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Promoting Readiness of Minors in Supplemental Security Income (PROMISE): Youth and Family Outcomes Five Years After Enrollment

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Acronyms and Abbreviations

ABLE	Achieving a Better Life Experience
ACA	Affordable Care Act
ASPIRE	Achieving Success by Promoting Readiness for Education and Employment
CaPROMISE	California PROMISE
CDOR	California Department of Rehabilitation
CDR	Continuing disability review
CIL	Center for independent living
CMS	Centers for Medicare & Medicaid Services
CSC	Career service coordinator
DI	(Social Security) Disability Insurance
DOL	U.S. Department of Labor
DVR	Division of Vocational Rehabilitation
ED	U.S. Department of Education
FSP	Family service plan
GED	General Educational Development
IDA	Individual development account
IDEA	Individuals with Disabilities Education Act
IEP	Individualized education program
IPE	Individual plan for employment
LEA	Local educational agency
MD	Maryland
MDOD	Maryland Department of Disabilities
NYS	New York State
OASDI	Old-Age, Survivors, and Disability Insurance
PASS	Plan to Achieve Self-Support
p.p.	Percentage point
PROMISE	Promoting Readiness of Minors in Supplemental Security Income
RA	Random assignment

RDS	Research demonstration site
RFMH	Research Foundation for Mental Hygiene
RSA	Rehabilitation Services Administration
SNAP	Supplemental Nutrition Assistance Program
SSA	Social Security Administration
SSI	Supplemental Security Income
SSN	Social Security number
SSR	Supplemental Security Record
TANF	Temporary Assistance for Needy Families
TETD	Transitional Employment Training Demonstration
UA	University of Arkansas College of Education and Health Professions
VR	Vocational rehabilitation
WI	Wisconsin
WIOA	Workforce Innovation and Opportunity Act
WIPA	Work Incentive Planning and Assistance
YTD	Youth Transition Demonstration

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 their longer-term success. Nearly one-third of youth SSI recipients drop out of high school before reaching age 18 (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). The large number of children with disabilities who receive SSI also generates concerns about their long-term financial well-being and a potentially large fiscal burden because many of these children will continue to receive SSI as adults (Hemmeter and Gilby 2009).

PROMISE—Promoting Readiness of Minors in SSI—was a joint initiative of the U.S. Department of Education (ED), the Social Security Administration (SSA), the U.S. Department of Health and Human Services, and the U.S. Department of Labor (DOL) to promote positive change in the lives of youth who received SSI and their families. Under cooperative agreements with ED awarded in 2013, six state agencies across 11 states implemented model demonstration projects in which they enrolled youth ages 14 through 16 who were receiving SSI.[1] The programs intended to (1) offer educational, vocational, and other services to youth; and (2) make better use of existing resources by improving service coordination between state and local agencies. To be eligible for PROMISE, youth had to be age 14 through 16 at the time of enrollment, receiving SSI during the PROMISE enrollment period, and living in a PROMISE program service delivery area. Under contract to SSA, we are conducting a national evaluation of how the six programs were implemented and operated, their impacts on youth and family outcomes, and their cost-effectiveness.

This report presents estimates of the five-year impacts of the PROMISE programs on youth and parent outcomes. These outcomes cover domains that the programs were designed to affect: education, employment, self-determination, expectations about the youth's future, health insurance coverage and expenditures, income, and participation in SSA and other public assistance programs. We also present findings from analyses of the benefits and costs of the PROMISE programs and summarize findings from the PROMISE process and 18-month impact analyses we conducted previously.

