self-determination and expectations, likelihood of having health insurance, or Medicaid participation at 18 months after enrollment in MD PROMISE.

Figure VI.1. MD PROMISE: Impacts on youth primary outcomes



*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

We also estimated the impacts of MD PROMISE for subgroups of youth defined by their sex, age, and primary impairment when they enrolled in the evaluation. The subgroup analyses focused on the primary youth outcome(s) in each domain. We found that MD PROMISE had differential impacts on the youth's paid employment by age at enrollment and total Medicaid expenditures by primary impairment. It also had differential impacts on the percentage of months the youth enrolled in Medicaid by sex and by age.

1. MD PROMISE connected more youth to transition services

Consistent with the intent of the PROMISE program model, MD PROMISE increased the receipt of transition services among youth with disabilities. These services included case management, employment-promoting services, benefits counseling, help with financial education, and education and training supports (Table VI.2). With just under 90 percent of control group youth having received any transition services during the 18 months after random assignment, there did not appear to be significant barriers to youth receiving at least some transition services in Maryland; nonetheless, the program increased this share by 7 percentage points.

The PROMISE 18-month survey also asked about the use of specific transition services. We found that MD PROMISE had significant positive impacts on youth's receipt of most types of transition services queried (Table VI.2). It increased the receipt of case management by 26 percentage points—consistent with its program model, which emphasized assertive case management. The program also increased the share of youth who received an array of other transition services, including employment-promoting services (such as career planning, job skills

training, help with a job search, and on-the-job supports), benefits counseling, help with financial education, training in self-advocacy or self-determination, and help accessing education or training. The lack of an impact on school transition planning is not surprising, given Maryland's focus on providing community-based services rather than supports in schools. The lack of impacts on both life skills training and help with assistive technology is also not surprising, given that the program model did not include an explicit focus on increasing access to such technology and did not offer formal classes or trainings related to life skills (Kauff et al. 2018).[52]

Table VI.2. MD PROMISE: Impact on youth's receipt of transition services (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any transition services since RA	89.9	6.5	0.00***
Supplementary outcomes			
Types of services received since RA (italics indicate key transition services)			
Case management[a]	40.5	26.1	0.00***
School transition planning	72.1	1.5	0.49
Employment-promoting services[a]	51.9	20.9	0.00***
Benefits counseling[a]	6.1	26.8	0.00***
Financial education[a]	19.2	16.1	0.00***
Self-advocacy or self-determination training	41.5	5.5	0.03**
Help accessing education or training	37.0	14.8	0.00***
Life skills training	55.9	2.3	0.36
Help with assistive technology	27.9	3.0	0.19
Other services	7.2	6.4	0.00***
Received any key transition services since RA	65.2	17.8	0.00***
Hours of key transition services received since RA	434.8	-80.0	0.02**
Number of key transition service providers since RA	1.0	0.5	0.00***
Usefulness of key transition services received since RA			
No key service reported	34.8	-17.8	0.00***
No service rated somewhat or very useful	2.7	0.9	
Any service rated somewhat or very useful	62.6	17.0	
VR services (from state VR agency data)			
Applied for VR services since RA	5.9	0.7	0.54
Received VR services since RA	5.6	0.6	0.55

Source: PROMISE 18-month follow-up survey; state VR agency data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of MD PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12d for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

[a]These services are identified as key transition services because they were required of the PROMISE programs. We asked more detailed questions about providers of these services in the PROMISE 18-month survey than providers of other transition services.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

We also examined youth's use of a subset of these services—designated as "key" transition services—and their intensity: case management, employment-promoting services, benefits

[52] Though youth may have received informal life skills training through services like case management, the 18-month survey question was intended, and likely interpreted, to refer to formal classes or trainings.

counseling, and help with financial education. About 65 percent of youth in the control group received any of these key services during the 18 months following random assignment. MD PROMISE increased youth's receipt of these services by 18 percentage points—a relative impact of 28 percent. Similarly, on average, treatment group youth received these services from 1.5 providers, whereas control group youth received them from 1 provider; thus, the program had an impact of 0.5 providers. Though much of this increase can be attributed to the increase in receipt of any key services, this finding may also reflect provision of case management and employment services to treatment group youth by a nonprofit organization to which few control group youth had access, or the program's efforts to link youth to adult service providers and a contractor for benefits counseling (Kauff et al. 2018).

Despite these positive effects on receipt of key transition services, the program had a negative impact on the number of hours of key services that youth received. On average, the youth in the control group received 435 hours of key transition services in total (or just under 6 hours per week, on average, during the 18-month follow-up period); the program reduced that amount by 80 hours in total (or about 1 hour per week during the 18-month follow-up period). Further exploratory analysis revealed that the lack of impact on this outcome measure appears to have been driven by control group youth receiving more services in school settings, so survey respondents' reports of service hours are more likely to conflate hours spent specifically on transition services with hours spent in usual school activities. When we focus on services received from nonschool-based providers, the hours of key transition services received by treatment and control group youth do not differ (see Appendix Table A.17).

MD PROMISE enhanced the perceived usefulness of key services received by the youth. In the control group, 63 percent of youth reported receiving some key services they considered to be somewhat or very useful; the program increased the share of treatment group youth who reported the same by 17 percentage points. This offsets the 18 percentage-point reduction in the share of youth with no key services reported, implying that all youth who received key transition services found them somewhat or very useful.

Analyzing the administrative records from the state's VR agency, we found that MD PROMISE had no impact on youth's participation in VR services (Table VI.2). Family employment specialists in the program led the facilitation of all employment-related services for program participants, including paid and unpaid work experiences, job search services, and outreach to employers. They often worked collaboratively with counselors from the state's VR agency and referred youth to the agency for services. Maryland's VR agency was in order-of-selection status during PROMISE program operations, however, so many treatment group youth were not eligible for VR services.[53] Moreover, the VR agency's usual practice was to enroll youth in VR services one year prior to leaving high school; given the ages of youth at the time of their enrollment in MD PROMISE, many would not have qualified as of 18 months after random assignment. Family employment specialists made efforts to connect treatment group youth to

[53] At the time of data collection for the process analysis, the state VR agency was only serving those with the most significant disabilities; those with less significant disabilities either were placed on a waiting list for services or were not eligible for services.

Pre-ETS instead, but these services did not begin in earnest until spring 2016 (Kauff et al. 2018).[54]

2. MD PROMISE had no impact on youth's school enrollment but helped more youth receive job-related training

MD PROMISE had no impact on the primary outcome of the youth education domain: youth's school enrollment at the time of the 18-month survey. About 84 percent of control group youth were enrolled in school at the time of the survey, and 97 percent had ever been enrolled in school since random assignment (Table VI.3). Given the ages of the participants at the time of the survey, it is not surprising to find that the program had no impact on these outcomes.[55, 56] MD PROMISE also had no impact on the share of youth who received a GED, certificate of completion, or high school diploma since random assignment.

Table VI.3. MD PROMISE: Impact on youth's education and job-related training (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Enrolled in school at the time of the survey	84.1	-0.5	0.79
Supplementary outcomes			
Ever enrolled in school since RA	97.4	-1.1	0.22
Received GED, certificate of completion, or high school diploma since RA	13.2	0.1	0.97
Job-related training since RA			
Received any job-related training	17.2	6.3	0.00***
Received any job-related training credential	2.8	0.9	0.34

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of MD PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12d for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

[54] A new provision under the Workforce Innovation and Opportunity Act prompted the state VR agency to create a Pre-ETS program, through which it engaged with in-school youth throughout their high school careers. Services provided to youth through Pre-ETS fell into five categories: (1) job exploration counseling, (2) work-based learning (such as an internship or summer employment experience), (3) counseling on opportunities for postsecondary education or comprehensive transition programs, (4) workplace readiness activities, and (5) self-advocacy instruction. Our measure of VR applications and services did not include youth who received Pre-ETS from a VR agency because data were only sparsely reported. Youth can receive Pre-ETS but not actually apply for services or have a signed Individualized Plan for Employment.

[55] Starting with the 2015-2016 school year, Maryland increased the compulsory school age from 16 to 17 years. It is possible that the requirement for youth to remain in school until an older age muted any effect MD PROMISE might have had on school enrollment in the absence of the law change. Maryland also increased the compulsory school age to 18 in the 2017-2018 school year, but that occurred more than 18 months after enrollment for nearly all study youth and so would not materially affect the 18-month impact estimates.

[56] The estimated impacts on school enrollment differed between male and female youth; however, the estimate was not significantly different from zero for either group (Appendix Table A.14d).

MD PROMISE increased youth's receipt of job-related training. About 17 percent of the control group had attended a training program or taken classes outside of school since random assignment to help them learn job skills or get a job. MD PROMISE increased the share of youth who received such training by 6 percentage points. Treatment group youth may have considered their participation in PROMISE as attendance in a training program outside of school; few treatment group youth had received VR services since random assignment, and program staff rarely made referrals to other job or job skills training programs (Kauff et al. 2018). Consistent with this, the program did not have an impact on the share of youth who had received employment-related training credentials since random assignment.

3. MD PROMISE increased youth's paid employment and earnings

MD PROMISE increased the share of youth who held a paid job during the 18 months after random assignment (Table VI.4). About 22 percent of control group youth reported having a paid job during the follow-up period; the program increased this rate by 19 percentage points. Having a paid job may be viewed partly as a measure of receipt of MD PROMISE services because, as required by the federal partners, PROMISE programs were to ensure youth had paid jobs while participating in the program. Impacts on paid employment during the 18 months after random assignment differed significantly by the youth's age (Appendix Table A.13d). The program had a larger impact among youth who were ages 14 or 15 at random assignment compared with youth who were age 16 at that time (22 versus 14 percentage points). As noted previously, opportunities for younger youth to obtain work-based learning experiences through the state VR agency were limited before 2016. The efforts of MD PROMISE to provide alternative work-based learning experiences to younger youth likely contributed to the larger impact observed.

The program also raised the rate of paid employment during the year immediately before the 18-month survey. About 18 percent of control group youth reported having a paid job during that year; MD PROMISE increased the rate by 17 percentage points. Over the same period, control group youth worked 1.6 hours per week in paid jobs (based on all youth, regardless of employment status), and MD PROMISE increased this by 1.3 hours. Consistent with these higher numbers, we found that the program increased youth's earnings from all jobs during the year before the survey by $531—a 64 percent increase from the control group's average annual earnings of $831.

When we examined employment at the time of the follow-up survey, we found a smaller positive impact on paid employment (Appendix Table A.12d). About 9 percent of control group youth had a paid job at the time of 18-month survey; the program increased it by 4 percentage points. These findings might be a result of most of the employed treatment group youth having had short-term jobs during the 18-month period after random assignment; among treatment group youth who had a paid job during the follow-up period, the average job tenure was 17 weeks (statistic not shown in the table).

Consistent with the findings based on survey data, our analyses of SSA data on earnings indicate that MD PROMISE had a positive impact on the likelihood of the youth's employment and earnings. SSA data on earnings show that 21 percent of youth in the control group had earnings from employment in the calendar year after random assignment; MD PROMISE increased this share by 13 percentage points. On average, control group youth earned $431 over this period; the program increased this amount by $221 (or 51 percent).

Table VI.4. MD PROMISE: Impact on youth's employment and earnings (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Ever employed in a paid job since RA	22.0	18.6	0.00***
Supplementary outcomes			
Employment in the year before the survey			
Any paid employment	17.7	16.8	0.00***
Weekly hours worked in paid jobs	1.6	1.3	0.00***
Total earnings from all jobs ($)	831	531	0.01***
Ever employed in the calendar year after RA (from SSA data)	21.3	12.8	0.00***
Earnings in the calendar year after RA (from SSA data) ($)	431	221	0.00***

Source: PROMISE 18-month follow-up survey; SSA administrative records.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of MD PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12d for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

4. MD PROMISE had no impact on youth's self-determination or expectations for the future

MD PROMISE had no impact on youth's self-determination as measured by our self-determination composite scale (Table VI.5). We estimated that youth in the control group had an average score of 48 on a scale of 0 to 100; the score was the same for treatment group youth. We also analyzed youth's responses to questions in three subdomains of self-determination—autonomy, psychological empowerment, and self-realization—separately, finding that the program had no impact on these areas. Though MD PROMISE may have been able to affect these outcomes indirectly through other aspects of the program, it did not provide services for youth specifically focused on self-determination (Kauff et al. 2018).

The 18-month survey asked youth and parents about their expectations for the future regarding the youth's educational attainment and independence at age 25. Our primary measure in the expectations domain was whether youth expected to complete high school or receive a GED. We found that 99 percent of control group youth expected to complete high school or receive a GED; expectations of treatment group youth did not differ from their control group counterparts. The program also did not affect the youth's expectations regarding postsecondary education, financial independence, the likelihood of living independently, or having a paid job at age 25. Similarly, the program had no impact on parents' expectations for their youth in these areas. MD PROMISE intended for case managers and family employment specialists to provide employment and other services to family members, in anticipation that those services would raise parents' expectations about their own futures and those of their children. The initial program design did not include specific trainings or group activities for parents or guardians, and none occurred during the first three years of program operations. MD PROMISE hoped to use some of the supplemental funding the program received from ED in 2015 to provide more formalized parent training but, as of the end of the third year of program operations, the program had been

unable to identify an existing curriculum that was culturally sensitive and targeted to low-income parents of youth with disabilities (Kauff et al. 2018).

Table VI.5. MD PROMISE: Impacts on youth's self-determination and expectations (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcomes			
Self-determination score at the time of the survey (scale: 0 to 100)	48.4	0.4	0.38
Youth expected to complete high school or GED at the time of the survey	98.9	-0.8	0.27
Supplementary outcomes			
Scores on subdomains of self-determination at the time of the survey			
Autonomy (scale: 0 to 300)	144.7	3.2	0.31
Psychological empowerment (scale: 0 to 100)	89.2	0.1	0.96
Self-realization (scale: 0 to 100)	7.6	0.1	0.88
At the time of the survey, youth expected to:			
Get post-secondary education	59.7	0.4	0.90
Live independently at age 25	70.3	3.8	0.16
Be financially independent at age 25	80.3	2.7	0.24
Be employed at age 25	95.7	-1.0	0.39
At the time of the survey, parent expected youth to:			
Get post-secondary education	43.6	-2.9	0.24
Live independently at age 25	43.3	-0.1	0.98
Be financially independent at age 25	66.8	-2.1	0.38
Be employed in a paid job at age 25	86.6	2.6	0.12
Parent believed it important for youth to become independent in some way at the time of the survey	94.8	1.1	0.29

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of MD PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12d for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

5. MD PROMISE had no impact on youth's health insurance coverage

The primary outcome in the analysis of youth's health is whether youth or parents reported that youth had health insurance. The vast majority of youth in the control group had health insurance at the time of the survey (98 percent), and MD PROMISE had no impact on this outcome (Table VI.6). The program increased the percentage of youth who reported needing help with or equipment for an activity of daily living by 4 percentage points, but had no impact on whether the youth needed help with or equipment for an instrumental activity of daily living. It also had no impact on youth's smoking, use of marijuana or illicit drugs but had an undesirable impact on alcohol use. Specifically, it increased the percentage of youth who used alcohol by 2 percentage points (from 3 percent among youth in the control group). Nothing from the process analysis would explain these findings. One possibility is that the increased employment among youth led to higher rates of alcohol use, as has been found in some previous studies (McMorris and Uggen 2000; Chen et al. 2006).

Table VI.6. MD PROMISE: Impact on youth's health and health insurance (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Youth had health insurance at the time of the survey	98.2	-0.7	0.32
Supplementary outcomes			
Health insurance type at the time of the survey			
Public	93.0	-0.2	0.90
Private	8.0	-0.3	0.81
Needed help with or equipment for at least one ADL at the time of the survey	24.4	3.9	0.07*
Needed help with or equipment for at least one IADL at the time of the survey	44.1	0.4	0.87
Substance use in the 30 days before the survey			
Smoking	7.2	2.0	0.17
Alcohol	3.0	1.8	0.06*
Marijuana	5.6	1.4	0.28
Other illicit drug	1.0	-0.3	0.49

Source: PROMISE 18-month survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of MD PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12d for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

6. MD PROMISE had no impact on youth's Medicaid enrollment or expenditures

MD PROMISE had no impact on the percentage of months youth were enrolled in Medicaid during the 18 months following random assignment (Table VI.7). On average, the control group youth had Medicaid coverage for nearly the entire 18-month period (97 percent)—virtually the same as that for youth in the treatment group. SSI recipients in Maryland are automatically eligible for Medicaid (SSA 2017). We did not expect to find an impact on Medicaid enrollment within 18 months following the youth's enrollment in PROMISE. Program impacts on this outcome differed by both age and sex; MD PROMISE increased the percentage of months enrolled in Medicaid for youth aged 14 and 15 at enrollment and male youth, while not affecting Medicaid enrollment for youth aged 16 at enrollment and female youth. MD PROMISE increased enrollment in the 1915(c) waiver program by 2 percentage points, though it had no impact on enrollment in comprehensive managed care plans.

MD PROMISE had no impact on Medicaid expenditures during the 18 months following random assignment. On average, control group youth had $24,900 in total Medicaid expenditures; the average for the treatment group did not differ significantly. Impacts on Medicaid expenditures differed by the youth's primary impairment (Appendix Table A.15d). The program increased expenditures among youth with an intellectual or developmental disability and those with other nonmental impairments, while it decreased expenditures among those with other mental impairments. The increase for those with intellectual and developmental disabilities might be related to the positive impact of the program on enrollment in 1915(c) waivers, as noted

above; some of these waiver programs in Maryland target youth and adults with intellectual and developmental disabilities (Centers for Medicare and Medicaid Services 2018).

Table VI.7. MD PROMISE: Impact on youth's use of Medicaid (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcomes			
Percentage of months enrolled in Medicaid since RA	97.3	0.7	0.21
Total Medicaid expenditures since RA ($)	24,900	2,509	0.14
Supplementary outcomes			
Enrollment since RA			
Medicaid managed care	92.7	1.1	0.29
Medicaid 1915(c) waiver	1.8	1.8	0.02**
Medicaid capitated behavioral health	n.d.		
Medicaid payments since RA			
Any Medicaid payments	99.5	0.1	0.76
Average monthly Medicaid payments ($)	1,383	139	0.14
Average monthly fee-for-service payments ($)	809	137	0.15
Average monthly capitated payments ($)	574	3	0.91

Source: State Medicaid data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of MD PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12d for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

n.d. = no data available.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

7. MD PROMISE raised youth's total income

Our primary measure of youth's economic well-being was the total income they received during the year before the 18-month survey from paid jobs (based on the 18-month survey data) and SSA disability payments (based on SSA administrative data). MD PROMISE increased the amount youth received from earnings and SSA payments by $708, compared with the $7,865 received by control group youth during the reference period—a 9 percent increase. (Table VI.8). We also measured youth's annual income during the calendar year after random assignment using SSA data on annual earnings. Control group youth earned an average of $7,393 over this period; PROMISE increased this amount by $307 (or 4 percent). The positive impact of MD PROMISE on youth's total income was driven by the program's positive impact on earnings from paid jobs (Table VI.4); MD PROMISE had no impact on youth's likelihood of receiving SSA disability payments or the level of payments they received.

The program made it less likely that youth lived with their parents, but had no impact on a self-reported categorical measure of youth household income from the 18-month survey or on whether anyone in the youth's household participated in non-SSA public assistance programs.

Table VI.8. MD PROMISE: Impact on youth's economic well-being (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Youth total income (earnings and SSA payments) in the year before the survey ($)	7,865	708	0.00***
Supplementary outcomes			
SSA payments in 18-month period since RA (from SSA data)			
Received any SSA payments	96.8	0.7	0.32
Total SSA payments ($)	10,688	115	0.38
Income in the calendar year after RA (from SSA data) ($)	7,393	307	0.01***
Youth resided with parent at the time of the survey	98.0	-1.4	0.09*
Household income in the calendar year before the survey			
Less than $10,000	31.9	2.2	0.81
$10,000 to $19,999	28.8	-0.8	
$20,000 to $29,999	19.6	-0.2	
$30,000 or more	19.7	-1.2	
Any household member who participated in non-SSA public assistance programs at the time of the survey	73.4	-0.3	0.88

Source: PROMISE 18-month follow-up survey; SSA administrative records.

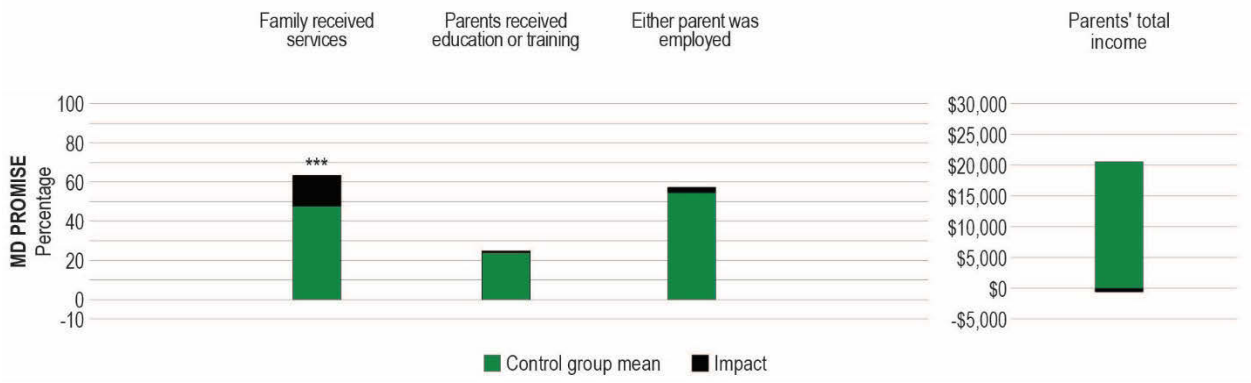
Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of MD PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12d for sample sizes for all outcomes. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

D. Impacts on family outcomes 18 months after enrollment

The findings in this section show whether the services provided by MD PROMISE led to short-term impacts on parent and family outcomes in four domains (Figure VI.2). The impact estimates reveal that the program increased receipt of support services by parents and family members other than the SSI youth but had no impact on parents' education, training, likelihood of having a paid job, earnings, or total income from earnings and SSA payments. We found that MD PROMISE had differential impacts on parent's total income by the sex of the youth. We found no other differential impacts by age, sex, or primary impairment.