A. The PROMISE conceptual framework

The federal partners sponsoring PROMISE envisioned programs that, through evidence-based service practices and strong partnerships, would address many of the challenges described above for youth receiving SSI. The federal partners expected that the entities awarded funding to implement the PROMISE programs would draw on their experiences with the target population and evidence of best practices to identify innovative ways of offering services to improve the economic self-sufficiency of youth receiving SSI 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 federal, state, and local agencies that offer services to youth receiving SSI 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 they believed could achieve the desired results and thus required the PROMISE programs to include the following core components (ED 2013a):

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

- **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 (TANF), 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.[2]

The core program components were intended to address the set of personal barriers for youth with disabilities, such as low familial expectations regarding education and employment, fear of benefit loss, and limited education and skills. The components were also intended to address some of the systemic and environmental factors that are determinants of the education, employment, and financial outcomes of youth receiving SSI and their families, including inadequate and uncoordinated services. The components also 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 awarded $211 million over five years to five individual states and one consortium of six states to design and implement PROMISE programs. ED subsequently increased the awards to $230 million over six years. The awardees were state agencies that had formed partnerships with other agencies for the purpose of implementing PROMISE.

The federal sponsors had three key requirements for the PROMISE programs (ED 2013a): (1) enroll a minimum of 2,000 youth in the national PROMISE evaluation; (2) develop partnerships with agencies responsible for providing services to youth receiving SSI and their families; and (3) include the initiative's four core service components in its service offerings—case management, benefits counseling and financial education, career and work-based learning experiences, and parent training and education.

The six PROMISE programs were implemented in Arkansas (Arkansas PROMISE), California (CaPROMISE), Maryland (MD PROMISE), New York State (NYS PROMISE), Wisconsin (WI PROMISE), and a consortium of six western states known collectively as Achieving Success by Promoting Readiness for Education and Employment (ASPIRE). The consortium's six states were Arizona, Colorado, Montana, North Dakota, South Dakota, and Utah. Each program implemented the

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

required components of the PROMISE model using its proposed approach based on a logic model that reflected the state's (or consortium's) experience with SSI youth, its understanding of best practices for serving youth with disabilities, and its familiarity with transition environments.

C. The national PROMISE evaluation

The federal sponsors of the PROMISE initiative were interested in whether and how the PROMISE programs achieved their goals and whether the benefits of the programs outweighed their costs. Through the national evaluation, we assessed whether youth and families in the treatment group experienced better outcomes than control group members with respect to education, employment, benefit receipt, economic well-being, and other outcomes during the five years after random assignment (RA). The impact analyses relied on the evaluation's rigorous RA design (Fraker et al. 2014a). RA resulted in two groups of similar youth who differed in their eligibility for PROMISE services, such that the differences in their outcomes could be reasonably attributed to the effects of PROMISE. The programs began enrolling youth from April to October 2014; enrollment continued through April 2016. The target number of youth voluntarily enrolled in the PROMISE evaluation was 2,000 for each program except CaPROMISE, where the target was 3,078. PROMISE-eligible youth who agreed to participate in the evaluation were randomly assigned with equal probability to either a treatment group, which meant they were eligible to receive PROMISE services, or a control group, which meant they were not eligible for PROMISE services but could receive other services available in their communities.

We collected data on youth and parent outcomes during the five years after RA. In a previous report, we documented the programs' impacts on key outcomes 18 months after RA (Mamun et al. 2019a, 2019b). This report presents estimates of the programs' impacts on youth's and parents' outcomes five years after RA. The five-year follow-up period allowed us to assess the programs' impacts several years after services ended. However, the evaluation period overlapped with other events that might have affected youth and parent outcomes, such as the global pandemic caused by the spread of severe acute respiratory syndrome coronavirus 2 (hereafter referred to as COVID-19), public policies implemented in response to the pandemic, and the implementation of the Workforce Innovation and Opportunity Act (WIOA).

We combined the findings of the impact analyses with cost data to conduct benefit-cost analyses. These analyses assessed whether the benefits of each PROMISE program during the five years after RA were large enough to justify its costs. We considered benefits and costs from a range of perspectives, including those of the PROMISE program participants; SSA, ED, and the federal government as a whole; state agencies that implemented the programs; and these key stakeholders collectively.

D. Findings from the five-year impact analysis

The findings from the five-year impact and benefit-cost analyses can be summarized as follows:

- PROMISE improved only a few of the primary youth outcomes and the impacts varied by program (Figures ES.1 and ES.2). Two programs increased youth's employment rate and three programs increased their income. None reduced the amount of SSA payments youth received during the five-year evaluation period.
- With a few exceptions, the six programs did not affect parents' primary outcomes such as their employment rates, earnings, SSA payments, income, or Medicaid and Medicare expenditures (Figures ES.3 and ES.4). Only one program had a favorable impact for parents: WI PROMISE increased the share of families where at least one parent had health insurance.

- We found variation in programs' impacts according to youth or family characteristics. MD PROMISE and NYS PROMISE had an impact on labor market outcomes for youth with intellectual and developmental disabilities but not for youth with other impairments. We also found evidence that some programs improved labor market outcomes in families in which a parent was receiving SSA payments at RA.
- Over the five-year evaluation period, none of the programs generated positive net benefits across all stakeholder groups. The net benefits per treatment group family ranged from -$16,269 in WI PROMISE to -$37,882 in Arkansas PROMISE. For all programs except ASPIRE and NYS PROMISE, youth and their families experienced a net benefit from participation in PROMISE.

Figure ES.1. PROMISE programs' impacts on youth non-monetary outcomes in the five years after RA

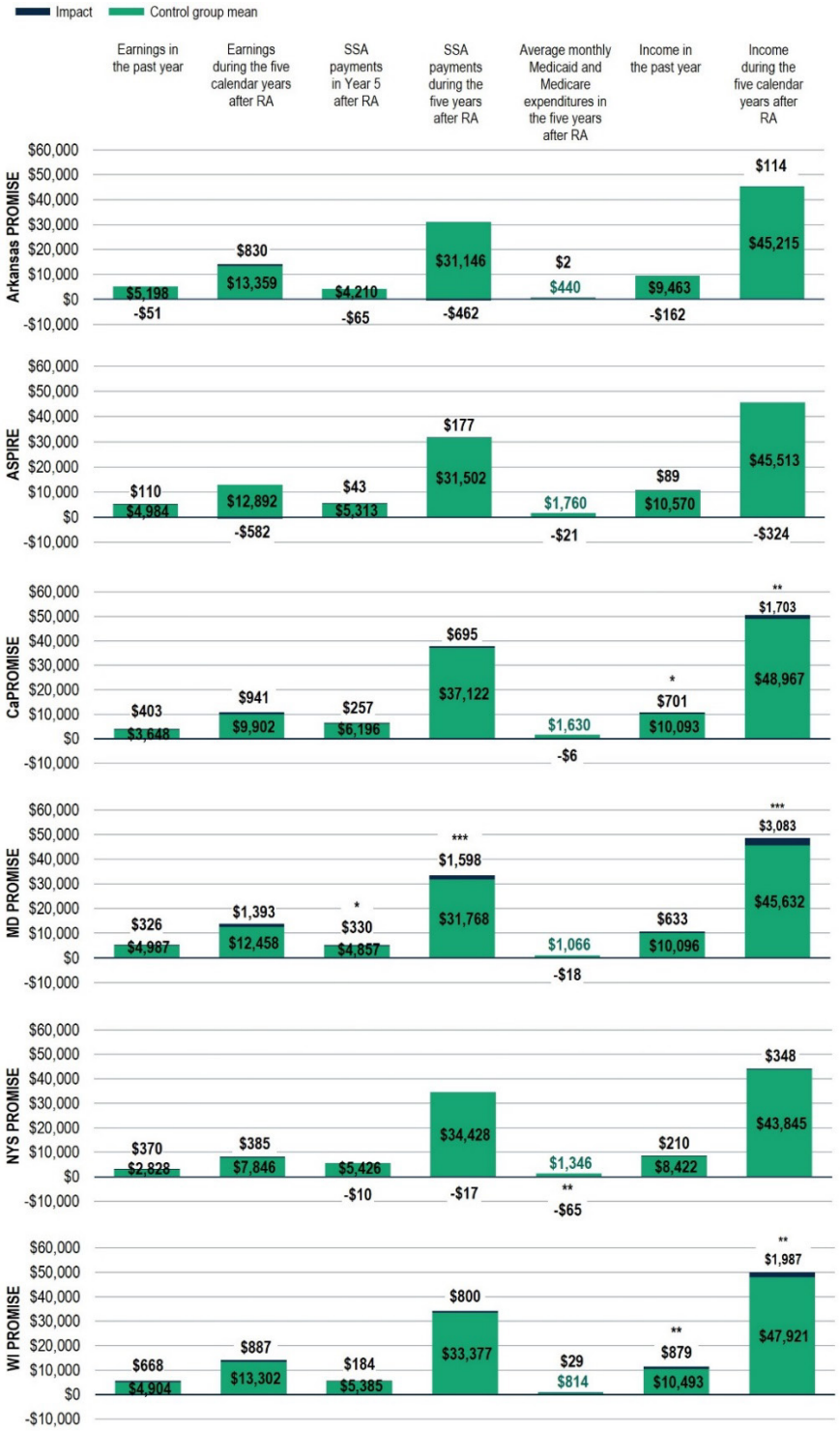
Source: Youth five-year survey; SSA data.