Figure VI.2. MD PROMISE: Impacts on parent and family primary outcomes



*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

1. MD PROMISE increased families' receipt of support services

Consistent with its program model, we found that MD PROMISE helped engage more families in support services (Table VI.9). In the control group, 48 percent of all parents reported that a family member received services during the 18 months after random assignment. The program increased this share by 16 percentage points. It also had positive impacts on families' receipt of an array of specific services, such as case management, education or training supports, employment-promoting services, benefits counseling, help with financial education, and information on youth's disability.

We examined the likelihood of family members receiving a subset of these services—designated as "key" support services—and their intensity: case management, employment-promoting services, benefits counseling, and financial education. About 33 percent of parents in the control group reported that their family members received these services during the 18 months following random assignment. MD PROMISE increased the share of treatment group families receiving key services by 24 percentage points. The program did increase the number of providers used by families by an average of 0.3 providers, though much of this increase can be attributed to the increase in receipt of any key services. Despite the large impact on the likelihood of receiving key services, the program slightly reduced the hours of service receipt by families. Control group families received an average of 57 hours, and MD PROMISE reduced the hours received by members of the treatment group by 21 hours. The result may reflect some substitution of services on the part of treatment group families between usual community service providers and MD PROMISE.

MD PROMISE enhanced the perceived usefulness of key services received by the families. The impact estimates for this outcome suggest that as the program increased the share of families receiving key services, more families found those services to be somewhat or very useful. Thirty-two percent of control group families rated any key services received as somewhat or very useful; the program increased this percentage by 22 percent, nearly mirroring the increase in the receipt of any key services. Moreover, the program reduced the likelihood of unmet needs for services or supports reported by parents—particularly case management and employment-promoting services (Appendix Table A.12d). This finding is consistent with the program's model of assigning a two-person team to each treatment group family—one focused on providing case

management and one on providing employment-related services (Kauff et al. 2018), which was supported by other staff such as benefits counsellors and school personnel.

Based on data from the state VR agency's administrative records, MD PROMISE had no impact on parents' application for or receipt of VR services during the 18 months after PROMISE enrollment. Less than 2 percent of treatment and control group parents applied for or received VR services after random assignment. The program did not make a concerted effort to enroll family members in VR (Kauff et al. 2018). Families interested in employment were more likely to be connected to AJCs because of the length of the VR agency's waitlist; as noted previously, the agency was operating under an order of selection.

Table VI.9. MD PROMISE: Impact on family's receipt of services (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any family support services since RA	47.7	15.6	0.00***
Supplementary outcomes			
Types of family support services received since RA (italics indicate key support services)			
Case management[a]	17.6	10.5	0.00***
Education or training supports	11.2	3.1	0.06*
Employment-promoting services[a]	12.0	3.6	0.04**
Benefits counseling[a]	14.3	27.2	0.00***
Financial education[a]	10.9	16.1	0.00***
Parent training and information on youth's disability[a]	28.0	10.0	0.00***
Parent networking support	15.7	-2.5	0.16
Any key support services received since RA	33.0	24.0	0.00***
Hours of key support services received since RA	57.3	-20.7	0.10*
Number of key support service providers since RA	0.5	0.3	0.00***
Usefulness of key services received since RA			
No key service reported	67.0	-23.8	0.00***
No service rated somewhat or very useful	1.0	2.0	
Any service rated somewhat or very useful	32.0	21.8	
Enrolling parent's engagement with VR services (from state VR agency data)			
Applied for VR services since RA	1.5	0.4	0.59
Received VR services since RA	1.1	0.5	0.48

Source: PROMISE 18-month follow-up survey; state vocational rehabilitation agency data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of MD PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12d for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

[a]These services were required of the PROMISE programs. With the exception of parent training and information on youth's disability, we asked more detailed questions about providers of these services in the PROMISE 18-month survey than providers of other support services. The outcome measures related to key support services presented in this table reflect all required services except parent training and information on youth's disability.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

2. MD PROMISE had no impact on parents' education or training

MD PROMISE did not affect parents' education or training. About 24 percent of parents in the control group reported that either they or their spouse had completed or attended education or

job skills training during the 18 months after random assignment. This outcome was nearly the same for the treatment group, indicating that MD PROMISE had no impact on the primary outcome in the domain of parents' education and training (Table VI.10). The program also had no impact on parents' enrollment in education or job skills training, or their attainment of a diploma, GED, certificate, or professional license.

Table VI.10. MD PROMISE: Impact on parents' education and training (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any education or job skills training since RA	23.7	1.0	0.64
Supplementary outcomes			
Either parent was enrolled in education or job skills training at the time of the survey	7.4	-0.2	0.86
Either parent received a diploma, GED, certificate of completion, or professional license since RA	11.2	-1.3	0.41

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of MD PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12d for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

3. MD PROMISE had no impact on parents' employment and earnings

MD PROMISE did not affect parents' employment or earnings. About 55 percent of parents in the control group reported that either they or their spouse had been employed for pay at any point since random assignment (Table VI.11). This outcome was nearly the same for the treatment group, indicating that MD PROMISE had no impact on the primary outcome in the domain of parents' employment and earnings. Findings from the process analysis suggest that although the parents of treatment group youth were eligible for employment-related services from MD PROMISE, the program had no performance measures related to parents' receipt of these services and MIS data indicate that few parents received them during the 18 months after random assignment (Kauff et al. 2018). Similarly, the program had no impact on parents' employment-related outcomes during the past month (that is, the share of parents who reported that they or their spouse had worked for pay, parents' earnings, or whether parents had access to health insurance through their job in the past month). However, SSA data suggest that the program reduced parents' earnings in the calendar year after random assignment. It is unclear what underpinned the negative impact on parents' earnings based on administrative data.

Table VI.11. MD PROMISE: Impacts on parents' employment and earnings (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Either parent was employed since RA	54.5	2.7	0.28
Supplementary outcomes			
Either parent was employed in the month before the survey	48.7	0.4	0.88
Parents' earnings from all jobs in the month before the survey ($)	890	79	0.22
Parents' earnings in the calendar year after RA (from SSA data) ($)	18,465	-1,005	0.05*
Either parent was offered health insurance through a job held in the month before the survey	27.9	-0.5	0.83

Source: PROMISE 18-month follow-up survey; SSA administrative records.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of MD PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12d for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

4. MD PROMISE had no impact on parents' annual total income

Our primary outcome for parents' economic well-being was their total income in the calendar year after random assignment, calculated as the sum of their earnings and benefits from SSA payments (for the enrolling parents and their spouses, if applicable). In the control group, the average parental income per household during this year was $20,498. MD PROMISE did not have a significant impact on this outcome. (Table VI.12). Impacts on parents' income differed significantly by the youth's sex (Appendix Table A.14d). MD PROMISE significantly decreased parents' income where the youth was female by $2,120, a decrease of 10 percent relative to the control group mean of about $21,000. MD PROMISE had no effect on parents' income where the youth was male. The differential impact on parents' income is mainly driven by changes in parents' earnings, which also decreased for parents of female youth while not changing for parents of male youth (results not shown in the table).

In supplementary analyses, we found that MD PROMISE affected parents' receipt of disability benefits. MD PROMISE increased the share of parents who received any SSA disability program payments by 4 percentage points above the control group mean of 21 percentage points. It also increased the combined amount of SSI and OASDI payments by $641 above the control group mean of just over $3,000. The latter increase was driven by the program's positive impact on the amount of OASDI payments as well as the share of parents receiving OASDI payments (Appendix Table A.12d). This finding may in part be explained by the program's impact on parents' receipt of benefit counseling services (Table VI.9). Presumably through these services, parents were more likely to become aware of and seek benefits for which they were eligible. MD PROMISE did not affect parents' enrollment in Medicaid or Medicaid expenditures.

Table VI.12. MD PROMISE: Impact on parents' economic well-being (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Parents' total income in the calendar year after RA (from SSA data) ($)	20,498	-546	0.31
Supplementary outcomes			
Parents' SSA payments in 18-month period since RA (from SSA data)			
Received any payments	21.3	4.0	0.04**
Total payments ($)	3,090	641	0.04**
Medicaid enrollment and payments since RA (from state Medicaid program data)			
Enrolled in Medicaid	82.8	2.9	0.16
Enrolled in Medicaid comprehensive managed care	74.0	1.7	0.51
Enrolled in Medicaid 1915(c) waiver	0.0	n.a.	
Total Medicaid payments ($)	9,105	342	0.59

Source: PROMISE 18-month follow-up surveys; SSA administrative records; state Medicaid data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of MD PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12d for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

n.a. = not available.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

E. Cost analysis results for MD PROMISE

This section summarizes our findings from the cost analysis of MD PROMISE, with a focus on cost by input category and program component, as well as the cost per treatment group enrollee and per participant. The technical appendix describes our methods for this analysis.

The average annual cost of the resources used by MD PROMISE to deliver services during the accounting period we targeted (July 1, 2016 through June 30, 2017) was $5,670 per treatment group youth and their families. We estimate the program's average cost per enrollee to be $19,103 over the entire service delivery period (October 1, 2014 through September 30, 2018).

1. Costs by input category

Table VI.13 summarizes the costs of MD PROMISE by input category during the accounting period. Almost all—96 percent—of the program's costs were for other direct costs, with most of the costs in this input category being for purchased services. This finding aligns with the qualitative data collected during site visits, from which we learned that the program relied heavily on contractors (rather than direct employees of the program) for the provision of PROMISE services. Way Station, the case management and employment services provider, accounted for the majority of those costs.

Labor costs constituted the second largest proportion of MD PROMISE costs. This input cost category consisted of the labor hours provided by the staff who managed the program. Those staff included the program director, the program manager, and other staff responsible for overseeing the program. Among the input cost categories with positive costs, the smallest was indirect costs, which accounted for just 0.3 percent of program costs and consisted largely of management staff travel and the 4.8 percent indirect rate that the Maryland Department of

Disabilities applied to the direct costs incurred by the program, excluding equipment and pass-through funds. The program reported no use of donated goods or services in serving enrolled youth.

Table VI.13. MD PROMISE costs by input category, July 2016 through June 2017

Category	Percentage of MD PROMISE total cost	Cost amount
Labor costs	4.0	$227,121
Other direct costs	95.7	$5,407,043
Indirect costs	0.3	$18,906
Costs of donated goods and services	0.0	$0
Total	**100.0**	**$5,653,071**

Source: Maryland PROMISE cost data.

Note: Data reflect costs from July 1, 2016 through June 30, 2017. The total sum may differ from the sum of figures in the table due to rounding.

2. Costs by program component

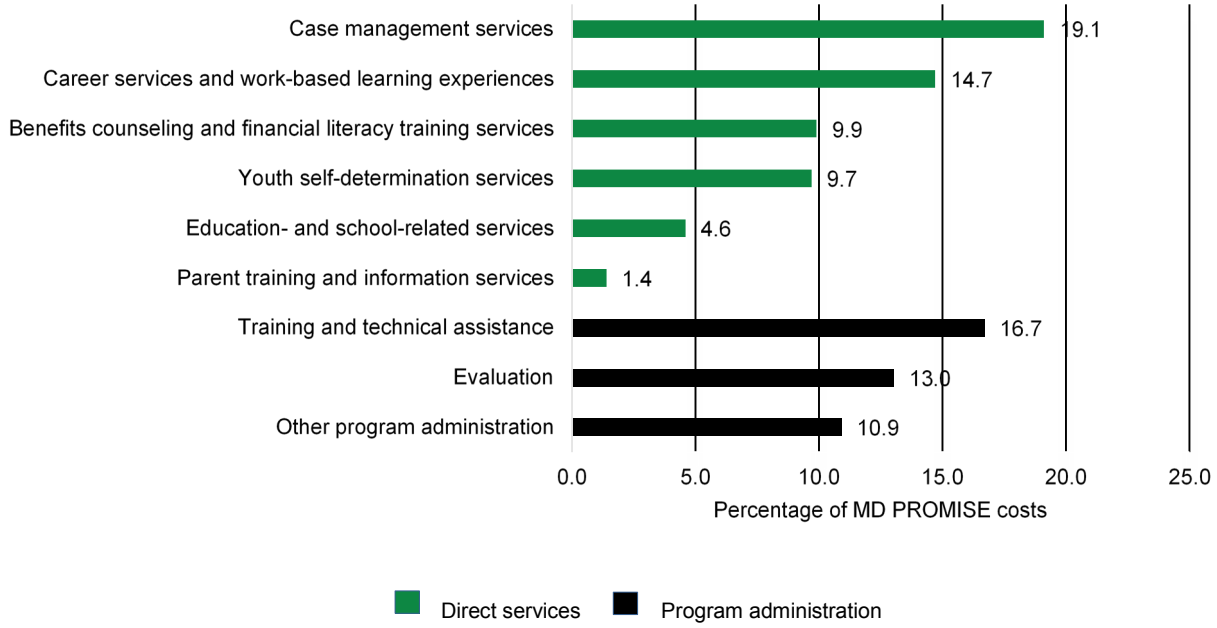
The six service components accounted for nearly 60 percent of the total cost of MD PROMISE during the accounting period (Figure VI.3). Among the direct service components, costs were largest for case management services; this finding aligns with our previously reported finding that Way Station accounted for the majority of the program's other direct costs. Career services and work-based learning experiences, also provided by Way Station, accounted for the second largest share of direct service costs. Additionally, benefits counseling/financial education services and youth self-determination services each represented about 10 percent of costs. Finally, the program had few service costs associated with education and parent training. This pattern is consistent with the program's design, which did not emphasize the provision of educational supports and focused case management services on the family rather than offering distinct services for parents or guardians.

Program administration accounted for approximately 41 percent of the total cost of MD PROMISE. Among the three components of program administration, training and technical assistance accounted for the largest share of these costs, with TransCen responsible for the vast majority of the $946,531 spent (Appendix Table A.22d). TransCen primarily delivered individualized training and technical assistance to Way Station staff and helped the MD PROMISE program management staff keep the entire intervention team focused on attaining the program's benchmarks for unpaid and paid work experiences. TransCen also assisted in establishing memoranda of understanding or informal relationships with large employers to secure their commitment to employ or provide unpaid work experiences to MD PROMISE youth. TransCen's training and technical assistance costs should be considered in conjunction with those related to career services and work-based learning experiences. Though training and technical assistance did not exclusively address employment concerns, employment was a primary focus of TransCen's training and technical assistance activities. Combined, these two components represent almost one-third (31 percent) of the program's costs.

Evaluation and other program administration categories accounted for 24 percent of MD PROMISE costs, and included time spent on program maintenance and management, as well as

evaluation activities. The program's evaluation costs comprised time spent supporting the national evaluation and providing oversight and support to the formative evaluator in addition to purchasing evaluation services. Other program administration costs involved activities related to oversight of the program and staff, ED's reporting requirements, and general administration.

Figure VI.3. MD PROMISE costs by program component, July 2016 through June 2017



Note: Data reflect costs from July 1, 2016 through June 30, 2017.

3. Costs per treatment group enrollee and per participant

The treatment group included 997 youth (both research and nonresearch cases); of those, 920 participated in MD PROMISE services. For both treatment group enrollees and participants, we assumed an average duration of participation in the program of 3.4 years, which we estimated based on the average length of potential participation for enrollees from the random assignment date through September 30, 2018. Dividing the total program cost for the one-year accounting period by the number of enrolled and participant youth, we obtained an average annual program cost of $5,670 for enrolled treatment group youth and their families, and $6,145 for participating youth and their families. Applying this annual program cost to the average duration of participation, we found a total program cost of $19,103 per enrollee and $20,702 per participant in services, on average, over the program's entire service delivery period (not just the one-year accounting period). The costs per enrollee and participant include substantive services provided to family members and youth.[57]

[57] The average annual and total program costs as derived from the data and presented in the text differ slightly due to rounding. These statistics are calculated based on an average monthly program cost of $472.51 for enrolled youth and their families and $512.05 for participating youth and their families, and an average duration of participation of 3.4 years.

F. Summary of findings and discussion

MD PROMISE had positive and statistically significant impacts on several of the primary outcomes considered in our analysis (Table VI.14). It made youth more likely to receive transition services and increased their employment and total income. The program had no impact on youth's education, self-determination, expectations to complete high school, health insurance coverage, and Medicaid enrollment and expenditures. For families, the program increased the likelihood of receiving support services but had no impact on parents' employment in paid jobs, education, training, or income in the calendar year after random assignment.

The 18-month findings on MD PROMISE's impact on youth reflect the program's focus on delivering assertive case management and employment services. It improved several short-term outcomes that can be considered either program services or outputs, including the receipt of transition services, paid employment, and earnings. Lack of impacts on self-determination may reflect the program's lack of explicit focus on that outcome; the program had no internal benchmarks with respect to self-determination and provided self-determination services within the context of case management rather than as a distinct program component. But for many of the youth outcomes we analyzed, including self-determination, 18 months after enrollment is likely too early to detect meaningful impacts. We will revisit most of the areas in which the program had no impact—such as school enrollment and youth expectations about completing high school—in the five-year follow-up analysis to determine whether any impacts emerge with the passage of time.

Table VI.14. MD PROMISE: Summary of impacts on primary outcomes, by domain

	Domain	Primary outcome	Impact summary
Youth	Receipt of transition services	Receipt of any transition services	+++
	Education	Enrollment in school at the time of survey	0
	Employment and earnings	Ever employed in a paid job since RA	+++
	Self-determination and expectations	Self-determination scale (range: 0 to 100)	0
	Self-determination and expectations	Youth expects to complete high school/GED	0
	Health and health insurance	Youth has health insurance	0
	Use of Medicaid	Percentage of months enrolled in Medicaid since RA	0
	Use of Medicaid	Total Medicaid expenditure since RA ($)	0
	Economic well-being	Youth total income in past year ($)	+++
Family	Receipt of services	Any family support services since RA	+++
	Parents' education and training	Any education or job skills training since RA	0
	Parents' employment and earnings	Either parent was employed for pay since RA	0
	Parents' economic well-being	Parents' income in calendar year after RA	0

Source: PROMISE 18-month follow-up surveys and SSA administrative records.

Note: +/++/+++ Impact estimate is positive and statistically significant at the .10/.05/.01 level using a two-tailed *t*-test.
-/- -/- - - Impact estimate is negative and statistically significant at the .10/.05/.01 level using a two-tailed *t*-test.
0 Impact estimate is not statistically different from zero at the .10 level using a two-tailed *t*-test.

The 18-month impact findings for parents in MD PROMISE might reflect the program's efforts to provide assertive case management to all family members but employment-related services primarily to youth. The parents or guardians of treatment group youth were eligible for employment-related services, but findings from the process analysis suggest that the program had no expectations regarding the percentage who would receive these services; MIS data indicate that few of them did so. It is somewhat surprising that the program reduced the hours of key services received by parents and other family members, considering that it did help more families receive these services. The findings suggest that more treatment group families received these services than did control group families; however, on average, control group families received more services from school-based providers while the treatment group spent no more time participating in services from nonschool-based providers than did the control group. If the program was able to deliver higher quality services in fewer hours, it still might lead to improved longer-term outcomes for the families in MD PROMISE, despite the lack of a measured impact on the number of hours of services received.

The positive short-term impacts we found—along with the fact that many people in MD PROMISE still were receiving services when they completed the 18-month survey—suggests that the program has the potential for longer-term positive impacts on youth and parent employment, earnings, and total income, despite possible reductions in benefits. Through our planned five-year impact analysis, we will learn whether that potential is realized.

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VII. NYS PROMISE

Summary of 18-month impacts and costs of NYS PROMISE

- NYS PROMISE expanded the share of youth who received transition services and made it more likely that their families would receive support services.
- It also increased the youth's receipt of job-related training, but did not affect youth's school enrollment.
- The program also increased the likelihood that the youth had paid jobs.
- The program had no impacts on (1) the number of hours of key services that the youth and families received, (2) the educational attainment of the parents, (3) the youth's self-determination and expectations about their future, (4) the youth's total income, (5) the parents' employment and income, and (6) the youth's and families' receipt of SSA payments.
- NYS PROMISE's average annual cost per treatment group enrollee was $7,456, which included the costs of providing services to both the youth and their family members.

A. Program overview and a review of findings from the process analysis

This section provides an overview of NYS PROMISE and the findings from the program's process analysis (McCutcheon et al. 2018). The process analysis documented the program's structure and service model and described its implementation during the first three years of operations based on data from the NYS PROMISE MIS, site visits, and key informant interviews.

1. Program overview

The New York State Office of Mental Health was the lead agency for the NYS PROMISE program. It contracted with the Research Foundation for Mental Hygiene (RFMH), a quasi-governmental nonprofit that supports research activities, to lead the day-to-day implementation of the program. RFMH shared the leadership responsibilities with Cornell University's K. Lisa Yang and Hock E. Tan Institute on Employment and Disability, which also provided training and technical assistance to the program's staff. NYS PROMISE operated in three regions of the state: (1) the Capital Region, (2) Western New York, and (3) New York City.

Through contracts with the program, three types of organizations provided program services to the youth and their families who enrolled in NYS PROMISE: (1) RDSs delivered case management to the youth; (2) parent centers delivered family coaching and training to the parents; and (3) local service providers delivered employment and education services, benefits counseling, and financial literacy training to the youth and their parents. To build the capacity of the existing service system and increase the sustainability of the intervention, NYS PROMISE chose the RDSs—which were largely LEAs—parent centers, and service providers from among organizations that were already serving youth with disabilities. Midway through the program's operations RFMH hired community case managers to deliver case management to the youth in New York City and community employment specialists to provide them with employment services, although this was not part of the original model.

The program's case managers and family coaches were responsible for maintaining regular contact with members of both the control and treatment groups. They met with the control group members to track information about their activities and outcomes and to provide referrals to state agencies and local service providers. The program managers regarded such meetings and

referrals as standard LEA practices rather than enhancements made because of NYS PROMISE. They met with treatment group members to help them reach their employment and education goals and to refer them to NYS PROMISE service providers and other community resources. In addition to the employment and education services, benefits counseling, and financial literacy training that local service providers offered the treatment group, family coaches provided information and four core trainings to treatment group parents and guardians on (1) transition planning, (2) effective advocacy, (3) self-determination, and (4) family action planning to connect with community-based resources, as well as the youth's rights and work incentives.

Even though most of the RDSs were LEAs, the design for NYS PROMISE did not include specific services related to secondary education. Program managers regarded secondary education as the responsibility of the LEAs. Instead, NYS PROMISE supported education through coaches who provided assistance with a variety of activities pertaining to the transition to postsecondary education, such as course selection, scheduling, and registration; campus navigation; study habits, organization, and time management; advocacy for accommodations, communication skills, financial planning (information on loans and scholarships); and goal setting.

2. Summary of findings from the process analysis

Three years after the program began in October 2014, NYS PROMISE had engaged 90 percent of treatment group youth as participants in the program, but the youth's take-up of services was low. Case managers held meetings with program participants occasionally—on average, less than once per quarter—and referred them to core PROMISE services infrequently. Although they had referred many youth to pre-employment services (for instance, two-thirds to assessment activities and one-third to career planning and preparation), only about one-quarter of those referred had completed those services. Case managers referred relatively few youth (between 7 percent and 15 percent) to unpaid or paid work experiences, 19 percent of families to benefits counseling, and 12 percent of families to financial literacy training. About 30 percent of the youth had parents who received at least one core training from a family coach. Though reported rates of participation in formal parent trainings were low, nearly all participating youth and families (95 percent) received general supports and information on a variety of topics.

Six factors, including a few procedural issues that may have restricted service delivery, help explain the low service take-up rates reflected in the program data. First, program managers and staff acknowledged challenges with data entry, which likely resulted in the underreporting of referrals to and completion of NYS PROMISE services. Second, case managers and family coaches were responsible for both recruiting youth into the evaluation and providing case management to those who enrolled. Meeting the evaluation enrollment target was the program's top priority but was challenging, so staff dedicated most of their time during the enrollment window to recruitment and little time to engaging program participants in services. Many early enrollees went for months without receiving any communication from program staff. Such delays resulted in low rates of referrals to services and low service take-up rates among those who were frustrated by the pace of service delivery. Third, some staff had caseloads they thought were too large to provide the desired level of service. This issue was particularly salient in one New York City RDS where case managers had to fulfill their PROMISE responsibilities while working other full-time jobs within the LEA. Fourth, limited capacity among the local service

providers, particularly in the New York City region, dampened the rate of service receipt. Because of few referrals early on and concerns about the program's outcome-based payment model, providers were reluctant to hire dedicated PROMISE staff. Fifth, in the New York City region, until the program hired a school liaison, community case managers who operated outside of an LEA had trouble accessing schools to meet with youth, obtain updated family contact information, and obtain copies of participants' IEPs. Sixth, staff in all regions cited families' complex needs and unstable living situations as a major barrier to their ongoing engagement with the program.

In addition to low service take-up, two other issues may have muted the distinction between the experiences of treatment and control group youth enrolled in the evaluation. First, through meetings with their NYS PROMISE case managers and family coaches, some of the control group youth and parents likely received more referrals to state agencies, local service providers, and other resources than they would have in the program's absence. Furthermore, some control group members received supports from case managers and family coaches. Second, there were delays in making referrals to employment services during the program's early years that may have blurred the distinction between treatment and control group youth. The program's employment services were modeled after those provided by the state's VR agency. Though the availability of NYS PROMISE employment services to youth as young as age 14 was supposed to distinguish those services from the counterfactual employment services (because VR and local employment service providers typically began serving youth at age 18 or 19), the delays muted this distinction. The process analysis concluded that together these issues likely reduced the potential for NYS PROMISE to have made a difference in outcomes for the treatment group youth relative to the control group youth.

B. Baseline characteristics of the youth survey respondent sample

The youth survey respondent sample for the interim impact analysis of NYS PROMISE consisted of 1,691 randomly assigned youth who completed an 18-month follow-up survey.[58] About one-third of the youth in the sample were female (Table VII.1, Column A). At the time of random assignment, 38 percent of the youth were age 14, 32 percent were age 15, and another 31 percent were age 16. Most of the families (85 percent) expressed a preference for English as their written and spoken language. The majority of youth (85 percent) lived with their parents, but a nontrivial share (13 percent) lived in their own households at the time they had applied for SSI. The two largest racial and ethnic groups were non-Hispanic black (40 percent) and Hispanic (39 percent), followed by non-Hispanic other or mixed race (9 percent) and non-Hispanic white (8 percent). The racial-ethnic composition of the parents was similar to that of the youth, though slightly more parents were non-Hispanic white and fewer parents were Hispanic.

[58] Of the 2,090 youth enrolled in the NYS PROMISE evaluation, 1,967 were randomly assigned—986 youth to the treatment group and 981 youth to the control group. Random assignment occurred immediately after the youth and the family enrolled in NYS PROMISE. The remaining 123 youth had siblings already enrolled in the evaluation and so were purposively assigned to the same groups as their siblings (71 treatment cases and 52 control cases). We did not include these nonresearch cases in the impact analysis. The full research sample for the impact analysis consisted of the 1,967 youth who enrolled in the evaluation and who were randomly assigned to the treatment or control group. These 1,967 youth, less one youth (a treatment case) who died within 18 months of enrollment, constituted the denominator for calculating the 18-month survey response rate for NYS PROMISE, which was 86 percent for the youth survey and 90 percent for the parent survey.

We grouped the youth's primary impairments, as recorded in baseline SSA administrative data, into five categories, the largest of which was intellectual or developmental disability (57 percent). The next largest group was other mental impairment (26 percent), which was followed by physical disability (12 percent); other or unknown disability (4 percent); and speech, hearing, or visual impairment (1 percent).

About 96 percent of the youth in our sample received SSI payments during the month of random assignment. On average, the time since their initial SSI eligibility to PROMISE enrollment was 9.7 years. Their average age at the time of most recent SSI application was 6 years. About 10 percent of the youth received OASDI payments. On average, the youth had received $7,854 in SSA payments during the year before their month of random assignment. About 19 percent of the sample youth lived in a household with multiple SSI-eligible children. Only 7 percent of youth had any earnings from employment in the year before random assignment; among parents, 63 percent had any earnings.

On average, most of these characteristics were similar for youth in the treatment and control groups, which was expected given that the youth were randomly assigned to these groups. We compared the two groups across 25 characteristics at the time of random assignment (Table VII.1, Columns B and C) and found four statistically significant differences between the two groups: (1) youth living arrangement at the time of SSI application, (2) OASDI payment amount, (3) number of parents used in the SSA data analysis, and (4) parent SSA beneficiary status (with the difference in the last two measures driven by an absence of parent data in SSA records). Although the differences were nontrivial, we should be able to identify unbiased estimates of program impacts by comparing the treatment and control groups while accounting for the differences in baseline characteristics through regression adjustment.

Table VII.1. NYS PROMISE: Baseline characteristics of the youth survey respondent sample (percentage, unless otherwise noted)

	All (A)	Treatment (B)	Control (C)	Difference (B-C)	*p*-value
Demographic characteristics					
Youth sex is female	32.1	31.8	32.4	-0.6	0.78
Youth age at RA					
14 years	37.8	39.1	36.5	2.6	0.55
15 years	31.6	31.1	32.2	-1.0	
16 years	30.6	29.8	31.3	-1.5	
Average age	15.4	15.3	15.4	-0.1	0.23
Youth language preference at SSI application					
English is preferred written language	85.1	84.3	86.0	-1.7	0.32
English is preferred spoken language	84.9	84.5	85.3	-0.8	0.64
Youth living arrangement at SSI application					
In parents' household	85.3	88.0	82.5	5.5	0.00***
Own household or alone	13.0	10.8	15.2	-4.4	
Another household and receiving support	1.8	1.2	2.3	-1.1	
Youth race/ethnicity (from the 18-month survey)					
Non-Hispanic white	7.9	7.9	7.9	-0.1	0.22
Non-Hispanic black	40.4	38.4	42.5	-4.0	
Hispanic	38.8	41.6	36.0	5.6	
Non-Hispanic American Indian	0.9	0.7	1.0	-0.3	
Non-Hispanic other or mixed race	9.2	8.4	10.0	-1.7	
Missing	2.8	3.0	2.5	0.5	
Enrolling parent age at RA (from the RA system)	44.3	44.2	44.3	-0.1	0.77
Parent race/ethnicity (from the 18-month survey)					
Non-Hispanic white	11.5	12.2	10.8	1.4	0.21
Non-Hispanic black	42.3	41.5	43.0	-1.5	
Hispanic	35.1	35.3	34.8	0.5	
Non-Hispanic American Indian	0.9	0.3	1.4	-1.0	
Non-Hispanic other or mixed race	7.9	8.6	7.3	1.2	
Missing	2.3	2.0	2.6	-0.6	
Disability					
Youth primary impairment					
Intellectual or developmental disability	57.3	57.4	57.2	0.2	0.47
Speech, hearing, or visual impairment	1.0	0.6	1.4	-0.9	
Physical disability	11.8	11.9	11.8	0.2	
Other mental impairment	26.0	26.4	25.5	0.9	
Other or unknown disability	3.9	3.7	4.1	-0.3	
SSA program participation					
Youth SSA payment status at RA					
Received SSI	96.1	96.0	96.2	-0.1	0.89
Received OASDI	9.9	8.8	11.0	-2.2	0.13
Years since youth's earliest SSI eligibility at RA	9.7	9.8	9.6	0.2	0.40
Youth age at most recent SSI application	6.1	5.9	6.2	-0.3	0.16
Youth payments in the year before RA ($)					
SSI	7,566	7,621	7,510	111	0.30
OASDI	288	234	343	-109	0.05**
Total SSI and OASDI	7,854	7,855	7,853	1	0.99
Household had multiple SSI-eligible children	18.7	18.5	18.8	-0.3	0.86
Enrolling parent provided a valid SSN at RA	85.0	86.3	83.8	2.5	0.14
Parents included in the SSA data analyses					
None	5.6	3.7	7.6	-3.9	0.00***
One parent	67.3	68.3	66.2	2.1	
Two parents	27.1	28.0	26.2	1.8	
Parent SSA payment status at RA					
Any parent received SSI only	11.7	11.9	11.5	0.5	0.01***
Any parent received OASDI only	8.7	8.0	9.4	-1.4	
Any parent received both SSI and OASDI	5.8	5.6	6.0	-0.4	
No parent received any SSA payments	68.2	70.8	65.6	5.2	
No parent was included in the SSA data analyses	5.6	3.7	7.6	-3.9	
Earnings					
Youth had any earnings in the calendar year before RA	6.9	6.4	7.4	-1.0	0.41
Youth earnings in the calendar year before RA ($)	55	51	59	-9	0.42
Parent had any earnings in the calendar year before RA	62.5	62.0	63.1	-1.1	0.66
Parent earnings in the calendar year before RA ($)	13,582	14,234	12,917	1,318	0.14
Number of youth	1,691	853	838		

Source: SSA administrative records; PROMISE RA system; PROMISE 18-month follow-up survey.

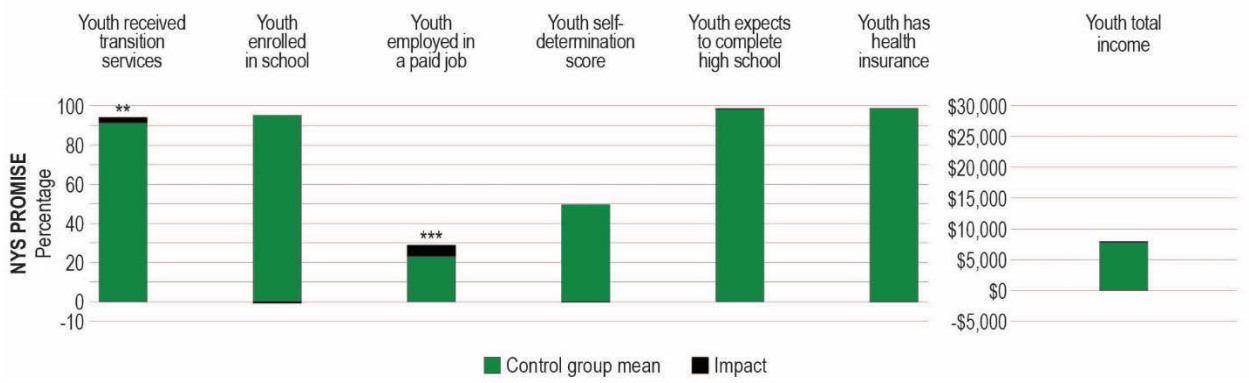
Note: The sample includes all youth who completed the PROMISE 18-month youth survey. We weighted statistics to adjust for survey nonresponse.

*/**/***Difference is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test or a chi-square test.

C. Impacts on youth outcomes 18 months after enrollment

The findings in this section show whether the services provided by NYS PROMISE led to short-term impacts on youth outcomes in seven domains (Figure VII.1). The impact estimates revealed that the program increased the share of youth who received transition services and their likelihood of engaging in paid employment. The program had no impact on the youth's school enrollment, self-determination and expectations, likelihood of having health insurance, and total income from paid employment and SSA payments in the 18 months after enrollment in NYS PROMISE.

Figure VII.1. NYS PROMISE: Impacts on youth primary outcomes



*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

We also estimated impacts of NYS PROMISE for subgroups of youth defined by the youth's sex, age, and primary impairment when they enrolled in the evaluation. The subgroup analyses focused on the primary outcomes in each outcome domain. We found that NYS PROMISE did not have any differential impact on youth outcomes by subgroup.

1. NYS PROMISE connected more youth to transition services

Consistent with the intent of the PROMISE program model, NYS PROMISE increased the receipt of transition services among youth with disabilities. These services included case management, employment-promoting services, benefits counseling, help with financial education, and education and training supports (Table VII.2). With 91 percent of control group youth having received any transition services during the 18 months after random assignment, there did not appear to be large barriers to youth receiving at least some transition services in New York; nonetheless, the program increased this share by 3 percentage points.

The PROMISE 18-month survey also asked about the use of specific transition services. We found that NYS PROMISE had positive impacts on the youth's receipt of each type of service queried except for school transition planning and help with assistive technology (Table VII.2). The program increased the receipt of case management by 21 percentage points. Despite low reports of case management meetings in the program MIS data, this finding was consistent with the program model, which planned on quarterly case management meetings with the youth and their families. The program also increased the share of youth who received an array of other transition services, such as employment-promoting services (including career planning, job skills training, help with a job search, and on-the-job supports); benefits counseling; help with

financial education; training in self-advocacy or self-determination; help accessing education or training; and life skills training. The program's relatively larger impacts on receipt of employment-promoting services and benefits counseling in particular reflected the program's concerted effort to provide those services (McCutcheon et al. 2018).

We also examined the youth's use of a subset of these services—designated as key transition services—and their intensity: case management, employment-promoting services, benefits counseling, and help with financial education. About 58 percent of youth in the control group received any of these key services during the 18 months following random assignment. NYS PROMISE increased the youth's receipt of these services by 16 percentage points. The program also increased the number of providers from whom the youth received key transition services. On average, control group youth received services from 0.9 providers; NYS PROMISE increased this number by 0.3 providers. Despite these positive effects, NYS PROMISE had no impact on the number of hours of key services that the youth received. On average, the total hours of key transition services received by control group youth—416 hours (or 5.3 hours per week on average during the 18-month follow-up period)—was not statistically different from that received by the treatment group youth.

NYS PROMISE enhanced the perceived usefulness of key services received by the youth. In the control group, 56 percent of the youth reported receiving some key services that they considered to be somewhat or very helpful; the program increased the share of treatment group youth who reported the same by 16 percentage points. This exactly offsets the 16 percentage-point reduction in the share of youth with no key services reported, implying that all youth who received key transition services found them somewhat or very useful.

Analyzing the administrative records from the state's VR agency, we found that NYS PROMISE had no impact on youth's participation in VR services (Table VII.2). Among control group youth, 2 percent applied for VR services during the 18 months after random assignment and 1 percent received VR services over that period, and these rates did not differ significantly from the treatment group. Though NYS PROMISE had a connection with the state's VR agency, the low rate of VR participation is likely because few case managers referred youth participants to VR. Case managers planned to refer youth once they had only two years of high school left or when the PROMISE program ended, neither of which happened within 18 months of random assignment (McCutcheon et al. 2018).

Table VII.2. NYS PROMISE: Impact on youth's receipt of transition services (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any transition services since RA	91.4	2.6	0.03**
Supplementary outcomes			
Types of services received since RA (italics indicate key transition services)			
Case management[a]	35.2	21.4	0.00***
School transition planning	72.8	0.1	0.98
Employment-promoting services[a]	45.6	14.4	0.00***
Benefits counseling[a]	6.7	6.2	0.00***
Financial education[a]	16.9	4.3	0.02**
Self-advocacy or self-determination training	38.7	6.1	0.01**
Help accessing education or training	30.4	7.9	0.00***
Life skills training	50.0	5.9	0.01**
Help with assistive technology	26.3	3.0	0.16
Other services	8.2	2.6	0.06*
Received any key transition services since RA	58.3	16.1	0.00***
Hours of key transition services received since RA	415.5	-38.0	0.28
Number of key transition service providers since RA	0.9	0.3	0.00***
Usefulness of key transition services received since RA			
No key service reported	41.7	-16.1	0.00***
No service rated somewhat or very useful	2.3	-0.1	
Any service rated somewhat or very useful	56.0	16.2	
VR services (from state VR agency data)			
Applied for VR services since RA	1.7	-0.1	0.82
Received VR services since RA	0.9	-0.1	0.84

Source: PROMISE 18-month follow-up survey; state VR agency data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of NYS PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12e for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

[a]These services are identified as key transition services because they were required of the PROMISE programs. We asked more detailed questions about providers of these services in the PROMISE 18-month survey than providers of other transition services.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

2. NYS PROMISE had no impact on the youth's school enrollment but increased their receipt of job-related training

NYS PROMISE had no impact on the primary outcome of the youth education domain: the youth's school enrollment at the time of the 18-month survey. About 95 percent of control group youth were enrolled in school at the time of the survey (Table VII.3). In addition, 99 percent of the youth had ever been enrolled in school since random assignment; the program had no impact on this outcome. NYS PROMISE also had no impact on the share of youth who received a GED, certificate of completion, or high school diploma since random assignment. The lack of impacts on the education-related outcomes likely reflected the fact that NYS PROMISE did not focus heavily on secondary school education services. As stated previously, program managers viewed those services as the responsibility of the LEAs (McCutcheon et al. 2018).

NYS PROMISE increased the youth's receipt of job-related training. About 14 percent of the control group had attended a training program or taken classes outside of school since random assignment to help them learn job skills or get a job. NYS PROMISE increased the share of youth who received such training by 9 percentage points. But the program had no impact on the share of youth who received job-related training credentials since random assignment.

Table VII.3. NYS PROMISE: Impact on youth's education and job-related training (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Enrolled in school at the time of the survey	95.1	-0.7	0.50
Supplementary outcomes			
Ever enrolled in school since RA	99.3	-0.1	0.87
Received GED, certificate of completion, or high school diploma since RA	4.2	-0.3	0.79
Job-related training since RA			
Received any job-related training	14.2	9.0	0.00***
Received any job-related training credential	2.3	-0.2	0.83

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of NYS PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12e for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

3. NYS PROMISE increased the youth's paid employment but did not affect their earnings

NYS PROMISE increased the share of youth who held a paid job during the 18 months after random assignment (Table VII.4). About 23 percent of control group youth had a paid job during the follow-up period; the program increased this rate by 6 percentage points for treatment group youth. Having a paid job may be partly viewed as a measure of receipt of NYS PROMISE services because, as required by the federal partners, PROMISE programs had to ensure that the youth had paid jobs while participating in the program. NYS PROMISE set a benchmark for case counselors to refer at least 71 percent of youth to paid work experiences by the program's fifth year (McCutcheon et al. 2018). By the end of the third year of operations, the program had a substantial way to go to achieve this goal. However, its efforts had nonetheless resulted in a positive impact on paid employment during the 18 months after random assignment.

The program also raised the rate of paid employment during the year immediately before the 18-month survey. About 17 percent of control group youth reported having a paid job during that year; NYS PROMISE increased the rate by 5 percentage points. However, NYS PROMISE did not affect the average number of hours worked per week in paid jobs nor did it affect the youth's earnings from all jobs during that period.

When we examined employment at the time of the follow-up survey, we found no impact on paid employment (Appendix Table A.12e). The lack of an impact on paid employment at the

time of the survey, despite the impact on any paid employment during the 18 months after random assignment, might be because many of the employed treatment group youth had short-term jobs during the 18-month period after random assignment. Among treatment group youth who had a paid job during the follow-up period, the average job tenure was about 20 weeks (statistic not shown in the table).

Consistent with the findings based on survey data, our analyses of SSA data on earnings indicate that NYS PROMISE had a positive impact on the likelihood of the youth's employment and no impact on average earnings. Twenty percent of control group youth had any earnings from employment during the calendar year following random assignment; NYS PROMISE increased this share by 4 percentage points. The same data showed no impact on average earnings during that period.