Note: All outcomes were measured at the time of the five-year parent survey unless otherwise specified.

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

GED = General Educational Development; RA = random assignment; SSA = Social Security Administration.

Figure ES.2. PROMISE programs' impacts on youth monetary outcomes in the five years after RA



Source: Youth five-year survey; SSA data.

Note: All outcomes were measured at the time of the five-year parent survey unless otherwise specified.

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

RA = random assignment; SSA = Social Security Administration.

Figure ES.3. PROMISE programs' impacts on parent non-monetary outcomes in the five years after RA

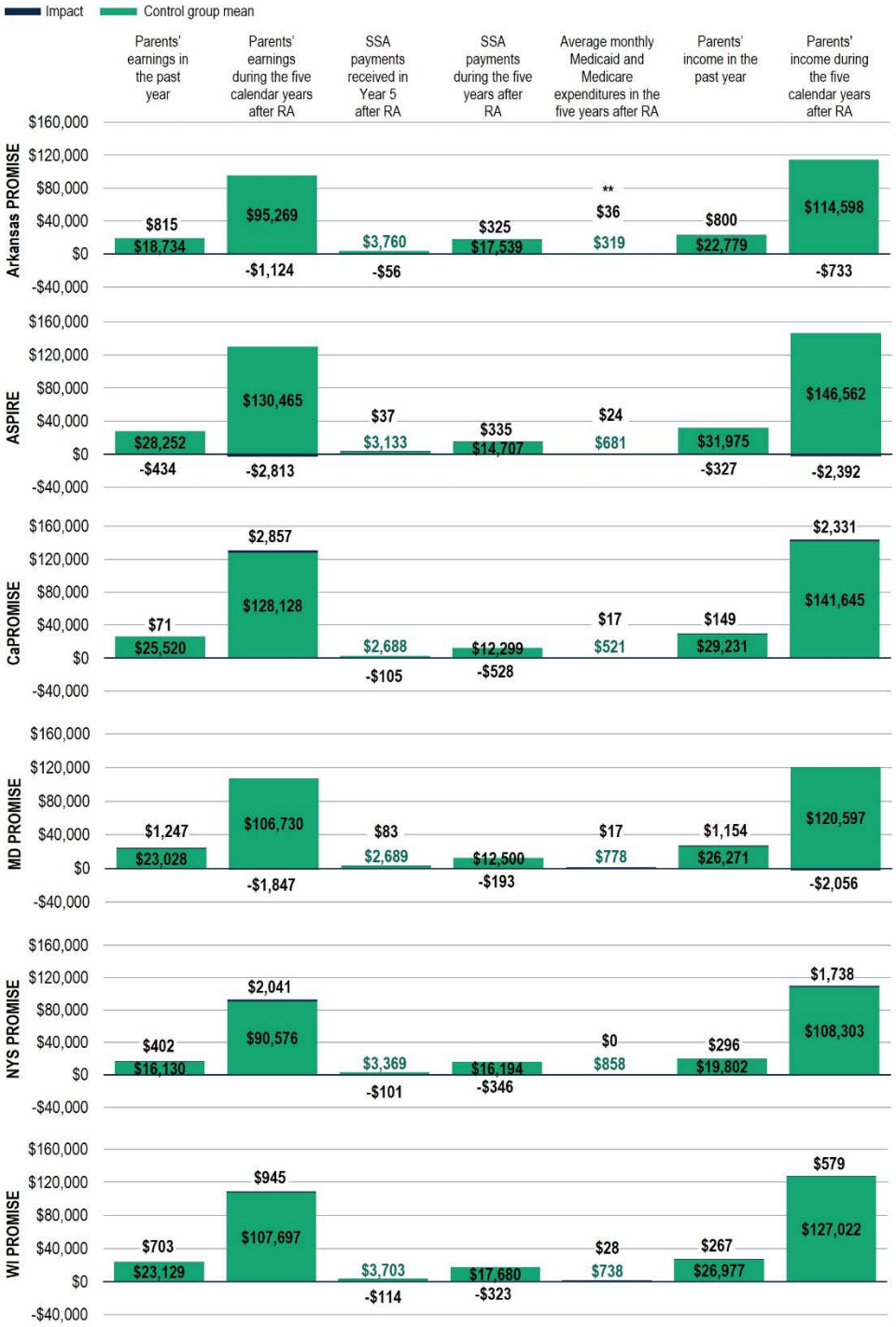
Source: Parent five-year survey; SSA data.