Table VII.4. NYS PROMISE: Impact on youth's employment and earnings (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Ever employed in a paid job since RA	23.1	5.7	0.01***
Supplementary outcomes			
Employment in the year before the survey			
Any paid employment	16.8	4.5	0.02**
Weekly hours worked in paid jobs	1.1	0.3	0.16
Total earnings from all jobs ($)	571	19	0.85
Ever employed in the calendar year after RA (from SSA data)	20.2	3.7	0.04**
Earnings in the calendar year after RA (from SSA data) ($)	338	41	0.38

Source: PROMISE 18-month follow-up survey; SSA administrative records.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of NYS PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12e for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

4. NYS PROMISE had no impact on the youth's self-determination or expectations for the future

NYS PROMISE had no impact on the youth's self-determination as measured by our self-determination composite scale (Table VII.5). We estimated that youth in the control and treatment groups both had an average score of 50 on a scale of 0 to 100. We also separately analyzed the youth's responses to questions in three subdomains of self-determination—autonomy, psychological empowerment, and self-realization. The program had no impact on any of these three subdomains. The lack of impact on youth self-determination likely reflected that NYS PROMISE did not offer self-determination or self-advocacy training to participating youth. Moreover, relatively few parents completed the self-determination training that the program offered to them by the end of the third year of program operation (McCutcheon et al. 2018).

The 18-month survey asked youth and parents about their expectations for the future regarding the youth's educational attainment and independence at age 25. Our primary measure

in the expectations domain was whether youth expected to complete high school or receive a GED. We found that 98 percent of control group youth expected to complete high school or receive a GED; this did not differ from the treatment group. The program had no impact on the youth's expectations that they would get postsecondary education, live independently, be financially independent, or have a paid job at age 25. The impacts on parent expectations were similar to those of the youth. NYS PROMISE also had no impact on whether parents believed it was important that the youth eventually become independent in some way—95 percent of parents in the control group held this belief even without the program.

Table VII.5. NYS PROMISE: Impacts on self-determination and expectations (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcomes			
Self-determination score at the time of the survey (scale: 0 to 100)	49.5	-0.2	0.76
Youth expected to complete high school or GED at the time of the survey	98.3	0.3	0.72
Supplementary outcomes			
Scores on subdomains of self-determination at the time of the survey			
Autonomy (scale: 0 to 300)	146.8	1.3	0.72
Psychological empowerment (scale: 0 to 100)	90.7	-1.6	0.14
Self-realization (scale: 0 to 100)	8.9	0.7	0.48
At the time of the survey, youth expected to:			
Get postsecondary education	63.3	1.6	0.60
Live independently at age 25	65.0	4.1	0.16
Be financially independent at age 25	86.1	-3.7	0.11
Be employed at age 25	94.1	0.6	0.65
At the time of the survey, parent expected youth to:			
Get postsecondary education	47.1	-1.1	0.66
Live independently at age 25	34.7	1.8	0.45
Be financially independent at age 25	64.3	0.4	0.86
Be employed in a paid job at age 25	83.0	1.9	0.28
Parent believed it important for youth to become independent in some way at the time of the survey	95.2	1.4	0.13

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of NYS PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12e for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

5. NYS PROMISE did not affect the youth's health insurance coverage

The primary outcome in the analysis of youth health is whether the youth had health insurance at the time of the survey. The vast majority of youth in the control group had health insurance (99 percent), virtually the same rate as those in the treatment group (Table VII.6). Because nearly all youth already had health insurance coverage, there was little room for improvement on this outcome. The program had no impact on whether the youth needed help with or equipment for an activity of daily living or an instrumental activity of daily living. It also had no impact on youth's smoking, use of alcohol, marijuana, or illicit drugs.

Table VII.6. NYS PROMISE: Impact on youth's health and health insurance (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Youth had health insurance at the time of the survey	98.7	-0.1	0.88
Supplementary outcomes			
Health insurance type at the time of the survey			
Public	95.3	-0.4	0.71
Private	7.4	-1.3	0.28
Needed help with or equipment for at least one ADL at the time of the survey	34.1	-0.9	0.69
Needed help with or equipment for at least one IADL at the time of the survey	50.9	-2.7	0.26
Substance use in the 30 days before the survey			
Smoking	3.3	1.0	0.30
Alcohol	3.5	-0.1	0.91
Marijuana	5.0	1.1	0.32
Other illicit drug	0.6	-0.0	0.93

Source: PROMISE 18-month survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of NYS PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12e for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

6. Data were not available to assess the impact of NYS PROMISE on youth's Medicaid enrollment and expenditures

NYS PROMISE did not provide Medicaid data for the interim impact analysis. Instead, we will present statistics developed by the program's local evaluators to assess the impact of NYS PROMISE on Medicaid enrollment and expenditures if they are available before this report is finalized.

Table VII.7. NYS PROMISE: Impact on youth's use of Medicaid (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcomes			
Number of months enrolled in Medicaid since RA	n.d.		
Total Medicaid expenditures since RA ($)	n.d.		
Supplementary outcomes			
Enrollment since RA			
Medicaid managed care	n.d.		
Medicaid 1915(c) waiver	n.d.		
Medicaid capitated behavioral health	n.d.		
Medicaid payments since RA			
Any Medicaid payments	n.d.		
Average monthly Medicaid payments ($)	n.d.		
Average monthly fee for service payments ($)	n.d.		
Average monthly capitated payments ($)	n.d.		

Source: State Medicaid data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of NYS PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12e for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

n.d. = no data available.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

7. NYS PROMISE did not affect the youth's total income

Our primary measure of the youth's economic well-being was the total income they received during the year before the 18-month survey from paid jobs (based on the 18-month survey data) and from SSA payments (based on SSA data). On average, the control group received $7,820 from earnings and SSA payments during the reference period (Table VII.8). NYS PROMISE had no impact on this outcome. We also measured the youth's annual income during the calendar year after random assignment by using SSA data on annual earnings combined with SSA payments. The average annual income for the treatment group did not differ from the control group average ($7,460).

The lack of impact of NYS PROMISE on the youth's total income reflected the program's lack of impact on both total earnings from paid jobs (Table VII.4) and receipt of SSA payments. The program had no impact on the youth's likelihood of receiving SSA payments or the level of payments they received. NYS PROMISE also did not affect categorical measures of youth household income or the share of youth that resided with a parent from the 18-month survey.

Table VII.8. NYS PROMISE: Impact on youth's economic well-being (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Youth total income (earnings and SSA payments) in the year before the survey ($)	7,820	65	0.62
Supplementary outcomes			
SSA payments in 18-month period since RA (from SSA data)			
Received any SSA payments	97.9	-0.6	0.34
Total SSA payments ($)	11,292	-10	0.93
Income in the calendar year after RA (from SSA data) ($)	7,460	47	0.63
Youth resided with parent at the time of the survey	98.6	-0.2	0.71
Household income in the calendar year before the survey			
Less than $10,000	35.4	2.0	0.43
$10,000 to $19,999	32.3	-0.4	
$20,000 to $29,999	17.8	-2.8	
$30,000 or more	14.4	1.1	
Any household member who participated in non-SSA public assistance programs at the time of the survey	73.1	1.1	0.59

Source: PROMISE 18-month follow-up survey; SSA administrative records.

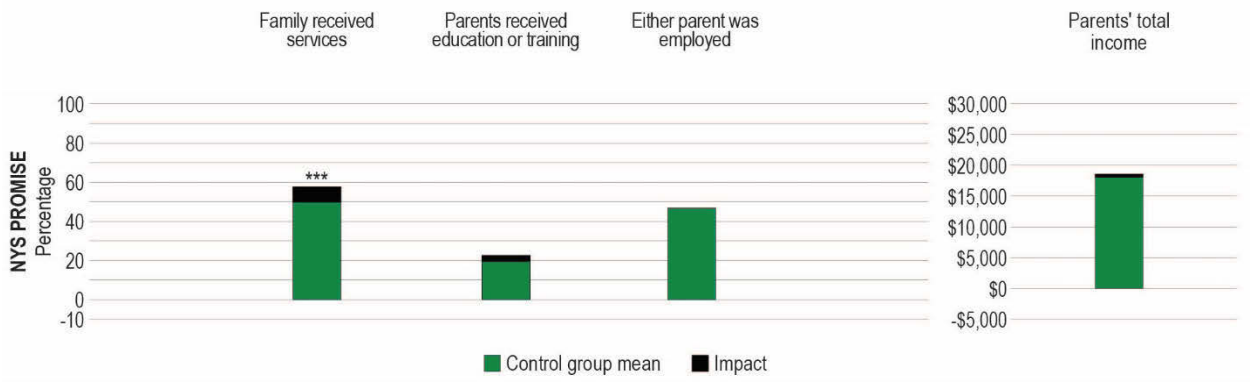
Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of NYS PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12e for sample sizes for all outcomes. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

D. Impacts on family outcomes 18 months after enrollment

The findings in this section show whether the services provided by NYS PROMISE led to short-term impacts on parent and family outcomes in four domains (Figure VII.2). The impact estimates revealed that the program increased the receipt of support services by parents and family members other than the SSI youth but had no impact on parents' education, training, employment, or total income from earnings and SSA payments. We also found that NYS PROMISE had a differential impact on the likelihood that families received key support services by the youth's primary impairment.

Figure VII.2. NYS PROMISE: Impacts on parent and family primary outcomes



*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

1. NYS PROMISE increased families' receipt of support services

Consistent with its program model, we found that NYS PROMISE helped engage more families in support services (Table VII.9). In the control group, half of all parents reported that a family member other than the SSI youth received services during the 18 months after random assignment. The program increased this share by 8 percentage points. Impacts on receipt of family support services differed by the youth's primary impairment (Appendix Table A.15e). Treatment group families of youth with other mental impairments were 23 percentage points more likely to receive any family support services than those in the control group. The program had no impact on receipt of any support services for families of youth with intellectual or developmental disabilities or youth with other nonmental impairments. Thus, the estimated positive impact on receipt of any family support services for the overall analysis sample was driven by the positive impact on families of youth with other mental impairments. As shown previously in Table VII.1, these families represented 26 percent of all treatment group families.

NYS PROMISE also had positive impacts on families' receipt of an array of specific services, such as case management, benefits counseling, help with financial education, parent training and information on the youth's disability, and parent networking support. These impacts were consistent with the findings from the process analysis, which suggested that family coaches provided general supports and information to nearly all participating families on topics such as benefits and entitlements, education, employment, finances, health care, housing, and transition planning (McCutcheon et al. 2018).

Additional exploratory analysis we conducted show that the impact on family receipt of support services was larger for families with multiple PROMISE-enrolled youth than families with a single PROMISE-enrolled youth (results not shown in a table). Although this suggests that some of the increased family service receipt may reflect the NYS PROMISE program's services to multiple PROMISE-enrolled youth, the impact was positive and significant for families with a single PROMISE-enrolled youth.

We examined the likelihood of family members receiving a subset of these services—designated as key support services—and their intensity: case management, employment-promoting services, benefits counseling, and financial education. About 30 percent of parents in the control group reported that their family members received these services during the 18

months following random assignment. NYS PROMISE increased the share of treatment group families receiving key services by 10 percentage points. These families also reported receiving key services from 0.1 more providers than the control group families did. However, the program had no impact on the hours of service receipt by families, even though the overall estimated average hours of service receipt by control group families was only 30 hours during the 18-month follow-up period.

NYS PROMISE enhanced the perceived usefulness of key services received by the families. The impact estimates for this outcome suggested that as the program increased the share of families that received key services more families found those services to be somewhat or very useful. At the same time, the program had no impact on the likelihood or types of unmet needs for services or supports reported by parents, although there was a slight reduction in unmet case management needs (Appendix Table A.12e). Although an increased number of parents received some services in these areas and found them to be useful, they may not have received the type or amount of services and supports to reduce their needs. Only five percent of parents of youth who participated in NYS PROMISE had attended all four core trainings provided to parents after three years of program operation. Case managers and family coaches also reported that families had complex needs and unstable living conditions that required them to focus on immediate needs, such as food and housing, before making referrals to formal program trainings that could meet other service needs (McCutcheon et al. 2018).

Based on data from the state VR agency's administrative records, NYS PROMISE increased parents' application for VR services during the 18 months after PROMISE enrollment. Less than 1 percent of control group parents applied for VR services after random assignment; NYS promise increased applications by 1 percentage point. The program did not affect the share of parents that received VR services.

Table VII.9. NYS PROMISE: Impact on family's receipt of services (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any family support services since RA	49.7	7.9	0.00***
Supplementary outcomes			
Types of family support services received since RA (italics indicate key support services)			
Case management[a]	13.8	5.1	0.00***
Education or training supports	11.5	-2.3	0.10
Employment-promoting services[a]	7.5	0.1	0.96
Benefits counseling[a]	16.6	12.7	0.00***
Financial education[a]	10.9	5.2	0.00***
Parent training and information on youth's disability[a]	33.1	6.5	0.00***
Parent networking support	17.0	9.2	0.00***
Any key support services received since RA	29.6	9.9	0.00***
Hours of key support services received since RA	30.3	-3.6	0.68
Number of key support service providers since RA	0.4	0.1	0.00***
Usefulness of key services received since RA			
No key service reported	70.4	-9.5	0.00***
No service rated somewhat or very useful	1.2	0.1	
Any service rated somewhat or very useful	28.4	9.3	
Enrolling parent's engagement with VR services (from state VR agency data)			
Applied for VR services since RA	0.1	1.1	0.01***
Received VR services since RA	0.5	0.4	0.34

Source: PROMISE 18-month follow-up survey; state vocational rehabilitation agency data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of NYS PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12e for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

[a]These services were required of the PROMISE programs. With the exception of parent training and information on youth's disability, we asked more detailed questions about providers of these services in the PROMISE 18-month survey than providers of other support services. The outcome measures related to key support services presented in this table reflect all required services except parent training and information on youth's disability.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

2. NYS PROMISE had no impact on parents' education or training

About 19 percent of parents in the control group reported that either they or their spouse had completed or attended education or job skills training during the 18 months after random assignment. NYS PROMISE had no impact on this primary outcome in the domain of parents' education and training (Table VII.10). At the same time, the program increased the share of parents who received a diploma, GED, certificate, or professional license since random assignment by 3 percentage points. Education was a common topic discussed during family case management meetings, which might explain the increase. Although the estimated impact on the primary outcome suggests that NYS PROMISE had no impact on parents' education and training, the impact estimates for it and related supplementary outcomes are consistently positive and small, with the *p*-values narrowly missing the conventional standard for statistical significance (all *p*-values in Table VII.10 are less than 0.15). This suggests that NYS PROMISE may have had a small positive impact on parents' education and training.

Table VII.10. NYS PROMISE: Impact on parents' education and training (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any education or job skills training since RA	19.4	3.1	0.11
Supplementary outcomes			
Either parent was enrolled in education or job skills training at the time of the survey	5.5	1.9	0.11
Either parent received a diploma, GED, certificate of completion, or professional license since RA	7.2	2.6	0.06*

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of NYS PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12e for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

3. NYS PROMISE had no impact on parents' employment and earnings

NYS PROMISE did not connect more parents to paid jobs during the 18-month follow-up (Table VII.11). About 47 percent of parents in the control group reported that either they or their spouse had worked for pay at any point since random assignment; the share of parents working in the treatment group was similar.

We also found no impacts on other employment outcomes for parents. There was no change in the percentage of parents reporting that they or their spouse had worked for pay in the past month, nor in the parents' earnings. Similarly, NYS PROMISE had no impact on parents' earnings as reported in SSA data. The program also had no impact on whether parents had access to health insurance through their jobs.

Table VII.11. NYS PROMISE: Impacts on parents' employment and earnings (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Either parent was employed since RA	46.6	0.1	0.98
Supplementary outcomes			
Either parent was employed in the month before the survey	44.7	-2.5	0.26
Parents' earnings from all jobs in the month before the survey ($)	736	-13	0.79
Parents' earnings in the calendar year after RA (from SSA data) ($)	15,326	463	0.33
Either parent was offered health insurance through a job held in the month before the survey	22.9	-1.6	0.39

Source: PROMISE 18-month follow-up survey; SSA administrative records.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of NYS PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12e for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

4. NYS PROMISE had no impact on parents' annual total income

Our primary outcome for parents' economic well-being was their total income in the calendar year after random assignment, calculated as the sum of their earnings and payments from SSI and OASDI programs (for the enrolling parents and their spouses, if applicable). In the control group, the average parental income per household during this year was $17,986. NYS PROMISE had no impact on this measure of income (Table VII.12).

In supplementary analyses, we examined whether NYS PROMISE affected parents' receipt of SSA payments. We found that the program had no impact on whether they received any SSA payments or on the combined amount of SSI and OASDI payments.

Table VII.12. NYS PROMISE: Impact on parents' economic well-being (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Parents' total income in the calendar year after RA (from SSA data) ($)	17,986	511	0.29
Supplementary outcomes			
Parents' SSA payments in 18-month period since RA (from SSA data)			
Received any payments	31.0	-0.5	0.68
Total payments ($)	4,196	35	0.81
Medicaid enrollment and payments since RA (from state Medicaid program data)			
Enrolled in Medicaid	n.d.		
Enrolled in Medicaid comprehensive managed care	n.d.		
Enrolled in Medicaid 1915(c) waiver	n.d.		
Total Medicaid payments ($)	n.d.		

Source: PROMISE 18-month follow-up surveys; SSA administrative records; state Medicaid data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of NYS PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12e for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

n.d. = no data available.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

E. Cost analysis results for NYS PROMISE

This section summarizes our findings from the cost analysis of NYS PROMISE, with a focus on cost by input category and program component as well as the cost per treatment group enrollee and per participant. The technical appendix describes our methods for this analysis.

The average annual cost of the resources used by NYS PROMISE to deliver services during the accounting period we targeted (October 1, 2016, through September 30, 2017) was $7,456 per treatment group youth and their families. We estimated the program's average cost per enrollee to be $21,623 over the entire service delivery period (October 1, 2014, through September 30, 2018).

1. Costs by input category

Table VII.13 summarizes the costs of NYS PROMISE by input category during the accounting period. The majority—68 percent—of the program's costs were for other direct costs that included spending on RDSs and parent centers. Nearly all of the costs in this input category involved purchased services for PROMISE youth and their families. Enrollee payments (that is, participant-specific service costs such as transit passes and interpretation services) accounted for the remaining small portion of other direct costs. Cornell accounted for the largest portion of purchased services costs. Cornell was a managing partner that issued contracts to the RDSs that provided case management to youth as well as to parent centers that provided case management and training to parents. Cornell also led the formative evaluation, training, and technical assistance activities and provided oversight to the RDSs and parent centers in partnership with RFMH. Payments to all other service providers (paid for by RFMH) comprised the remaining purchased services costs.

Labor costs constituted the second-largest proportion (24 percent) of NYS PROMISE costs. About one-third of this cost category included the wage and fringe benefit costs of program management staff within the state's Office of Mental Health. The remaining labor costs included wage and fringe benefit costs of community case managers and community employment specialists. These labor costs did not include those associated with RDSs, family case managers, or parent center directors because they were included within Cornell's purchased services.

The third-largest proportion (5 percent) of NYS PROMISE costs were indirect costs that included operational costs such as meeting expenses, travel, and office supplies. These costs were associated with staff from the Office of Mental Health and not the operational costs associated with Cornell or other NYS PROMISE service partners.

Among the input cost categories, the smallest was for the costs of donated goods and services, which accounted for 2 percent of NYS PROMISE costs. These costs included in-kind contributions such as computers, cell phones, and wireless hot spots for 30 staff, as well as access to and utilities for eight 100-square-foot offices in Albany, New York. The program had no costs associated with volunteer labor.

Table VII.13. NYS PROMISE costs by input category, October 2016 through September 2017

Category	Percentage of NYS PROMISE total cost	Cost amount
Other direct costs	68.3	$5,386,612
Labor costs	24.0	$1,892,642
Indirect costs	5.3	$414,098
Costs of donated goods and services	2.4	$187,724
Total	**100.0**	**$7,881,077**

Source: NYS PROMISE cost data

Note: Data reflects costs from October 1, 2016 through September 30, 2017. The total sum may differ from the sum of figures in the table due to rounding.

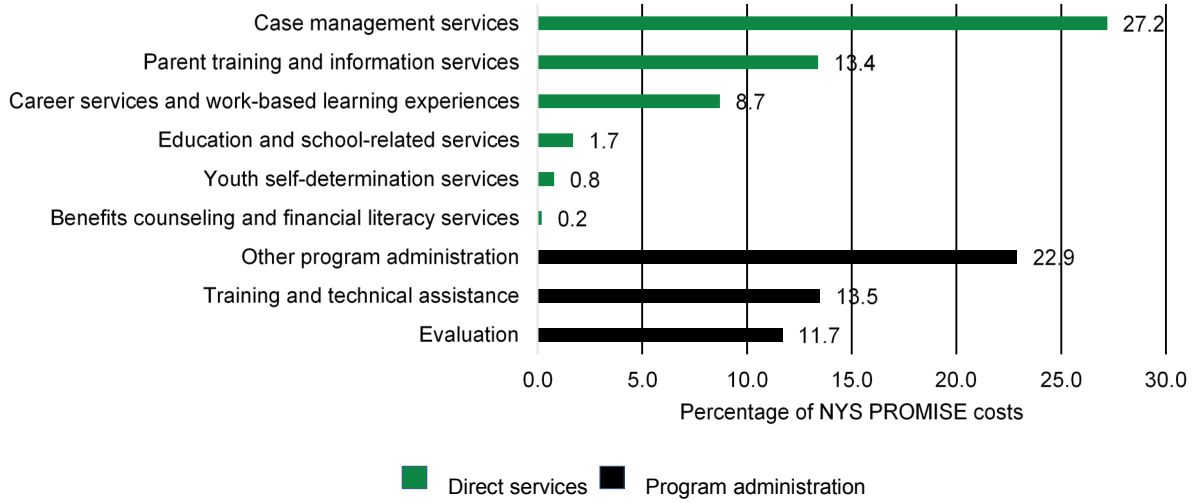
2. Costs by program component

The six service components accounted for approximately 52 percent of the total cost of NYS PROMISE during the accounting period (Figure VII.3). Among the direct service components, costs were largest for case management services (27 percent of total costs). Parent training and information services represented 13 percent of costs, which was the second-largest portion of direct service costs. Parent training and information services primarily consisted of information sharing and coaching, as family coaches provided families with timely information to overcome challenges in their daily lives. About $966,000 of Cornell's purchased services was spent on parent centers, which accounted for the vast majority of the total costs associated with parent training and information services (Appendix Table A.22e). Career services and work-based learning experiences were the third-largest proportion of direct service costs and comprised almost 9 percent of total costs. Career services and work-based learning experiences were NYS PROMISE's primary intervention services for participating youth; six of the ten PROMISE services were focused on employment activities. Finally, the program had few service costs associated with education and school-related services, youth self-determination services, or

benefits counseling. This finding aligned with the program's focus on employment and parent information services rather than empowerment and education supports. Through the process analysis, we found that case managers prioritized employment services over benefits counseling due to capacity constraints. Case managers and family coaches also shared information related to benefits more informally as families faced crises and were unable to participate in the formal benefits counseling service (McCutcheon et al. 2018).

Program administration accounted for 48 percent of the total cost of NYS PROMISE. Of the three components of program administration—evaluation, training and technical assistance, and other program administration—the other program administration component accounted for the largest share of these costs (nearly 23 percent of total costs). This category included costs related to the steering committee as well as general administration of the program. Training and technical assistance costs (nearly 14 percent of total costs) included activities related to the receipt or delivery of staff training to improve knowledge and skills in working with youth, families, and the community. Finally, the program's evaluation costs (almost 12 percent) comprised time spent supporting the national evaluation and for Cornell to conduct the formative evaluation.

Figure VII.3. NYS PROMISE costs by program component, October 2016 through September 2017



Note: Data reflects costs from October 1, 2016 through September 30, 2017.

3. Costs per enrollee and per participant

The treatment group included 1,057 youth (both research and nonresearch cases). Of those, 953 youth participated in NYS PROMISE services. For both enrollees and participants, we assumed an average duration of participation in the program of 2.9 years, which we estimated based on the average length of potential participation for enrollees from the random assignment date through September 30, 2018. By dividing the total program cost for the one-year accounting period by the number of enrolled and participant youth, we obtained an average annual program cost of $7,456 for enrolled youth and their families and $8,270 for participating youth and their families. By applying this annual program cost to the average duration of participation, we found

during the program's entire service delivery period (not just the one-year accounting period). The costs per enrollee and participant included substantive services provided to family members and to youth.[59]

F. Summary of findings and discussion

NYS PROMISE had positive impacts on the primary outcomes that were most closely related to service delivery but had few impacts on other outcomes by 18 months after enrollment in the evaluation (Table VII.14). The program increased the likelihood that both youth and their family members would receive services. It also increased the likelihood that youth engaged in paid employment, and may have had a small positive impact on parents' education and training. The program had no impact on the youth's enrollment in school, self-determination and expectations, health insurance coverage, or total income. It also had no impact on the parents' employment or income in the calendar year after random assignment.

The 18-month findings on NYS PROMISE's impact on youth reflected the program's focus on delivering family-centered case management and employment services. NYS PROMISE improved several short-term outcomes that can be considered either program services or outputs, including the receipt of transition and family support services and youth employment. These positive impacts are indicative of the program achieving its intended outputs in these critical areas.

There were few impacts on other youth or parent outcomes that might be affected by these program services and outputs. The findings may reflect the reported low take-up of some services, such as benefits counseling and financial literacy training and the lack of completed services received by the families, as reported in the program MIS data (McCutcheon et al. 2018). If youth were not using these services much, that could explain the lack of impacts on short-term outcomes such as hours of key transition services received. But for many of the youth outcomes we analyzed, 18 months after enrollment is too early to detect meaningful impacts. We will revisit most of the areas where the program had no impact—such as school enrollment and youth expectations about completing high school—in the five-year follow-up analysis to determine whether any impacts emerged with the passage of time.

[59] The average annual and total program costs derived from the data presented in the text differ slightly due to rounding. These statistics were calculated based on an average monthly program cost of $621 for enrolled youth and their families and $689 for participating youth and their families and an average duration of participation of 34.8 months (2.9 years).

Table VII.14. NYS PROMISE: Summary of impacts on primary outcomes by domain

	Domain	Primary outcome	Impact summary
Youth	Receipt of transition services	Receipt of any transition services	++
	Education	Enrollment in school at the time of the survey	0
	Employment and earnings	Ever employed in a paid job since RA	+++
	Self-determination and expectations	Self-determination scale (0 to 100)	0
	Self-determination and expectations	Youth expects to complete high school/GED	0
	Health and health insurance	Youth has health insurance	0
	Use of Medicaid	Percentage of months enrolled in Medicaid since RA	n.d.
	Use of Medicaid	Total Medicaid expenditure since RA ($)	n.d.
	Economic well-being	Youth's total income in past year ($)	0
Family	Receipt of services	Any family support services since RA	+++
	Parents' education and training	Any education or job skills training since RA	0
	Parents' employment and earnings	Either parent was employed for pay since RA	0
	Parents' economic well-being	Parents' income in calendar year after RA	0

Source: PROMISE 18-month follow-up survey and SSA administrative records.

Note: +/++/+++ The impact estimate is positive and statistically significant at the .10/.05/.01 level using a two-tailed *t*-test.

0 The impact estimate is not statistically different from zero at the .10 level using a two-tailed *t*-test.

n.d. = no data available.

Similarly, the program had no impact on the hours of key services received by parents and other family members, despite helping more families receive these services. The findings suggested that more treatment group families received these services than did control group families—but, on average, the treatment group spent no more time participating in services than did the control group. If the program was able to deliver higher quality services in similar hours, it may still lead to improved longer-term outcomes for the families in NYS PROMISE, despite the lack of a measured impact on the hours of services received.

The positive short-term impacts we found on services—along with the fact that many people in NYS PROMISE still were receiving services when they completed the 18-month survey—suggests that the program has the potential for longer-term positive impacts on youth and parent employment, earnings, and total income despite possible reductions in benefits. Through our planned five-year impact analysis, we will learn whether that potential is realized.

VIII. WI PROMISE

Summary of 18-month impacts and costs of WI PROMISE

- WI PROMISE expanded the share of youth who received transition services and made it more likely that their families would receive support services.
- It also increased the youth's receipt of job-related training, but did not affect youth's school enrollment.
- The program also increased the likelihood that youth had paid jobs, raised their annual earnings and total income within the first 18 months, and helped more youth obtain health insurance.
- The program had a positive impact on parents' likelihood of paid employment and total earnings in the past month.
- The program had no impacts on (1) the number of hours of key services that youth and families received, (2) the educational attainment of parents, (3) youth's self-determination and expectations about the future, (4) the parents' total income, and (5) youth's and families' reliance on Medicaid benefits and SSA payments.
- WI PROMISE's average annual cost per treatment group enrollee was $6,915, which includes the costs of providing services to both the youth and their family members.

A. Program overview and a review of findings from the process analysis

This section provides an overview of WI PROMISE and the findings from the program's process analysis (Selekman et al. 2018). The process analysis documented the program's structure and service model, and described its implementation during the first three years of operations, based on data from WI PROMISE's MIS, site visits, and key informant interviews.

1. Program overview

The Wisconsin Department of Workforce Development was the lead agency for WI PROMISE, with most program activities housed in its Division of Vocational Rehabilitation (DVR). The Wisconsin Department of Workforce Development partnered with the state's Departments of Health Services, Public Instruction, and Children and Families, and contracted with various organizations and consultants to deploy WI PROMISE statewide.

The program model for WI PROMISE emphasized four elements: (1) early engagement of youth in traditional DVR services; (2) intensive case counseling, consisting of case management and vocational counseling; (3) engagement of the whole family in case counseling and services, including work incentives and benefits counseling; and (4) trainings for youth, parents, and guardians. Trainings for youth focused on topics such as soft skills (including communication, enthusiasm and attitude, teamwork, networking, problem solving, and professionalism), self-advocacy, health literacy, and financial literacy training by financial coaches. A single training for parents and guardians focused on increasing their expectations for their children's employment prospects and navigating transition services and supports.

Contracted service providers delivered the benefits counseling and most of the trainings. WI PROMISE counselors—mostly current or former DVR counselors employed by DVR to work exclusively with PROMISE youth in the treatment group—conducted case counseling. Case counseling involved collaborating with participants to develop individual plans for employment, assembling resource teams to help youth pursue their goals, and referring participants to trainings and other services that could meet their needs. Counselors were also responsible for promoting the program's twin goals: that each youth have at least one paid work experience before the end of the program and that 50 percent of youth have a parent or guardian who also does so. To

facilitate these outcomes, counselors relied mostly on DVR-approved employment providers to furnish job development and placement services, as well as job training, coaching, and other employment supports. WI PROMISE counselors had an average caseload of 60 youth—much less than the typical caseload of 100 for traditional DVR counselors. Midway through program operations, WI PROMISE hired family advocates to support case counselors by working with youth and families participating in the program as well as those who either had never engaged with the program or had become disengaged from it.

WI PROMISE did not offer education-related services beyond what was currently available in the community. However, helping participating youth and their parents or guardians reach their education goals was a vital part of the program. WI PROMISE counselors and family advocates could connect families in the treatment group to DVR training grants that helped pay for postsecondary education, though very few PROMISE youth had received these grants. They could also work with representatives from the school system, who were part of the resource teams, and attend IEP meetings to ensure that youth had access to the supports they needed to succeed in their post-secondary transition plans.

2. Summary of findings from the process analysis

Three years after the program began operations in April 2014, WI PROMISE had engaged 86 percent of treatment group youth as participants in the program. The program offered an array of services and supports to treatment group youth and family members, but analysis of its MIS data revealed that take-up rates for most WI PROMISE services in the first three years of program operations were low relative to what the program had anticipated. Three years after the start of program operations, nearly all (94 percent) of WI PROMISE participants had engaged in case management, and 65 percent had been referred to job development services. Fewer participants were using other services: 50 percent had a resource team, 39 percent had a paid work experience, 36 percent had any contact with a benefits counselor, 28 percent had any contact with a financial coach, 14 percent had completed soft skills training, 8 percent had completed self-advocacy training, and 5 percent had completed health literacy training. This finding was in contrast to the goal of having all participating youth engaged in these services by the end of the program. Take-up rates were even lower in the Milwaukee region, where more than half of treatment group youth lived.

Four factors help explain this relatively low take-up. First, as project managers, staff, and service providers agreed during site visits, take-up was low largely because of the low volume and slow pace of referrals to trainings and other WI PROMISE services during the first year and a half of the program. Second, according to program staff, many of the treatment group youth and family members had trouble meeting basic needs, such as housing and food security, and counselors often refrained from making referrals to WI PROMISE services while dealing with such crises. Third, counselors did not have as much time to spend with participants as they needed because the benefit of their reduced caseload was offset by the focus on serving *all* members of the family. Fourth, program staff found that youth and families sometimes hesitated to engage in employment-promoting services because of the young age of the youth. Sometimes, engaging such youth also required time-consuming special efforts by the case counselors.

Moreover, in addition to this low take-up of WI PROMISE services, the opportunities for control group youth to receive transition services grew during program implementation. In the

early phase of implementation, there was little risk that control group members would receive the same type of case counseling that the program offered because WI PROMISE counselors were serving only treatment group youth. After the passage of the WIOA in 2014, several changes occurred that gave the control group more opportunities to receive services similar to those available to the treatment group. For example, in early 2017, DVR began prioritizing its services to transition-age youth with disabilities and modifying its traditional services to mirror many of those offered by WI PROMISE. Specifically, DVR began delivering the same soft skills and self-advocacy training, adopted the same approach to benefits counseling (offering shorter, more frequent benefit consultations), and trained its own counselors on how to deliver trauma-informed care in counseling,[60] just as it had trained PROMISE counselors.

Moreover, throughout program operations, the soft skills training WI PROMISE provided was available to both treatment group youth and other youth with disabilities, regardless of their involvement in DVR; this more flexible availability helped to fill slots in classes that were not filled with treatment group youth alone. To the extent control group youth participated, the opportunities for them, combined with the challenges the program faced in delivering intensive case counseling and employment services, may have muted the distinction between the treatment and usual services among youth enrolled in PROMISE.

B. Baseline characteristics of the youth survey respondent sample

The youth survey respondent sample for the interim impact analysis of WI PROMISE consists of 1,475 randomly assigned youth who completed an 18-month follow-up survey.[61] Except for data on youth's and parents' race and ethnicity, all baseline characteristics are based on data from SSA administrative records. About one-third of the youth in the sample were female (Table VIII.1, column A). At the time of random assignment, 39 percent of the youth were age 14, 27 percent of the youth were 15, and another 34 percent of the youth were 16. Roughly 95 percent expressed a preference for English as their written and spoken language. Eighty-eight percent lived with their parents; another 12 percent lived in their own households at the time they applied for SSI. The largest racial and ethnic group was non-Hispanic black (40 percent), followed by non-Hispanic white (33 percent) and Hispanic (14 percent). The racial-ethnic composition of the parents was roughly similar to that of the youth, though slightly more parents were non-Hispanic white than non-Hispanic black.

[60] Trauma-informed care is a model of behavioral health counseling that emphasizes the importance of recognizing the prevalence of trauma and its impact on the lives of people being served by practitioners (Substance Abuse and Mental Health Services Administration, 2014).

[61] Of the 2,024 youth enrolled in the WI PROMISE evaluation, 1,896 were randomly assigned—950 to the treatment group and 946 to the control group. Random assignment occurred immediately after the youth and family enrolled in WI PROMISE. Of the remaining 128 youth, 125 had siblings already enrolled in the evaluation and so were purposively assigned to the same groups as their siblings (65 treatment cases and 60 control cases); the other 3 youth were purposively assigned to the treatment group at the request of WI PROMISE. We did not include these 128 nonresearch cases in the impact analysis. The full research sample for the impact analysis consists of the 1,896 youth who enrolled in the evaluation and were randomly assigned to the treatment or control group. These 1,896 youth, less 5 youth (2 treatment and 3 control cases) who had died within 18 months of enrollment, constitute the denominator for calculating the 18-month survey response rate for WI PROMISE, which was 78 percent for the youth survey and 83 percent for the parent survey.

We grouped the youth's primary impairments, as recorded in baseline SSA administrative data, into five categories, the largest of which was other mental impairment (44 percent). The next largest group was intellectual or developmental disability (39 percent), followed by physical disability (12 percent); other or unknown disability (4 percent); and speech, hearing, or visual impairment (1 percent).

About 95 percent of those in our sample received SSI payments during the month of random assignment. At that point, the time since their initial SSI eligibility was 8.4 years, on average. Their age at the time of most recent SSI application was 7 years, on average. Twelve percent of the youth received OASDI payments. On average, the youth had received $7,558 in SSA payments during the year before their month of enrollment in the evaluation and random assignment. Twenty-two percent of our sample youth also lived in a household with multiple SSI-eligible children. Only 4 percent of youth had any earnings from employment in the year before random assignment; among parents, 71 percent had any earnings.

On average, most of these characteristics were similar for youth in the treatment and control groups, which was expected, given that the youth were randomly assigned to these groups. We compared the two groups across 25 characteristics at the time of random assignment (Table VIII.1, columns B and C) and found only one statistically significant difference between the two groups: the distribution of parent race/ethnicity categories. We expect to be able to identify unbiased estimates of program impacts by comparing the treatment and control groups while accounting for this difference in baseline characteristics through regression adjustment.

Table VIII.1. WI PROMISE: Baseline characteristics of the youth survey respondent sample (percentage, unless otherwise noted)

	All (A)	Treatment (B)	Control (C)	Difference (B-C)	*p*-value
Demographic characteristics					
Youth sex is female	34.0	34.1	33.8	0.3	0.90
Youth age at RA					
14 years	39.0	39.3	38.8	0.5	0.52
15 years	27.4	28.5	26.4	2.1	
16 years	33.6	32.3	34.8	-2.6	
Average age	15.4	15.4	15.4	-0.0	0.64
Youth language preference at SSI application					
English is preferred written language	95.4	94.6	96.1	-1.5	0.17
English is preferred spoken language	95.2	94.6	95.9	-1.2	0.26
Youth living arrangement at SSI application					
In parents' household	87.8	87.6	88.0	-0.5	0.18
Own household or alone	11.5	11.3	11.7	-0.4	
Another household and receiving support	0.7	1.2	0.3	0.9	
Youth race/ethnicity (from the 18-month survey)					
Non-Hispanic white	33.1	34.3	31.9	2.5	0.43
Non-Hispanic black	39.8	38.8	40.8	-2.0	
Hispanic	14.2	15.3	13.1	2.2	
Non-Hispanic American Indian	2.6	2.6	2.5	0.0	
Non-Hispanic other or mixed race	8.6	7.6	9.7	-2.1	
Missing	1.7	1.4	2.1	-0.7	
Enrolling parent age at RA (from the RA system)	41.6	41.7	41.5	0.3	0.51
Parent race/ethnicity (from the 18-month survey)					
Non-Hispanic white	42.3	43.4	41.2	2.1	0.04**
Non-Hispanic black	38.5	37.8	39.3	-1.5	
Hispanic	9.5	10.7	8.4	2.3	
Non-Hispanic American Indian	1.8	2.0	1.7	0.3	
Non-Hispanic other or mixed race	6.3	4.4	8.3	-3.8	
Missing	1.5	1.8	1.2	0.5	
Disability					
Youth primary impairment					
Intellectual or developmental disability	38.5	38.9	38.1	0.8	0.20
Speech, hearing, or visual impairment	1.3	1.6	0.9	0.6	
Physical disability	12.1	13.2	11.0	2.2	
Other mental impairment	44.0	41.6	46.4	-4.9	
Other or unknown disability	4.2	4.8	3.5	1.3	
SSA program participation					
Youth SSA payment status at RA					
Received SSI	95.4	95.2	95.5	-0.3	0.80
Received OASDI	11.5	11.2	11.9	-0.7	0.69
Years since youth's earliest SSI eligibility at RA	8.4	8.5	8.4	0.1	0.66
Youth age at most recent SSI application	7.4	7.4	7.5	-0.0	0.82
Youth payments in the year before RA ($)					
SSI	7,247	7,202	7,294	-92	0.44
OASDI	311	283	339	-56	0.34
Total SSI and OASDI	7,558	7,485	7,633	-148	0.16
Household had multiple SSI-eligible children	22.4	22.1	22.7	-0.6	0.80
Enrolling parent provided a valid SSN at RA	91.5	90.7	92.3	-1.6	0.29
Parents included in the SSA data analyses					
None	3.5	3.7	3.2	0.5	0.84
One parent	59.6	59.2	60.0	-0.8	
Two parents	36.9	37.0	36.8	0.2	
Parent SSA payment status at RA					
Any parent received SSI only	12.4	11.3	13.6	-2.3	0.63
Any parent received OASDI only	8.2	7.7	8.7	-0.9	
Any parent received both SSI and OASDI	7.8	7.9	7.8	0.0	
No parent received any SSA payments	68.1	69.4	66.7	2.6	
No parent was included in the SSA data analyses	3.5	3.7	3.2	0.5	
Earnings					
Youth had any earnings in the calendar year before RA	3.7	3.7	3.6	0.1	0.91
Youth earnings in the calendar year before RA ($)	29	36	23	13	0.32
Parent had any earnings in the calendar year before RA	70.6	70.3	70.9	-0.6	0.80
Parent earnings in the calendar year before RA ($)	13,822	13,981	13,659	321	0.72
Number of youth	1,475	746	729		

Source: SSA administrative records; PROMISE RA system; PROMISE 18-month follow-up survey.

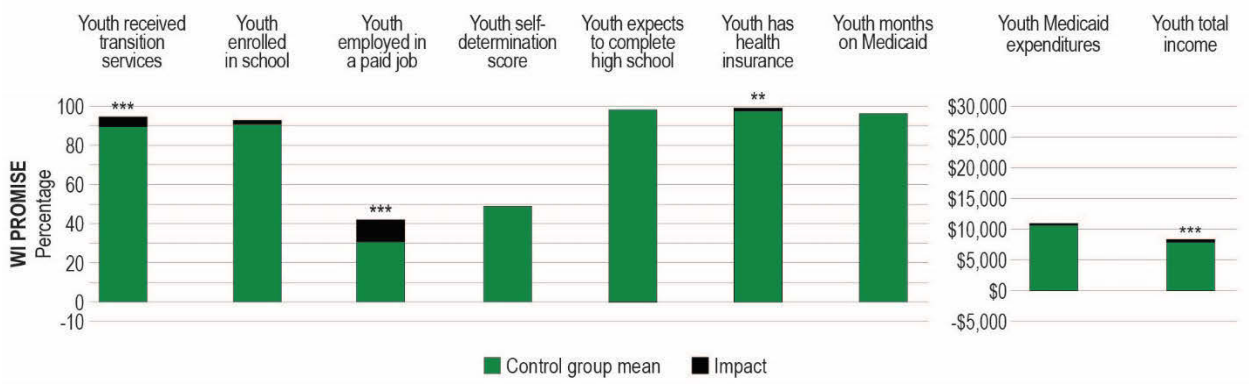
Note: The sample includes all youth who completed the PROMISE 18-month youth survey. We weighted statistics to adjust for survey nonresponse.

*/**/***Difference is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test or a chi-square test.

C. Impacts on youth outcomes 18 months after enrollment

The findings in this section show whether the services provided by WI PROMISE led to short-term impacts on youth outcomes in seven domains (Figure VIII.1). The impact estimates reveal that the program increased the share of youth who received transition services, their likelihood of paid employment since random assignment and annual earnings, their likelihood of having health insurance, and their total income from employment and SSA payments. However, the program had no impact on their school enrollment, self-determination and expectations, or Medicaid participation at 18 months after enrollment.