Note: All outcomes were measured at the time of the five-year parent survey unless otherwise specified.

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

RA = random assignment; SSA = Social Security Administration.

Figure ES.4. PROMISE programs' impacts on parent monetary outcomes in the five years after RA



Source: Parent five-year survey; SSA data.

Note: All outcomes were measured at the time of the five-year parent survey unless otherwise specified.

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

RA = random assignment; SSA = Social Security Administration.

E. Discussion of key themes in findings

At the 18-month impact evaluation, we found positive PROMISE impacts on youth's receipt of transition services and employment and earnings, and families' receipt of support services. These early impacts did not consistently translate into meaningful improvements in all targeted outcomes for youth and their parents five years after RA. We found evidence suggesting that PROMISE improved youth employment and economic well-being but affected few other youth outcomes. The programs had little impact on parents' outcomes over the five-year follow-up period. Below we highlight key patterns in the findings across the six programs and discuss their significance and possible explanations.

1. Two programs had persistent impacts on youth's employment; various reasons might explain the absence of impacts in the others

Each program increased employment and earnings in the first few years after RA, but the longer-term findings were less encouraging. When we pooled data from the six programs, we found that, on average, the programs increased youth's employment and earnings; however, these average impacts mask substantial variation in the programs' impacts (Figure ES.5). When we examined each program separately, we found that no program increased youth earnings, and only two programs (NYS PROMISE and WI PROMISE) had impacts on youth employment that continued beyond the third year after RA. We suggest several possible explanations for these findings.

First, the general absence of persistent employment impacts suggests that a service model such as PROMISE, which emphasizes connections to short-term work opportunities, does not necessarily translate into long-term employment impacts. Some of the benefits of initial work experiences can dissipate in the longer term once services end and as youth in the control group catch up and gain work experience. This is especially likely if youth who are particularly motivated to work are more likely to enroll in evaluations, making them likely to have better labor market outcomes even in the absence of PROMISE when compared to other youth receiving SSI. At the same time, the findings do not necessarily suggest that paid work experiences are unimportant. In a related report, we found evidence that early work experiences were a key mechanism for the programs' average five-year impacts on youth employment and earnings (Patnaik et al. 2022). The findings from the PROMISE evaluation suggest that paid work experiences are important; however, the extent to which they influence longer-term outcomes might depend on factors such as the characteristics of youth who participate in them and the way in which they are implemented (discussed further below).

Second, although all programs provided employment services to youth, NYS PROMISE and WI PROMISE appeared to be more effective at increasing youth employment than the others. Both programs increased youth employment in the year before the survey by more than 10 percent compared with the control group; the other programs' impacts were statistically insignificant and smaller relative to the control group mean. A possible explanation is that the type of staff who provided employment services at NYS PROMISE and WI PROMISE made them particularly effective. In the later years of program operations, NYS PROMISE brought in specialists from the Marriott Foundation's Bridges from School to Work initiative to train and support the program's employment service providers in New York City, where the majority of enrollees accessed services. This organization had more than three decades of experience in helping young adults with disabilities find jobs during and after high school, including youth receiving SSI (Hemmeter et al. 2015). WI PROMISE hired VR counselors to provide employment services to youth and had the largest relative impact on youth's use of VR services in the 18 months after RA (Mamun et al. 2019a). We cannot say with certainty that differences in staff experience in providing

Figure ES.5. Average impacts of PROMISE programs on youth outcomes

Source: Five-year survey, SSA data.