Figure VIII.1 WI PROMISE: Impacts on youth primary outcomes



*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

We also estimated impacts of WI PROMISE for subgroups of youth defined by their sex, age, and primary impairment when they enrolled in the evaluation. The subgroup analyses focused on the primary outcome(s) in each outcome domain. We found that WI PROMISE had differential impacts on youth's total Medicaid expenditures since random assignment by age at enrollment.

1. WI PROMISE connected more youth to transition services

Consistent with the intent of the PROMISE program model, WI PROMISE increased the receipt of transition services among youth with disabilities. These services included case management, employment-promoting services, benefits counseling, help with financial education, and education and training supports (Table VIII.2). With nearly 90 percent of control group youth having received any transition services during the 18 months after random assignment, there did not appear to be large barriers to youth receiving at least some transition services; nonetheless, the program increased this share by 5 percentage points.

The PROMISE 18-month survey also asked about the use of specific transition services. We found that WI PROMISE had positive impacts on youth's receipt of each type of service queried (Table VIII.2). It increased the receipt of case management by 31 percentage points—consistent with the program model, which stresses intensive family-centered case counseling. The program also increased the share of youth who received an array of other transition services, such as employment-promoting services (such as career planning, job skills training, help with a job search, and on-the-job supports), benefits counseling, help with financial education, and training in self-advocacy or self-determination. The program had relatively larger impacts on receipt of

particular types of transition services that the program made a service model. WI PROMISE did not affect receipt of school transition planning, which is not surprising because WI PROMISE did not provide education services beyond what was already available in the community (Selekman et al. 2018).

We also examined youth's use of a subset of these services—designated as "key" transition services—and their intensity: case management, employment-promoting services, benefits counseling, and help with financial education. About 64 percent of youth in the control group received any of these key services during the 18 months following random assignment. WI PROMISE increased the share of youth receiving these services by 20 percentage points. Similarly, on average, treatment group youth received these services from 1.7 providers, whereas control group youth received them from 1.1 providers; thus, the program had an impact of 0.6 providers. DVR contracted with five organizations and one individual to provide PROMISE services, so the program was designed to spread services across multiple providers (Selekman et al. 2018). Despite these positive effects, WI PROMISE had no impact on the number of hours of key services that youth received. On average, the total hours of key transition services received by control group youth—343 hours (or 4.4 hours per week on average during the 18-month follow-up period)—was not statistically different from those received by the treatment group. Further exploratory analysis revealed that the lack of impact on this outcome measure appears to have been driven by control group youth receiving services in school settings, so survey respondents' reports of service hours are more likely to conflate hours spent specifically on transition services with hours spent in usual school activities. When we focus on services received from nonschool-based providers, the treatment group youth received a larger number of hours of key transition services, on average, than the control group youth (see results in Appendix Table A.17).

WI PROMISE enhanced the perceived usefulness of key services received by the youth. In the control group, 61 percent of youth reported receiving some key services they considered to be somewhat or very helpful; the program increased the share of treatment group youth who reported the same by 20 percentage points. This exactly offsets the 20 percentage-point reduction in the share of youth with no key services reported, implying that all youth who received key transition services found them somewhat or very useful.

Analyzing the administrative records from the state's VR agency, we found that WI PROMISE greatly increased youth's participation in VR services (Table VIII.2). This finding is consistent with the program's service model, which involved enrolling treatment group youth in VR, and the fact that most program activities were housed in DVR. The program increased the share of youth who applied to DVR by 83 percentage points and the share who received VR services by 71 percentage points—nearly six and eight times higher, respectively, than in the control group.

Table VIII.2. WI PROMISE: Impact on the youth's receipt of transition services (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any transition services since RA	89.7	5.0	0.00***
Supplementary outcomes			
Types of services received since RA (italics indicate key transition services)			
Case management[a]	43.5	30.6	0.00***
School transition planning	67.9	2.6	0.27
Employment-promoting services[a]	54.0	17.0	0.00***
Benefits counseling[a]	8.4	12.6	0.00***
Financial education[a]	15.2	15.4	0.00***
Self-advocacy or self-determination training	38.1	7.3	0.00***
Help accessing education or training	31.8	6.8	0.00***
Life skills training	55.0	6.0	0.02**
Help with assistive technology	23.7	7.1	0.00***
Other services	8.2	4.0	0.01***
Received any key transition services since RA	63.8	19.9	0.00***
Hours of key transition services received since RA	342.5	2.7	0.94
Number of key transition service providers since RA	1.1	0.6	0.00***
Usefulness of key transition services received since RA			
No key service reported	36.2	-19.9	0.00***
No service rated somewhat or very useful	3.2	-0.2	
Any service rated somewhat or very useful	60.7	20.1	
VR services (from state VR agency data)			
Applied for VR services since RA	14.0	82.9	0.00***
Received VR services since RA	8.8	71.3	0.00***

Source: PROMISE 18-month follow-up survey; state VR agency data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of WI PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12f for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

[a]These services are identified as key transition services because they were required of the PROMISE programs. We asked more detailed questions about providers of these services in the PROMISE 18-month survey than providers of other transition services.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

2. WI PROMISE had no impact on the youth's school enrollment but helped more youth receive training

WI PROMISE had no impact on the primary outcome of the youth education domain: youth's school enrollment at the time of the 18-month survey. About 91 percent of control group youth were enrolled in school at the time of the survey (Table VIII.3). Additionally, 99 percent had ever been enrolled in school since random assignment. The program also had no impact on the share of youth who received a GED, certificate of completion, or high school diploma since random assignment. It had a small impact on the highest grade completed, increasing the share of youth who had finished grades 9 through 11 but reducing the shares of youth who had finished grades 8 and 12 (Appendix Table A.12f). The impact likely captures the fact that WI PROMISE staff worked with representatives from the school system and attended IEP meetings to ensure that youth had access to the supports they needed to succeed in school (Selekman et al. 2018).

WI PROMISE also increased youth's receipt of job-related training. About 20 percent of the control group had attended a training program or taken classes outside of school since random assignment to help them learn job skills or get a job; WI PROMISE increased this share by 20 percentage points. The program may have achieved this impact through its Skills to Pay the Bills training[62]—which intended to teach concepts such as communication, enthusiasm and attitude, teamwork, networking, problem solving, and professionalism—or through job development services to help youth secure and maintain employment (Selekman et al. 2018). Similarly, while only 2 percent of control group youth had received job-related training credentials since random assignment, the program increased the share of youth who had received such credentials by 8 percentage points.

Table VIII.3. WI PROMISE: Impact on the youth's education and job-related training (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Enrolled in school at the time of the survey	90.6	2.0	0.17
Supplementary outcomes			
Ever enrolled in school since RA	98.5	0.5	0.33
Received GED, certificate of completion, or high school diploma since RA	5.6	-0.8	0.47
Job-related training since RA			
Received any job-related training	19.8	19.8	0.00***
Received any job-related training credential	1.9	8.1	0.00***

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of WI PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12f for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

3. WI PROMISE increased the youth's paid employment and earnings

WI PROMISE increased the share of youth who held a paid job during the 18 months after random assignment (Table VIII.4). About 31 percent of youth in the control group reported having a paid job during the follow-up period; the program increased this rate by 11 percentage points. Note that paid employment since random assignment may be viewed partly as a measure of receipt of WI PROMISE services because, as required by the federal partners, PROMISE programs were to ensure youth had paid jobs while participating in the program. WI PROMISE also had a positive impact on the share of youth employed in any job (paid or unpaid). About 45 percent of control group youth were ever employed during the 18 months after random assignment; the program increased this share by 10 percentage points (Appendix Table A.12f).

The program also raised the rate of paid employment during the year immediately before the 18-month survey. About 26 percent of control group youth reported having a paid job during that year; WI PROMISE increased the rate by 14 percentage points. Over the same period, control

[62] DOL's Office of Disability Employment Policy developed the Skills to Pay the Bills curriculum.

group youth worked 2.2 hours per week in paid jobs (based on all youth, regardless of employment status); PROMISE increased this amount by 0.9 hours. Consistent with these higher numbers, we found that the program increased youth's earnings from all jobs during the year before the survey by $394—a 45 percent increase from the control group's average annual earnings of $882.

When we examined employment and earnings at the time of the follow-up survey, we found no impact on paid employment (Appendix Table A.12f). The program also had no impact on weekly hours worked or earnings at the time of the 18-month survey. These findings might be a result of most of the employed treatment group youth having had short-term jobs during the 18-month period after random assignment; among treatment group youth who had a paid job during the follow-up period, the average job tenure was 20 weeks (statistic not shown in the table).

Consistent with the annual employment findings based on survey data, our analyses of SSA data on earnings indicate that WI PROMISE had a positive impact on youth's employment and earnings during the calendar year after random assignment. We found that 29 percent of control group youth had earnings in that year; the program increased this share by 15 percentage points. Control group youth had average earnings of $555 during the same period; WI PROMISE increased this amount by $105 (or 19 percent).

Table VIII.4. WI PROMISE: Impact on the youth's employment and earnings (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Ever employed in a paid job since RA	30.6	11.2	0.00***
Supplementary outcomes			
Employment in the year before the survey			
Any paid employment	26.3	13.6	0.00***
Weekly hours worked in paid jobs	2.2	0.9	0.01**
Total earnings from all jobs ($)	882	394	0.01***
Ever employed in the calendar year after RA (from SSA data)	28.9	15.1	0.00***
Earnings in the calendar year after RA (from SSA data) ($)	555	105	0.09*

Source: PROMISE 18-month follow-up survey; SSA administrative records.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of WI PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12f for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

4. WI PROMISE had no impact on the youth's self-determination or expectations for the future

WI PROMISE had no impact on youth's self-determination as measured by our self-determination composite scale (Table VIII.5). We estimated that youth in the control group had an average score of 49 on a scale of 0 to 100; the score was the same for treatment group youth. We also analyzed youth's responses to questions in three subdomains of self-determination—

autonomy, psychological empowerment, and self-realization—separately, finding that the program had no impact on these areas.

The 18-month survey asked youth and parents about their expectations for the future regarding the youth's educational attainment and independence at age 25. Our primary measure in the expectations domain was whether youth expected to complete high school or receive a GED. We found that 98 percent of control group youth expected to do so. The program had no impact on this outcome, presumably because nearly all control group youth already expected to complete high school. The program increased the share of youth who expected to pursue postsecondary education by 9 percentage points. However, it had no impact on youth's expectations that they would live independently, be financially independent, or have a paid job at age 25. It appears that even though more than a quarter treatment group youth in WI PROMISE received financial coaching and were able to open an individual development account by the third year of program implementation (Selekman et al. 2018), on average those services did not affect the youth's expectations regarding financial independence at age 25.

Interestingly, the impacts on parent expectations differed from those of the youth. The program increased the share of parents who expected the youth to live independently, be financially independent, and have a paid job at age 25 by 4 percentage points each, but did not affect their expectations about youth pursuing postsecondary education. WI PROMISE also had no impact on whether parents believed it was important that the youth eventually become independent in some way—96 percent of parents in the control group held this belief even without the program. The positive impacts on parent expectations may reflect the specific curriculum WI PROMISE used in its parent training—*My Child Can Work*—which drew on other initiatives in the state that aimed to improve employment outcomes for transition-age youth with disabilities but did not focus on postsecondary education or independence (Selekman et al. 2018). Other research suggests that higher parental expectations regarding youth's employment are predictive of better youth employment outcomes in the long-run (Carter et al. 2012; Doren et al. 2012). Thus, the program's positive impacts on parents' expectations for their youth may support improved longer-term outcomes for the youth.

Table VIII.5. WI PROMISE: Impacts on the youth's self-determination and expectations (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcomes			
Self-determination score at the time of the survey (scale: 0 to 100)	48.8	-0.0	0.95
Youth expected to complete high school or GED at the time of the survey	98.1	-0.3	0.70
Supplementary outcomes			
Scores on subdomains of self-determination at the time of the survey			
Autonomy (scale: 0 to 300)	145.3	4.2	0.18
Psychological empowerment (scale: 0 to 100)	86.2	-0.7	0.56
Self-realization (scale: 0 to 100)	11.6	-0.8	0.41
At the time of the survey, youth expected to:			
Get post-secondary education	55.1	9.4	0.00***
Live independently at age 25	70.6	-0.1	0.96
Be financially independent at age 25	74.6	4.0	0.10
Be employed at age 25	92.0	1.3	0.38
At the time of the survey, parent expected youth to:			
Get post-secondary education	40.2	1.8	0.47
Live independently at age 25	42.3	4.4	0.09*
Be financially independent at age 25	57.6	4.1	0.09*
Be employed in a paid job at age 25	85.1	4.1	0.02**
Parent believed it important for youth to become independent in some way at the time of the survey	96.0	1.2	0.21

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of WI PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12f for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

5. WI PROMISE helped more youth obtain health insurance

The primary outcome in the analysis of youth's health is whether youth or parents reported that youth had health insurance. Though the vast majority of youth in the control group had health insurance (98 percent), WI PROMISE had a small positive impact—it increased this rate by 1 percentage point (Table VIII.6). The program had no impact on whether the youth needed help with or equipment for an activity of daily living or an instrumental activity of daily living. It also had no impact on youth's smoking, use of alcohol, marijuana, or illicit drugs.

Table VIII.6. WI PROMISE: Impact on the youth's health and health insurance (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Youth had health insurance at the time of the survey	97.6	1.4	0.03**
Supplementary outcomes			
Health insurance type at the time of the survey			
Public	92.2	2.0	0.14
Private	9.5	0.9	0.54
Needed help with or equipment for at least one ADL at the time of the survey	29.0	0.7	0.76
Needed help with or equipment for at least one IADL at the time of the survey	52.4	-1.5	0.57
Substance use in the 30 days before the survey			
Smoking	8.7	-1.1	0.44
Alcohol	4.0	-0.4	0.69
Marijuana	6.5	-1.3	0.26
Other illicit drug	0.5	-0.2	0.45

Source: PROMISE 18-month survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of WI PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12f for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

6. WI PROMISE had no impact on the youth's Medicaid enrollment or expenditures

WI PROMISE had no impact on the percentage of months that youth were enrolled in Medicaid or the total Medicaid expenditures during the 18 months after random assignment (Table VIII.7). On average, control group youth had Medicaid coverage for 96 percent of the 18-month period—virtually the same as that for youth in the treatment group. Youth in the control group had $10,648 in total Medicaid expenditures, on average; the program had no impact on this outcome. These findings are not surprising because SSI recipients in Wisconsin are automatically eligible for Medicaid (SSA 2017), and we would not expect a marked shift in either SSI eligibility or Medicaid enrollment within 18 months of the youth's enrollment in PROMISE.

The program also had no impact on enrollment in particular Medicaid plans (comprehensive managed care, 1915(c) waiver programs, capitated behavioral health plans) or Medicaid payments (any payments, average monthly fee-for-service payments, or average monthly capitated payments). Impacts on Medicaid expenditures differed by the youth's age at enrollment (Table A.13.f). The program increased expenditures among youth who were age 16 at enrollment but had no impact on expenditures among those who were ages 14 or 15 at enrollment. We did not find differences in Medicaid expenditures by youth's sex[63] or primary impairment.

[63] Although the difference in the impacts by sex was statistically significant, neither subgroup-specific impact differed significantly from zero.

Table VIII.7. WI PROMISE: Impact on the youth's use of Medicaid (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcomes			
Percentage of months enrolled in Medicaid since RA	96.2	0.1	0.84
Total Medicaid expenditures since RA ($)	10,648	284	0.72
Supplementary outcomes			
Enrollment since RA			
Medicaid managed care	0.4	0.4	0.24
Medicaid 1915(c) waiver	3.5	0.5	0.56
Medicaid capitated behavioral health	5.4	0.4	0.69
Medicaid payments since RA			
Any Medicaid payments	98.2	-0.2	0.77
Average monthly Medicaid payments ($)	592	16	0.72
Average monthly fee-for-service payments ($)	502	10	0.79
Average monthly capitated payments ($)	90	6	0.70

Source: State Medicaid data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of WI PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12f for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

7. WI PROMISE raised the youth's total income

Our primary measure of youth's economic well-being was the total income they received during the year before the 18-month survey from paid jobs (based on the 18-month survey data) and SSA payments (based on SSA administrative data). WI PROMISE increased the amount youth received from earnings and SSA payments by $471 over the $7,852 average received by control group youth during the reference period (Table VIII.8). We also measured the youth's annual income during the calendar year after random assignment by using SSA data on annual earnings combined with SSA payments. The average annual income for the control group was $7,375; WI PROMISE increased this by $214. The positive impact on youth's total income was driven by the program's positive impact on earnings from paid jobs (Table VIII.4); WI PROMISE had no impact on youth's likelihood of receiving SSA payments or the amounts they received.

WI PROMISE also affected a categorical measure of youth household income from the 18-month survey. The program reduced the share of youth who lived in households with an annual income of less than $10,000 by 6 percentage points while increasing the share who lived in households with income greater than $20,000. The program had no impact on the share of youth that resided with a parent.

Table VIII.8. WI PROMISE: Impact on the youth's economic well-being (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Youth total income (earnings and SSA payments) in the year before the survey ($)	7,852	471	0.01***
Supplementary outcomes			
SSA payments in 18-month period since RA (from SSA data)			
Received any SSA payments	97.1	0.1	0.88
Total SSA payments ($)	10,861	129	0.32
Income in the calendar year after RA (from SSA data) ($)	7,375	214	0.05*
Youth resided with parent at the time of the survey	96.6	-0.8	0.42
Household income in the calendar year before the survey			
Less than $10,000	33.6	-5.5	0.07*
$10,000 to $19,999	31.1	0.1	
$20,000 to $29,999	19.1	2.5	
$30,000 or more	16.3	2.9	
Any household member who participated in non-SSA public assistance programs at the time of the survey	66.0	0.6	0.81

Source: PROMISE 18-month follow-up survey; SSA administrative records.

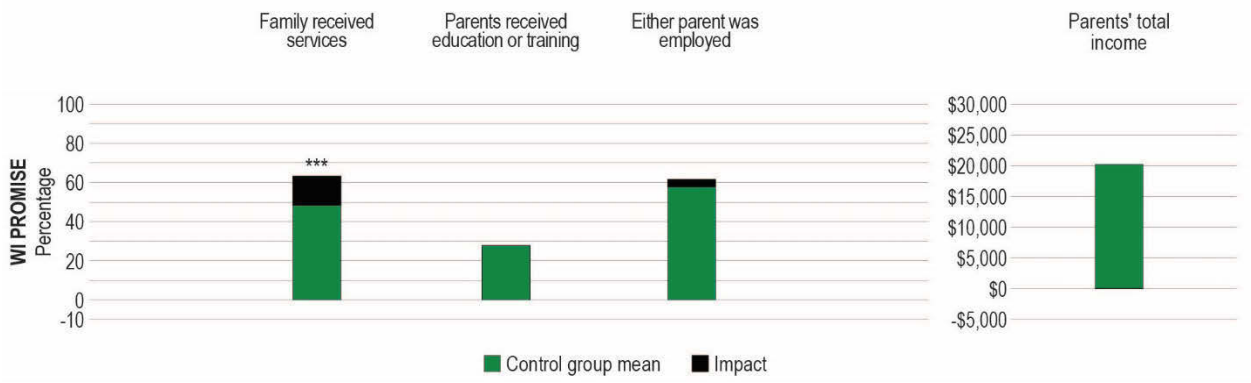
Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of WI PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12f for sample sizes for all outcomes. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

D. Impacts on family outcomes 18 months after enrollment

The findings in this section show whether the services provided by WI PROMISE led to short-term impacts on parent and family outcomes in four domains (Figure VIII.2). The impact estimates reveal that the program increased the receipt of support services by parents and family members other than the SSI youth and parents' earnings but had no impact on parents' education and training or total income from earnings and SSA payments. We also found that WI PROMISE had no differential impact on the primary family outcomes by subgroups defined by the youth's sex, age, and primary impairment when they enrolled in the evaluation.

Figure VIII.2. WI PROMISE: Impacts on parent and family primary outcomes



*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

1. WI PROMISE increased families' receipt of support services

Consistent with its program model, we found that WI PROMISE helped engage more families in support services (Table VIII.9). In the control group, 48 percent of all parents reported that a family member other than the SSI youth received services during the 18 months after random assignment. The program increased this share by 15 percentage points. It also had positive impacts on families' receipt of an array of specific services, such as case management, education or training supports, employment-promoting services, benefits counseling, help with financial education, and parent training and information on youth's disability.

Additional exploratory analysis we conducted show that the impact on family receipt of support services was larger for families with multiple PROMISE-enrolled youth that for families with a singled PROMISE-enrolled youth (results not shown in a table). Although this suggests that some of the increased family service receipt reflects the WI PROMISE program's services to multiple PROMISE-enrolled youth, the impact on family service receipt was positive and significant for families with a single PROMISE-enrolled youth.

We examined the likelihood of family members receiving a subset of these services—designated as "key" support services—and their intensity: case management, employment-promoting services, benefits counseling, and financial education. About 30 percent of parents in the control group reported that their family members received these services during the 18 months following random assignment. WI PROMISE increased the share of treatment group families receiving key services by 21 percentage points. These families also reported receiving key services from 0.3 more providers than did the control group families. The program had no impact on the number of hours of service receipt by families; the estimated impact was negative but not statistically different from that of the control group.

WI PROMISE also enhanced the perceived usefulness of key services received by the families. The impact estimates for this outcome suggest that as the program increased the share of families receiving key services, more of them found those services to be somewhat or very useful.

Based on our analysis of state VR agency data, WI PROMISE had no impact on the enrolling parents' application to or receipt of VR services during the 18 months after random

assignment. Less than 3 percent of control group parents applied for VR services and about 1 percent received VR services after random assignment. Similar shares of treatment group parents applied for and received VR services. Although program staff developed family service plans that were similar to individualized plans for employment developed for VR participants, very few parents were eligible for VR services (Selekman et al. 2018).

Table VIII.9. WI PROMISE: Impact on the family's receipt of services (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any family support services since RA	48.1	15.1	0.00***
Supplementary outcomes			
Types of family support services received since RA (italics indicate key support services)			
Case management[a]	17.2	19.9	0.00***
Education or training supports	12.7	5.3	0.00***
Employment-promoting services[a]	13.5	7.1	0.00***
Benefits counseling[a]	12.5	20.3	0.00***
Financial education[a]	7.4	12.7	0.00***
Parent training and information on youth's disability[a]	25.8	12.0	0.00***
Parent networking support	12.5	2.2	0.20
Any key support services received since RA	30.3	21.3	0.00***
Hours of key support services received since RA	44.6	-12.6	0.25
Number of key support service providers since RA	0.5	0.3	0.00***
Usefulness of key services received since RA			
No key service reported	69.7	-21.4	0.00***
No service rated somewhat or very useful	0.9	1.3	
Any service rated somewhat or very useful	29.4	20.1	
Enrolling parent's engagement with VR services (from state VR agency data)			
Applied for VR services since RA	2.5	0.5	0.50
Received VR services since RA	1.2	1.0	0.10

Source: PROMISE 18-month follow-up survey; state vocational rehabilitation agency data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of WI PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12f for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the first category, is based on a chi-square test across all categories.

[a]These services were required of the PROMISE programs. With the exception of parent training and information on youth's disability, we asked more detailed questions about providers of these services in the PROMISE 18-month survey than providers of other support services. The outcome measures related to key support services presented in this table reflect all required services except parent training and information on youth's disability.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

2. WI PROMISE had no impact on parents' education or training

About 28 percent of parents in the control group reported that either they or their spouse had completed or attended education or job skills training during the 18 months after random assignment. This outcome was nearly the same for the treatment group, indicating that WI PROMISE had no impact on the primary outcome in the domain of parents' education and training (Table VIII.10). The program also had no impact on either parents' enrollment in

education or job skills training or their attainment of a diploma, GED, certificate, or professional license since random assignment.

Table VIII.10. WI PROMISE: Impact on the parents' education and training (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Received any education or job skills training since RA	27.7	0.1	0.95
Supplementary outcomes			
Either parent was enrolled in education or job skills training at the time of the survey	8.9	1.7	0.26
Either parent received a diploma, GED, certificate of completion, or professional license since RA	10.3	-0.9	0.54

Source: PROMISE 18-month follow-up survey.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of WI PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12f for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

3. WI PROMISE likely increased parents' employment and earnings

Consistent with the program model, WI PROMISE helped connect more parents to paid jobs during the 18-month follow-up (Table VIII.11). About 58 percent of parents in the control group reported that either they or their spouse had worked for pay at any point since random assignment. Even though the estimated impact on this primary outcome was only on the margin of statistical significance (*p*-value of 0.13), we found supporting evidence of positive impacts of the program on supplementary measures of parents' employment and earnings.

We found that the program had positive impacts on parents' employment and earnings in the past month. About 53 percent of parents reported that they or their spouse had worked for pay in the past month; WI PROMISE increased that rate by 5 percentage points. Furthermore, the program raised parents' earnings. Parents in the control group reported that they and their spouse combined had earned $930 in the past month, on average; WI PROMISE increased these earnings by $208, or 22 percent. These findings are consistent with the program's goal that at least 50 percent of youth have a parent or guardian who had a paid work experience before the end of the program. However, the program had no impact on parents' earnings based on SSA records for the calendar year after random assignment, nor on whether parents had access to health insurance through their jobs. The difference between the level of earnings as well as impacts on earnings based on survey and SSA data may reflect the difference in the reference period for each measure (the month preceding the survey versus calendar year after random assignment).

Table VIII.11. WI PROMISE: Impacts on the parents' employment and earnings (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Either parent was employed since RA	57.7	3.8	0.13
Supplementary outcomes			
Either parent was employed in the month before the survey	52.7	5.3	0.03**
Parents' earnings from all jobs in the month before the survey ($)	930	208	0.00***
Parents' earnings in the calendar year after RA (from SSA data) ($)	17,350	65	0.90
Either parent was offered health insurance through a job held in the month before the survey	26.3	-0.2	0.94

Source: PROMISE 18-month follow-up survey; SSA administrative records.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of WI PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12f for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

4. WI PROMISE had no impact on parents' annual total income

Our primary outcome for parents' economic well-being is their total income in the calendar year after random assignment, calculated as the sum of their earnings and benefits from SSI and OASDI programs (for the enrolling parents and their spouses, if applicable). On average, parents' total income during this year for the control group was $20,160; WI PROMISE had no impact on this measure of income (Table VIII.12).

In supplementary analyses, we examined whether WI PROMISE affected parents' receipt of SSA payments and their Medicaid outcomes. We found that the program had no impact on either whether they received any SSA payments or the amount of SSI, OASDI, or combined SSI and OASDI payments. The program also did not have an impact on whether parents were enrolled in Medicaid. Considering the target population for PROMISE, it is not surprising that 87 percent of parents in the control group were enrolled in Medicaid—parents must have low income for their children to be eligible for SSI. Additionally, Medicaid is a widely known program; most parents would likely be aware of their potential eligibility for it if their children were enrolled. On average, Medicaid claims were $7,724 for the control group parents; the program had no impact on this outcome. It also had no impact on parents' enrollment in 1915(c) waiver plans but did increase the share of parents enrolled in comprehensive managed care by 4 percentage points.

Table VIII.12. WI PROMISE: Impact on the parents' economic well-being (percentage, unless otherwise noted)

	Control mean	Impact	*p*-value
Primary outcome			
Parents' total income in the calendar year after RA (from SSA data) ($)	20,160	-73	0.89
Supplementary outcomes			
Parents' SSA payments in 18-month period since RA (from SSA data)			
Received any payments	31.6	-2.0	0.35
Total payments ($)	4,447	-201	0.55
Medicaid enrollment and payments since RA (from state Medicaid program data)			
Enrolled in Medicaid	86.9	0.5	0.76
Enrolled in Medicaid comprehensive managed care	58.2	3.8	0.10*
Enrolled in Medicaid 1915(c) waiver	2.2	0.5	0.53
Total Medicaid payments ($)	7,724	270	0.61

Source: PROMISE 18-month follow-up surveys; SSA administrative records; state Medicaid data.

Note: This table shows the observed means for the control group, which is our estimate of the counterfactual, and the regression-adjusted impact estimates of WI PROMISE (see Chapter II, Section A). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We used baseline characteristics as explanatory variables in the regression model. See Appendix Table A.12f for sample sizes for all outcomes. For outcomes measured using data from the 18-month survey, we weighted statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test.

*/**/***Impact estimate is significantly different from zero at the .10/.05/.01 level.

E. Cost analysis results for WI PROMISE

This section summarizes our findings from the cost analysis of WI PROMISE, with a focus on cost by input category and program component, as well as the cost per treatment group enrollee and per participant. We described our methods for this analysis in Chapter II, Section B.

The average annual cost of the resources used by WI PROMISE to deliver services during the one-year accounting period we targeted (October 1, 2016 through September 30, 2017) was $6,915 per enrolled treatment group youth and their families. We estimate the program's average cost per enrollee will be $22,100 over the entire service delivery period (October 1, 2014 through September 30, 2018).

1. Costs by input category

Table VIII.13 summarizes the costs of WI PROMISE by input category during the accounting period. Nearly half—49 percent—of the costs were other direct costs. More than three-quarters of the costs in this category involved purchased services for PROMISE youth and their families. The Wisconsin Board for People with Developmental Disabilities (a steering committee member that provided PROMISE family advocates, hosted community conversations, and facilitated the executive committee) accounted for the largest portion of the costs for purchased services. The remaining portion of other direct costs went to enrollee payments, which were participant-specific service costs such as sign language interpreters, vision aids, on-the-job supports, and assessments.

The costs of donated goods and services constituted the second largest share (22 percent) of program costs. Enrollee-specific services funded by DVR accounted for the vast majority of the costs in this input category. The large portion of services donated by DVR reflects the program's

design; because DVR was the host agency for WI PROMISE and all WI PROMISE youth were enrolled in DVR, those services were provided to them as regular DVR consumers. The remaining costs in this input category were for the in-kind supervision of PROMISE staff by 11 directors at the overseeing agency.

The third largest proportion of costs (17 percent) was in the labor input category, which consisted of the labor hours of the program director, the program staff supervisor, and 31 direct service providers offering case management and coordination services. These labor costs did not include PROMISE family advocates, whose costs are part of the purchased services from the Wisconsin Board for People with Developmental Disabilities.

Of the input cost categories, the smallest was indirect costs, which accounted for just 11 percent of WI PROMISE costs and included operational costs for facilities, travel, and office supplies.

Table VIII.13. WI PROMISE costs, by input category, October 2016 through September 2017

Category	Percentage of WI PROMISE total cost	Cost amount
Other direct costs	49.1	$3,457,191
Costs of donated goods and services	22.4	$1,577,229
Labor costs	17.2	$1,208,479
Indirect costs	11.3	$796,961
Total	**100.0**	**$7,039,860**

Source: WI PROMISE cost data.

Note: Data reflects costs from October 1, 2016 through September 30, 2017. The total sum may differ from the sum of figures in the table due to rounding.

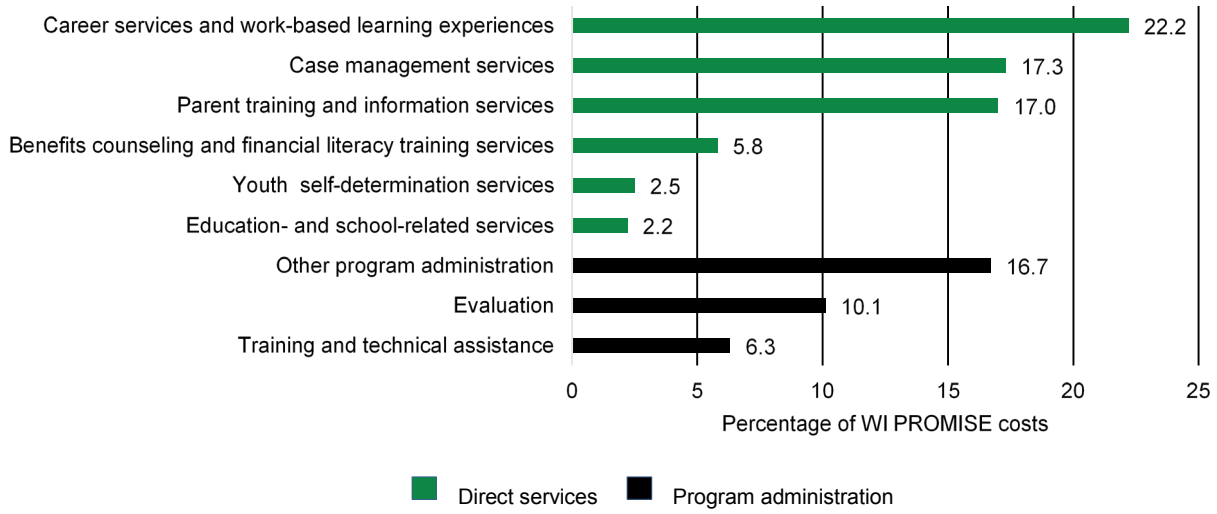
2. Costs by program component

The six service components accounted for nearly 67 percent of the total cost of WI PROMISE during the accounting period (Figure VIII.3). Among the direct service components, costs were largest for career services and work-based learning experiences (22 percent of total costs). Although the process analysis showed that program participants used case management more than any other service, career services and work-based learning experiences could have been more costly because DVR purchased those services from community vendors. Case management and parent training and information services each represented 17 percent of costs, thus accounting for the second and third largest portions of direct service costs. This pattern aligns with the program's emphasis on engaging the whole family in counseling and services. Benefits counseling and financial literacy training made up the next largest proportion of direct service costs, which included the benefits specialists from Employment Resources, Inc. and the work incentives benefits analysis this firm conducted with PROMISE participants. The program had few service costs associated with youth self-determination services, or education and school-related services. This pattern reflects the program's reliance on DVR funds rather than PROMISE funds to support education and school-related services.

Program administration accounted for 33 percent of the total cost of WI PROMISE. Of the three components of program administration—evaluation, training and technical assistance, and

other program administration—the other program administration component accounted for the largest share of these costs (17 percent of total program costs), with purchased services from the Wisconsin Department of Health Services responsible for nearly half of these costs. This department primarily coordinated MIS activities, such as storing and housing data, and participated in the steering committee. The other program administration component also included costs related to the executive and steering committees and general administration. The program's evaluation costs (10 percent of total program costs) constituted time spent supporting the national evaluation, the oversight and support provided to the formative evaluator, and the University of Wisconsin's purchased evaluation services. Training and technical assistance costs (6 percent of total program costs) included activities related to the receipt or delivery of staff training to improve their skills in working with youth, families, and the community.

Figure VIII.3. WI PROMISE costs, by program component, October 2016 through September 2017



Note: Data reflect costs from October 1, 2016 through September 30, 2017.

3. Costs per treatment group enrollee and per participant

The treatment group included 1,018 youth (both research and nonresearch cases); of those, 878 participated in WI PROMISE services. For both enrollees and participants, we assumed an average duration of participation in the program of 3.2 years, estimated based on the average length of potential participation for enrollees from the random assignment date through September 30, 2018. Dividing the total program cost for the one-year accounting period by the number of enrolled and participant youth, we obtained an average annual program cost of $6,915 for enrolled youth and their families, and $8,018 for participating youth and their families. Applying this annual program cost to the average duration of participation, we found a total program cost of $22,100 per enrollee and $25,624 per participant in services, on average, over the program's entire service delivery period (not just the one-year accounting period). The costs

per enrollee and participant include substantive services provided to family members and youth.[64]

F. Summary of findings and discussion

WI PROMISE had positive impacts on the primary outcomes most closely related to service delivery and also affected a few key employment outcomes by 18 months after enrollment in the evaluation (Table VIII.14). The program increased the likelihood that both youth and their family members received transition and family support services, and the likelihood that youth engaged in paid employment. It also increased youth's likelihood of having health insurance and their total income. In addition, it had a positive impact on parents' likelihood of paid employment and total earnings in the month preceding the survey. The program had no impact on youth's education, self-determination and expectations, or use of Medicaid, nor on parents' education, training, or income in the calendar year after random assignment.

Table VIII.14. WI PROMISE: Summary of impacts on primary outcomes, by domain

	Domain	Primary outcome	Impact summary
Youth	Receipt of transition services	Receipt of any transition services	+++
	Education	Enrollment in school at the time of the survey	0
	Employment and earnings	Ever employed in a paid job since RA	+++
	Self-determination and expectations	Self-determination scale (0 to 100)	0
	Self-determination and expectations	Youth expects to complete high school/GED	0
	Health and health insurance	Youth has health insurance	++
	Use of Medicaid	Percentage of months enrolled in Medicaid since RA	0
	Use of Medicaid	Total Medicaid expenditure since RA ($)	0
	Economic well-being	Youth's total income in past year ($)	+++
Family	Receipt of services	Any family support services since RA	+++
	Parents' education and training	Any education or job skills training since RA	0
	Parents' employment and earnings	Either parent was employed for pay since RA	0
	Parents' economic well-being	Parents' income in calendar year after RA	0

Source: PROMISE 18-month follow-up survey and SSA administrative records.

Note: +/++/+++ The impact estimate is positive and statistically significant at the .10/.05/.01 level using a two-tailed *t*-test.
0 The impact estimate is not statistically different from zero at the .10 level using a two-tailed *t*-test.

The 18-month findings on WI PROMISE's impact on youth and parents reflect the program's focus on delivering family-centered case counseling and employment services. It improved several short-term outcomes that can be considered either program services or outputs, including the receipt of services, paid employment, and earnings. These positive impacts are indicative of the program achieving its intended outputs in these critical areas. The positive impacts on youth's total income and parents' recent earnings also suggest that providing a

[64] The average annual and total program costs derived from the data presented in the text differ slightly due to rounding. These statistics are calculated based on an average monthly program cost of $576 for enrolled youth and their families and $668 for enrolled youth and their families, and an average participation duration of 38.4 months (3.2 years).

comprehensive suite of services to both youth and parents has broadly improved their economic well-being.

It is somewhat surprising that the program had no impact on the number of hours of key services received by parents and other family members, considering that the program did help more families receive these services. The findings suggest that more treatment group families received these services than did control group families—on average, however, the treatment group families spent less time participating in those services than their control group counterparts.

The findings also reflect youth's low take-up of some services, such as self-advocacy and soft skills trainings, benefits counseling, and financial literacy training (Selekman et al. 2018). If youth were not using these services much during the first 18 months of enrollment, it could explain the lack of impacts on short-term outcomes such as youth self-determination and number of hours of key transition services received. However, positive impacts on employment and earnings for youth suggest that the program may have been able to deliver higher quality services in fewer hours, in which case it might still lead to improved longer-term outcomes for youth and families enrolled in WI PROMISE. For many of the youth outcomes we analyzed, 18 months after enrollment is too early to detect meaningful impacts. We will revisit most of the areas in which the program had no impact—such as school enrollment and receipt of SSA payments—in the five-year follow-up analysis to determine whether any impacts emerged with the passage of time. The positive short-term impacts we found—along with the fact that many people in WI PROMISE still were receiving services when they completed the 18-month survey—suggests that the program has the potential for longer-term positive impacts on youth and parent employment, earnings, and total income despite possible reductions in benefits. Through our planned five-year impact analysis, we will learn whether that potential is realized.

IX. SUMMARY AND CONCLUSIONS

The federal partners' broad objective for the PROMISE initiative is to support the long-term economic self-sufficiency of transition-age SSI youth through improvements in their education and employment outcomes. The design and delivery of program services were guided by the requirements stipulated in the PROMISE grant solicitation, which included partnership and coordination between state agencies in the provision of a core set of transition and support services for youth and their families. The required core services were case management, benefits counseling and financial education, career and work-based learning experiences, and parent training and information. These core services were expected to address the personal and environmental factors believed to influence the educational, employment, and financial outcomes of SSI youth and their families, and ultimately lead to long-term improvement in those outcomes.

In this chapter, we summarize the findings from the PROMISE national evaluation's interim impact and cost analyses, and discuss key aspects of those findings. We conclude with a discussion of the implications of the evaluation findings for policy and practice.

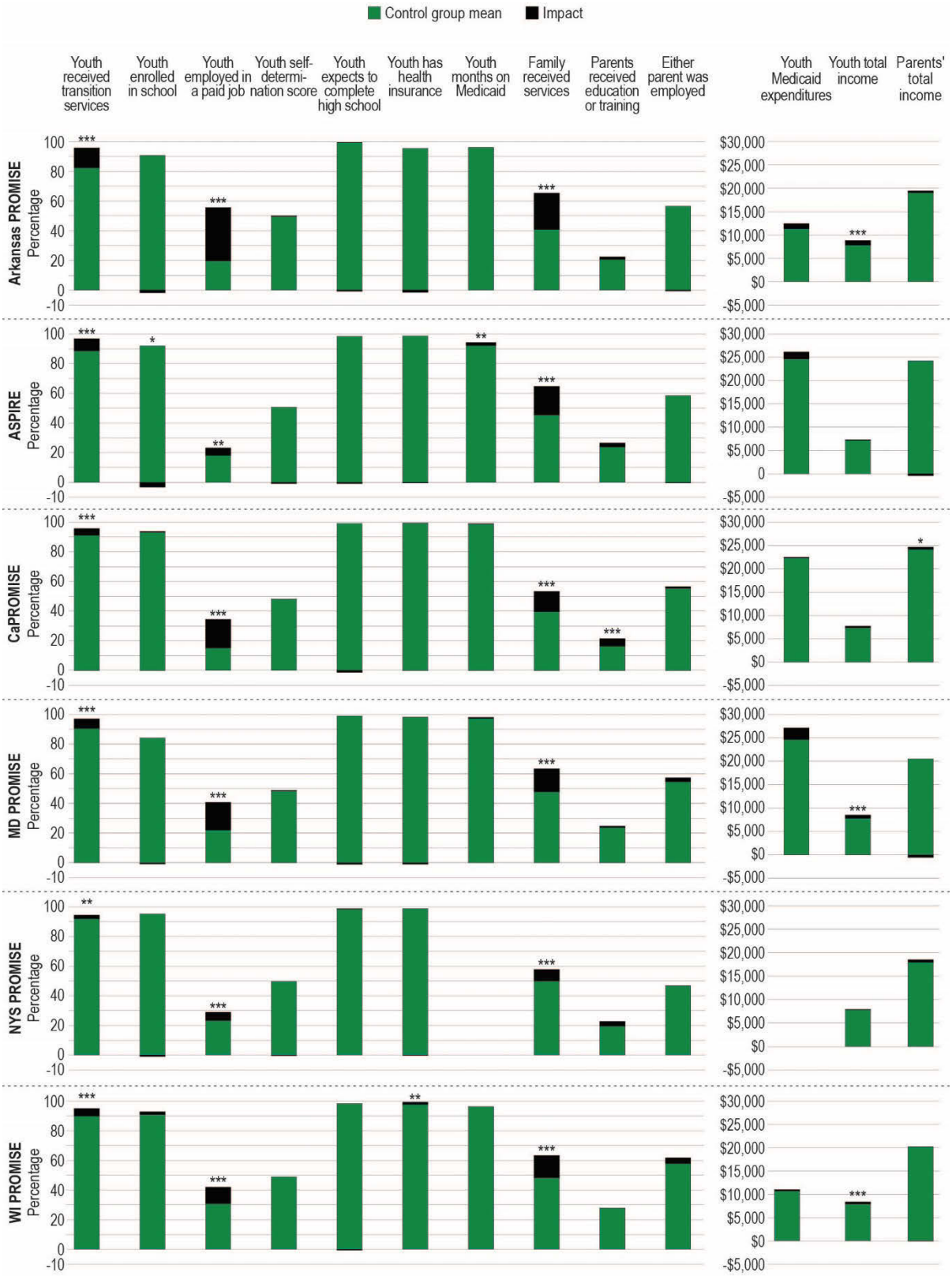
A. Summary of the evaluation findings

The national evaluation of the PROMISE programs used a random assignment design for estimating the impacts of each of the six programs. This report presents findings from our analysis of impacts on youth and family outcomes based on data representing 18 months after the eligible youth and families enrolled in the evaluation. Here we summarize the findings from the 18-month impact and cost analyses across the six PROMISE programs.