Note: This figure shows the average control group means and impacts of PROMISE on selected youth outcomes across the six programs and the control group means and impacts of each program for the same outcomes. To estimate the average impacts, we pooled data from the six programs and weighted each program equally. The control group means and impacts of each program are as presented in previous chapters. See Appendix Tables I.9-I.15 for more details.

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

≠/= Impacts for the six programs are/are not significantly different from each other at the .10 level, adjusted Wald test.

ASPIRE = Achieving Success by Promoting Readiness for Education and Employment; GED = General Educational Development; CaPROMISE = California PROMISE; MD = Maryland; NYS = New York State; RA = random assignment; SSA = Social Security Administration; WI = Wisconsin

employment supports to youth accounted for the differences in persistent impacts, but this factor and others related to how services were implemented likely played a role.

Third, for many enrollees, the fifth year after RA coincided with the COVID-19 pandemic, which might have influenced youth outcomes and programs' impacts. The pandemic put young people with disabilities at heightened risk of a delay in career development, absence from schools and the labor market, and experiences of primary and secondary trauma. The pandemic might have affected the potential for the programs to impact some outcomes. During the pandemic, youth might have faced more limited employment and economic opportunities. At the same time, some public policies might have had a protective effect, for example, the Families First Coronavirus Response Act of 2020 required state Medicaid programs to keep beneficiaries continuously enrolled through the end of the public health emergency as a condition of receiving an increase in their federal match rate during the emergency. In a related report, we present evidence that treatment group youth experienced a greater deterioration of labor market outcomes during the pandemic than control group youth (Hill et al. 2022). Though it is impossible to know what the impacts of each program would have been in the absence of the pandemic, there is evidence to suggest that five of the six PROMISE programs were on track to have larger impacts on youth's five-year labor market outcomes before the pandemic occurred (Hill et al. 2022).

It is important to place the findings in the broader context of the youth's employment. For some programs that did not affect youth's employment and earnings in the year before the five-year survey, we found impacts on other employment-related outcomes, such as labor force participation and employment in a job with coaching (MD PROMISE), employment at the time of the survey (Arkansas PROMISE), and use of supports or services to get or keep a job (Arkansas PROMISE and CaPROMISE). Moreover, the substantial list of outcome measures did not capture all dimensions of employment. PROMISE may have helped put youth on more promising career pathways or may have helped youth get better quality jobs. We do not know whether the programs affected other dimensions of quality, such as job security, control, flexibility, or environment. A future report will examine the characteristics of the jobs that PROMISE youth held at the time of the five-year survey (Farid et al. 2022).

In addition, some programs increased the employment and earnings of subgroups of youth. For example, among youth with intellectual and developmental disabilities, MD PROMISE increased employment rates and NYS PROMISE increased youth earnings during the five calendar years after RA, even though the programs had no impact on these outcomes overall. The findings suggest that PROMISE-like programs can be effective for some subgroups of youth even if they are not effective on average for youth in the program; more research is needed to understand why they work for some subgroups and what types of interventions would be effective for other youth in need of transition supports.

2. The student earned income exclusion and benefits counseling might have contributed to the absence of reductions in youth SSA payments and the increases in youth income

One objective of PROMISE was to increase youth's self-sufficiency and reduce their reliance on SSA payments during adulthood. None of the programs succeeded in doing so during the five-year follow-up period, at which point the oldest participating youth were age 22. When we pooled data from the six programs, we found that, on average, the programs increased youth's SSA payments (Figure ES.5), although there was substantial variation in the programs' impacts. MD PROMISE increased the share of youth receiving SSA payments in the fifth year after RA and the average amount of SSA payments received that year or during the five years after RA; the other programs had no impacts on these outcomes.