The estimated impacts on primary youth and family outcomes were generally similar across the six PROMISE programs (Figure IX.1). Each of the six programs increased youth's receipt of transition services, youth's paid employment, and family member receipt of support services during the first 18 months after enrollment. None of the programs increased the number of hours of key services that youth and families received, but four programs (Arkansas PROMISE, ASPIRE, CaPROMISE, and WI PROMISE) increased the likelihood that youth applied for VR services (Tables III.2, IV.2, V.2, VI.2, VII.2, VIII.2). Each program had a positive impact on youth's receipt of job-related training or training credentials (Tables III.3, IV.3, V.3, VI.3, VII.3, VIII.3). Four of the programs (Arkansas PROMISE, CaPROMISE, MD PROMISE, and WI PROMISE) had positive impacts on youth's total income from earnings and SSA payments. Only CaPROMISE reduced youth's receipt of any SSA payments (Table V.8), and increased parents' education and job-related training. By 18 months after enrollment, none of the programs had a desirable impact on youth's self-determination and expectations or youth's reliance on Medicaid, nor on parents' total income.[65] We also found that impacts on youth and parent outcomes varied for specific subgroups of youth, particularly by their age at enrollment, and primary impairment, and, for ASPIRE, by state.

[65] We received data from state Medicaid agencies for all PROMISE programs except NYS PROMISE. For ASPIRE, we received parent Medicaid data from all states except Arizona.

Figure IX.1. PROMISE program impacts on primary outcomes



Source: PROMISE 18-month survey, SSA administrative records.
*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.

We analyzed the costs of PROMISE program services during a period when operations were in a relatively steady state—that is, when the programs were neither ramping up nor winding down services. Although we will not conduct a formal benefit-cost analysis of the PROMISE programs until the five-year impact findings are available, conducting the cost analysis now has allowed us to obtain the detailed cost and programmatic data needed for that analysis. The average annual cost per enrollee ranged from $5,490 for ASPIRE to $9,148 for Arkansas PROMISE (Figure IX.2). These costs include the estimated annual costs of providing services to treatment group youth and their family members.

Figure IX.2. Costs per treatment group enrollee, by PROMISE program

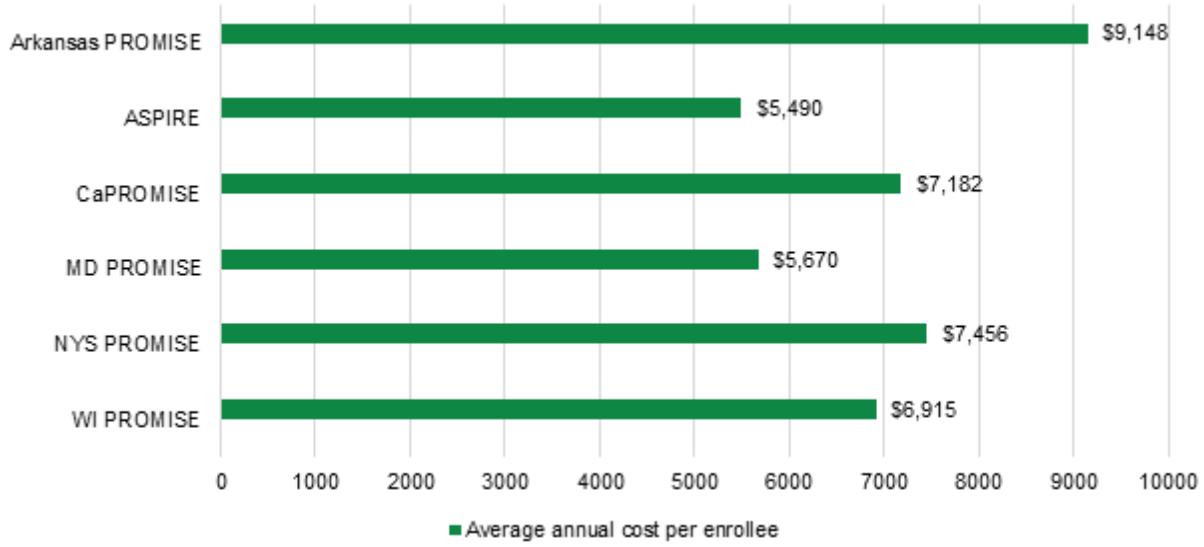


Table IX.1 shows the share of costs by program component for each PROMISE program (see Appendix Table A.20 for the definitions of program components). Direct services delivered to youth and their families (including services delivered by program staff, by contractors, and through formal nonmonetary agreements with other organizations) accounted for the majority of program costs for each PROMISE program. At the same time, the share of costs accounted for by direct services varied across programs—ranging from 52 percent of the total costs for NYS PROMISE to 71 percent for Arkansas PROMISE, with the remaining share accounted for by program administration costs. Among direct services, case management services constituted the largest share of total costs in all programs, followed by career services and work-based learning experiences in most programs.

Table IX.1. Share of PROMISE costs by program component (percentages)

Program component	Arkansas PROMISE	ASPIRE	CaPROMISE	MD PROMISE	NYS PROMISE	WI PROMISE
Direct services	**71**	**58**	**55**	**60**	**52**	**66**
Case management services	27	40	23	19	27	17
Career services and work-based learning experiences	27	2	10	15	9	22
Education- and school-related services	5	2	6	5	2	2
Benefits counseling and financial literacy training services	2	6	3	10	0	6
Youth self-determination services	6	6	6	10	1	2
Parent training and information services	4	2	7	1	13	17
Program administration	**29**	**42**	**44**	**41**	**48**	**33**
Program administration: evaluation	4	5	8	13	12	10
Program administration: training and technical assistance	8	17	21	17	13	6
Program administration: other	17	20	15	11	23	17

B. Discussion of the evaluation findings

The positive short-term impacts of the PROMISE programs on youth's receipt of transition services, youth employment, and families' receipt of support services suggest that the programs have the potential for longer-term positive impacts on youth and family outcomes. We might also expect longer-term positive impacts if service delivery continued to improve over time. All of the programs experienced early implementation challenges, which they attempted to address as they gained more experience with their service models and the families on their caseloads. In addition, during the first two years of implementation, the programs focused heavily on recruiting and enrolling large numbers of families in the study, which might have limited the ability to provide services to early treatment group enrollees. These factors may have constrained some of the impacts we observe as of 18 months after enrollment. Furthermore, it might take additional time for services to translate into impacts for some youth and family outcomes. The five-year impact analysis will indicate whether the important early impacts we identified translate into meaningful and persistent improvements in the employment and economic well-being of youth and families enrolled in the PROMISE programs and whether new impacts emerge. Below we highlight key findings across the programs and provide additional discussion of their significance and possible explanations for them.

1. Programs' impacts on services for youth and their families are in line with the core components of services required under the PROMISE initiative

All six PROMISE programs increased services to youth and their families, as intended. Even though each program varied in the way it delivered youth transition services and emphasized family support services, the impacts were largely consistent across programs for different types of services. Across programs, the impacts were more prominent for case management, employment-promoting services, benefits counseling, financial education, and parent training and information about youth's disability—all required as core services under PROMISE. Also,

each program had a positive impact on youth's receipt of job-related training or training credentials, likely reflecting the fact that each program focused on engaging youth in work-based learning experiences. The impacts were more modest for education or training supports and employment-promoting services to parents and families, which were not part of the required core components of family services.

2. The lack of impacts on total hours of services received by youth and their families likely reflects relatively service-rich environments, conflated survey responses about school-based services, and the substitution of existing services for PROMISE services

No PROMISE program increased the total number of hours of transition services received by youth despite the increase in youth's likelihood of service receipt. Three factors potentially explain this lack of impact. First, youth and families in the control group reported receiving a relatively large number of hours of services available in their communities even without the program, suggesting a relatively service-rich environment, which usually reduces the chances of program impact on hours of services. Second, control group youth received more key transition services in school settings, where survey respondents' reports of service hours are more likely to conflate hours spent specifically on key transition services with those spent on usual school activities. Once we accounted for this possibility by excluding school-based service providers from our analysis, two programs—Arkansas and WI PROMISE—showed impacts on the hours of key transition services received by treatment group youth. Third, some youth and parents may have substituted PROMISE services for services and providers with which they would have engaged in the absence of the program. To the extent PROMISE programs were able to deliver high quality services more efficiently in fewer hours, they still might lead to longer-term improvements in youth and family outcomes, despite the lack of an impact on the number of hours of key services received.

3. Each program was effective in helping youth obtain paid work experiences, but mainly in short-term jobs

Each PROMISE program had positive impacts on youth's likelihood of having paid employment at some point during the 18 months after enrollment. The impacts reflect the programs' focus on career and work-based learning experiences. However, the programs either had no impact (ASPIRE and NYS PROMISE) or much smaller impacts (the remaining four programs) on the likelihood of youth paid employment *at the time of the 18-month survey* than their impacts on youth's paid employment *at any time* during the 18-month period. This finding suggests that most of the employed youth had short-term jobs during the 18-month period after they enrolled in the evaluation, and supports the idea that the jobs were more program outputs than impacts. Because most of the youth were of school age at the time of the 18-month survey, we would not expect impacts on sustained employment.

4. The magnitude of impacts on youth employment and earnings varied across programs.

Though all six programs had positive impacts on the youth's likelihood of having paid employment at some point during the 18 months after PROMISE enrollment, the magnitude of the impacts varied substantially across programs. Arkansas PROMISE had the largest impact on youth employment, increasing the likelihood of paid employment by 184 percent relative to the control group. NYS PROMISE and ASPIRE had the smallest impacts, each increasing the likelihood of paid employment by about 25 percent relative to the control group. Differences in

the magnitudes might be related to a program's ability to meet key benchmarks. For example, NYS PROMISE fell substantially short of its benchmarks for referrals to unpaid and paid work experiences. ASPIRE set a goal of having 95 percent of youth engage in career exploration activities during each year of enrollment, but only about half of youth had done so by three years after enrollment began. Arkansas PROMISE was closer to achieving its service delivery benchmarks during that period. Impacts on earnings followed a similar pattern, with ASPIRE and NYS PROMISE having no measurable impact on earnings during the calendar year after random assignment (based on SSA data) and Arkansas PROMISE having the largest impact on earnings (164 percent of the control group mean). The other three PROMISE programs had positive impacts on youth earnings during the first calendar year after random assignment, and the magnitude of the impacts varied from 19 percent in MD PROMISE, to 45 percent in CaPROMISE, and 51 percent in WI PROMISE relative to the mean earnings among the corresponding control group youth in each program. Note that the extent to which the programs paid or subsidized youth wages may have contributed to the differences in earnings impacts; all programs except ASPIRE paid wages for at least some youth, with Arkansas PROMISE doing so most extensively.

5. Lack of impacts on youth self-determination might reflect the need for more time to pass for such impacts to manifest themselves, but could also reflect the limitations of our measure

No program had positive impacts on youth self-determination as measured using self-reported information related to autonomy, psychological empowerment, and self-realization—three of the four subdomains of the ARC Self-Determination Scale. Although the programs might simply have failed to affect this outcome, the finding is somewhat surprising because nearly all of the programs provided youth with services specifically intended to promote self-determination, although take-up of these services was low for some programs based on information from the process analyses. Because we assessed the impacts on self-determination 18 months after youth enrolled in the evaluation, it is possible that changes in self-determination require more time to materialize. The lack of impact could also partly reflect the exclusion of the self-regulation subdomain from our measure. Nonetheless, we found no desirable impacts on the three subdomains of self-determination that were captured by our measure.

6. For the programs that increased youth income, the impacts were driven by increased earnings rather than SSA payments

Four of the six programs—Arkansas PROMISE, CaPROMISE, MD PROMISE, and WI PROMISE—had positive impacts on youth total income from earnings and SSA payments during the year before the 18-month survey. The income increases were primarily driven by positive impacts on earnings, not by changes in SSA payments. For two of these programs—MD and WI PROMISE—we found no impacts on the likelihood or amount of SSA payments. CaPROMISE decreased the share of youth receiving SSA payments (but had no impact on the average payment amount), whereas Arkansas PROMISE reduced the average SSA payment amount (but had no impact on the share of youth receiving such payments). Because of the young ages of the youth, we did not expect the programs to affect their SSA payments within 18 months of enrollment; the large majority were enrolled in school and thus not able to fully engage in the labor market, thereby limiting the potential for substantially reducing the receipt of SSA payments.

7. There are a few likely explanations for the lack of impacts on outcomes in several other youth domains

Most PROMISE programs had no impact on youth outcomes related to school enrollment, health, health insurance coverage, Medicaid, and SSA payments. The absence of impacts on these outcomes is likely explained by the high prevalence of the outcome among control group youth, the ages of the youth, and the lack of program services that directly addressed the outcome. In most contexts, the control group achieved the outcomes at high rates even without the program (for example, school enrollment and health insurance coverage). For outcomes that might be affected by long-term employment (for example, Medicaid enrollment and SSA payments), youth were still too young to expect the program to have had any measurable effect at 18 months after enrollment when most were still attending school. For other outcomes—those related to the youth's health—the programs, by design, did not directly offer services that would improve youth outcomes.

8. Although some programs had different impacts for different subgroups, there was no clear pattern across programs

We found evidence of varying impacts on youth and parent outcomes, particularly by primary impairment and youth's age at enrollment. For example, ASPIRE's impact on youth's receipt of transition services and MD PROMISE's impact on youth's Medicaid expenditures differed by primary impairment. The impacts of both Arkansas PROMISE and CaPROMISE on youth's receipt of transition services differed by age. Although it is important to recognize the heterogeneity of the short-term impacts, there was no meaningful pattern across programs in the magnitude or direction of the impacts for any subgroup or outcome.

9. Across programs, measures of youth earnings based on survey data are higher than that based on administrative data; the opposite is true for parents' earnings

We measured the youth's and parents' earnings using data from two sources: the 18-month survey and SSA records. For all six programs, the level of the youth's annual earnings based on survey data was higher than the level of earnings based on SSA data (for both the treatment and control groups). The difference in the level of earnings between survey and SSA data may reflect the difference in the reference period—the year before the survey for the former and calendar year after random assignment for the latter. The difference might also reflect informal jobs that youth had and reported via the survey, but were not captured in the administrative records. In addition, recall and reporting error in the survey in terms of duration of jobs or hours worked could lead to over- or under-estimation of youth annual earnings. We measured parents' earnings for the month before the survey using the 18-month survey data and for the calendar year after random assignment using SSA data. For all six programs, the level of annual earnings based on survey data was lower than the level of annual earnings measured from SSA data. Although these differences may reflect the difference in the reference period, they are also aligned with recent research indicating that earnings estimates were consistently higher in SSA data relative to survey data (Wittenburg et al. 2018). This research also suggests that such differences are particularly pronounced for people with low income, which aptly describes the population targeted for PROMISE.

10. Three factors potentially explain the variation we observed in the programs' average annual and total costs per enrollee

First, the variation across programs in the average annual cost per enrollee depended on the extent to which the program provided services directly versus leveraging existing services available in the community. Arkansas PROMISE delivered or paid for most of its services directly, and its average annual cost per enrollee was high compared with the other programs. ASPIRE leveraged existing services to a relatively large extent, and its annual cost per enrollee was low compared with the other programs. If we were to account for the costs of services received from other agencies (that is, the cost of the existing services the programs leveraged), all of the programs' costs would be higher than our estimates. Second, the variation in total cost per enrollee is partly due to differences in the estimated average duration of service receipt. NYS PROMISE had the lowest estimated duration of service receipt, at 34.8 months; MD PROMISE had the highest, at 40.4 months. Third, programs might have underspent their award funding, which would be reflected in the carryover funds they would have available for the one-year, no-cost extension of the award. We did not include the time enrollees might receive services during the carryover period in our calculations. The underspending might reflect either a situation in which program costs were lower than expected or that actual delivery of services was of a lower intensity than intended.

11. PROMISE program services represent a relatively large investment on top of the federal expenditures that already support youth with disabilities

Across the six PROMISE programs, the average annual cost per treatment group enrollee ranged from $5,490 to $9,148. To put these costs into context, in 2014 the federal government spent an estimated $5,000 per youth with disability (under age 18) on public programs and supports specific to them or that represented assistance programs used by many such youth (Shenk and Livermore 2019).[66] Thus, the average annual cost per enrollee across the PROMISE programs was roughly similar to or greater than the average annual cost of all federal programs currently available to youth with disabilities. Though the PROMISE program costs include services provided to the youth's family members, they nonetheless represent a substantial additional investment to support the successful transition of SSI youth to adulthood.

12. Although the PROMISE evaluation's random assignment design for the impact analysis is strong, three factors might affect the estimated impacts.

General macroeconomic conditions, federal policy changes, and state-level systems changes during the period covered by the interim impact analysis may have indirectly influenced PROMISE impacts. The period between the start of PROMISE program enrollment and the end of the 18-month follow-up was a time of general economic expansion for the U.S. economy, with declining unemployment rates. Furthermore, two federal policy changes that might have improved youth access to services went into effect during this period: in 2014, WIOA was enacted, and in 2016, SSA began mailing a brochure to SSI recipients age 14 to 17 with information about the age-18 redetermination process, SSA work supports, and programs relevant to youth with disabilities. Moreover, the interagency collaborations required by the

[66] The estimates include the costs of supports and programs that specifically target youth with disabilities (for example SSI, VR, and special education) as well as the proportional costs of selected other public assistance programs that provide support to youth (for example, TANF, housing, and child nutrition programs).

PROMISE initiative together with WIOA may have prompted state-level systems changes that affected service delivery to all transition-age youth. The extent to which these factors influenced the estimated impacts of PROMISE is unclear. Because they could have influenced the likelihood of receiving transition services and other outcomes among both treatment and control group youth we cannot surmise the magnitude or direction of their influence on the estimated impacts. Nonetheless, it is important to keep these factors in mind when interpreting the impact analysis findings.

C. Implications for policy and practice

The implications of the PROMISE evaluation for policy and practice will not be fully known until findings from the five-year impact and benefit-cost analyses become available. It would be premature to draw broad policy implications based on short-term impacts on services and outcomes for two reasons. First, key outcomes related to employment and earnings at the 18-month point can be considered outputs of the program, given the focus on providing work-based learning experiences. Second, exploring impacts on key outcomes such as youth and their families' reliance on SSA, Medicaid, and other public assistance in the longer term will be more appropriate and meaningful than at this stage of the evaluation. Consequently, we will wait until the five-year impact findings are available to draw broader policy implications. In addition, the five-year impact findings will allow us to qualitatively assess whether implementation factors and the characteristics of youth and families served by each program correlate with longer-term impacts. Such assessments are likely to generate valuable information for policymakers and practitioners. Meanwhile, we can discuss the following three implications of the findings presented in this report.

1. Even in a relatively service-rich environment, policymakers and practitioners may need to focus on specific service areas in which they would like to engage youth to improve their outcomes

Although each PROMISE program operated in a relatively service-rich environment (as measured by the fact that nearly all control group youth in all programs received some transition services and the large average number of transition service hours they received), the required focus on the core PROMISE services resulted in a greater share of youth receiving those services. In all PROMISE programs, more than 90 percent of control group youth received some transition services during the period after they enrolled in the evaluation. This finding suggests that the "business as usual" environment (without the program) in these states provided youth with opportunities to engage in some type of transition services, particularly through the school system. Yet the areas in which the PROMISE programs made a difference in the short term are aligned with the core components of the PROMISE initiative—case management, career services and work-based learning, benefits counseling, and financial education. Similarly, there were few, if any, short-term impacts on more distal outcomes (such as health status and substance use) not directly addressed through program services. Altogether, the findings suggest that even in rich service environments, youth may not have access to or take advantage of some transition services considered effective in improving their outcomes. Thus, there is still room for programs and policies to focus on improving access to such services.

2. The interim impact findings support the need for better coordination across agencies that support transition-age youth with disabilities

The promulgation of WIOA is likely to improve interagency collaboration among federal, state, and local agencies serving youth with disabilities. The PROMISE initiative also promoted partnerships among service providers and agencies at the federal, state, and local levels. Our interim impact findings suggest that such collaborations were fruitful in connecting youth to services and increasing the likelihood that they received particular types of transition services and work-based experiences. Thus, the interim impacts of PROMISE programs provide ground for supporting such collaboration and indicate the prospect for improving outcomes for the youth.

3. The impact findings suggest the importance of state environments in influencing the effectiveness of federal programs and policies

The experiences of the six PROMISE programs highlight the importance of the state environment in influencing program implementation and impacts. All six programs implemented similar core program components, but the impacts across the programs varied. As described in the programs' process analysis reports, each had different challenges and experiences while implementing aspects of PROMISE, some of which were unique to their service environments, such as whether a state VR agency was in order of selection and the nature of the service delivery partnerships they developed. We found different impacts by ASPIRE state for several of the primary outcomes even though ASPIRE was essentially the same program in all six consortium states. The PROMISE programs' experiences remind us that the impacts of even a focused, well-funded program with standard core components will vary depending on how states implement the program and the state and local service environments in which it operates.

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