Even the two programs that boosted youth's employment rates did not reduce youth's SSA payments because they did not substantially affect their earnings. For SSI payments to have been reduced, youth's annual earnings generally would have needed to exceed the SSI student earned income exclusion amount ($7,670 in 2020), which might have been unrealistic for many treatment group youth who were still enrolled in school at the five-year follow-up (ranging from 27 percent to 56 percent across programs). Because the youth were still quite young five years after RA, the potential remains for the programs to increase self-sufficiency in the long term.

In addition, each program increased youth's awareness of at least one type of work support, which suggests that the benefits counseling all programs provided improved youth's understanding of work supports and incentives. Treatment group youth might have been better equipped or directly assisted by the PROMISE programs to use provisions that allow SSI recipients to retain benefits, possibly enabling youth to pursue employment without losing their SSA payments.

PROMISE aimed to increase youth's overall economic well-being as measured by their income from earnings and SSA payments. Three programs (CaPROMISE, MD PROMISE, and WI PROMISE) increased youth income. The programs may have better equipped youth to navigate SSA's programs and use work incentive provisions to increase earnings without losing SSA payments. In doing so, these programs improved the economic well-being of youth with disabilities receiving SSI during their transition to adulthood.

3. By and large, the programs did not improve youth's education, training, self-determination, expectations for the future, the likelihood of health insurance coverage, or Medicaid and Medicare expenditures

No program increased the shares of youth enrolled in school or training or who had attained a high school completion credential. There are a few possible explanations for why the programs did not improve youth's educational outcomes. First, the PROMISE model did not emphasize targeted services to promote educational attainment. The programs generally offered only one of the many academic practices and predictors related to transition: service provider involvement with individual transition plans in schools. The process analyses found that none of the PROMISE programs offered significant services to address education, although all assisted with youth's educational issues. Second, control group youth had relatively high educational attainment, leaving limited room for PROMISE to improve this outcome. In all programs, more than half of youth had a high school completion credential at the time of the five-year survey. By way of comparison, most VR applicants ages 16 to 24 have less than a high school level of education (Honeycutt et al. 2015). Third, the programs might have nudged youth to prioritize labor force participation over increased formal education and training. It is unclear whether such a substitution would be beneficial to some youth in the long term. It is conceivable that earlier labor market entry in lieu of further education could improve the long-term outcomes of some youth.

No program increased youth self-determination. When we examined youth's and parents' expectations for the youth's future, we found few significant impacts across the programs. These findings are somewhat surprising because most programs offered services intended to promote youth self-determination. Moreover, the inherent nature of other PROMISE activities, such as transition planning and goal setting, might have contributed to improved self-determination and higher expectations. The absence of impacts on self-determination and expectations is consistent with findings from the process analyses suggesting that take-up of services designed to improve these outcomes was low for some programs. The self-determination services also might not have been effective or of adequate dosage. Finally, it could be that

most enrollees already had higher-than-average self-determination and expectations for their ages and thus had little need for services that targeted these outcomes and limited room to improve them.

Only NYS PROMISE reduced youth's average monthly Medicaid and Medicare expenditures during the five years after RA. We do not know if this reduction is due to improved health, lower healthcare needs, alternative coverage, or foregone care, all of which have implications for the youth's welfare. Three programs (Arkansas PROMISE, ASPIRE, and WI PROMISE) increased youth enrollment in Medicaid in the first year after RA, likely because case management and benefits counseling services connected families to this program. By the fifth year after RA, there were no differences between the treatment and control groups for any program in the share of youth who were enrolled in Medicaid. The absence of an impact on Medicaid participation might in part be due to the Medicaid continuation policy implemented during the pandemic. It is also consistent with the finding that no program had an impact on the share of youth who received SSI in the fifth year after RA, as SSI receipt typically guarantees Medicaid eligibility.

4. Several factors likely contributed to the lack of impacts on parents' outcomes, including the intensity and focus of services and parents' need for the services offered

Despite PROMISE's aim to serve other family members of youth, particularly parents, we found few impacts on parents' outcomes across the six programs, and only one that appeared to be beneficial to families. . Only WI PROMISE appeared to benefit parents through its positive impact on their health insurance coverage. In the pooled analyses, we also found no average impacts on any parent outcomes, confirming that the absence of program-specific impacts on their outcomes was not because of limited statistical power.

The absence of program impacts on parents' outcomes is somewhat surprising because the relative size of the 18-month impacts on families' use of support services was much larger than those on youth's use of transition services (Patnaik et al. 2021). We posit five possible explanations for the absence of impacts on parents' five-year outcomes.

First, although the PROMISE model emphasized serving both youth and family members, the programs focused more on youth and did not provide parents with intensive services necessarily customized to their own needs. For example, ED expected programs to provide youth with at least one paid work experience while they were enrolled in high school but did not specify employment goals or services for parents; it only required training and information on how to improve their education and employment outcomes. Parent-specific services were less intensive and targeted; they included assistance in developing goals and plans for employment and education, connecting parents to resources, and dispensing funds for families to use in emergency situations. Only one program's logic model (Arkansas PROMISE) explicitly mentioned increasing parents' employment and earnings as an intended outcome of its services.

Second, although the programs increased the share of families that used support services, the impacts were not concentrated among the types of services most likely to improve parents' own outcomes. Family support services could include those focusing on the youth, such as training and information about a youth's disability, as well as family-oriented support services intended to improve the outcomes of other family members, such as education and training supports. PROMISE created a larger difference between treatment and control groups' use of youth-oriented than family-oriented support services, possibly because the programs did not emphasize family-oriented support services as much as those for youth. Another reason might have been that parents were less interested in family-oriented support services (for reasons we discuss further below).

Third, PROMISE services did not directly address outcomes that offered room for improvement, such as parents' earnings. The programs did not offer services to parents that are associated with increased earnings for individuals with low incomes, such as work experience, subsidized employment, transitional jobs, education, soft skills training, or occupational and sectoral training (Streke and Rotz 2022). The programs primarily referred parents to other existing resources, which may or may not have provided such services. Moreover, the parents' earnings might have been low because their caregiving responsibilities required them to spend less time in market work. Other research has found that having a child with special health care needs is associated with less time in labor market work, especially among mothers. SSI payments help support families and facilitate parental time for caregiving and away from the labor market, so parents already may have been optimizing their involvement in the labor market. In that case, an intervention like PROMISE would not address the underlying issue that parents who must provide caregiving for youth with disabilities face challenges in increasing their own earnings.

Fourth, education, training, and employment-promoting services may be more useful to a subset of parents of youth receiving SSI. When we examined variation in impacts for subgroups, we found that among those that had a parent receiving SSA payments at RA (thus, a parent unlikely to be working), Arkansas PROMISE increased parents' employment rates, earnings, and income, and MD PROMISE increased their employment. The programs did not affect these outcomes among families in which no parent received SSA payments at RA.

Finally, although the parents of youth receiving SSI generally have low incomes, the parents might not have needed help obtaining employment. About 7 in 10 control group families had a parent who was employed in the year before RA; this share remained stable over the five years after RA. This employment rate was on par with national estimates of the employment rate of working-age adults. The parents' relatively high employment rates might explain why the programs' impacts on service use were modest for education or training supports and employment-promoting services to families (Mamun et al. 2019a). Moreover, the high employment rates among parents likely left little room for improvement, which might explain the absence of impacts on the share of families in which a parent was employed.

Even though PROMISE did not improve parents' outcomes, family support services may have supported youth's outcomes. The programs tried to increase family involvement in transition planning and offered family members training and information on issues specific to the youth, such as benefits counseling and information about their disability. These family support services may have helped families navigate service systems and address their youth's disabilities and thus, could have contributed to improved youth outcomes. Consistent with this, a prior descriptive analysis found that local areas where PROMISE had large impacts on use of family support services also had larger impacts on youth outcomes 18 months after RA (Levere et al. 2020).

5. The costs of each program substantially exceeded its benefits over the five-year follow-up period

The net benefits over the five-year period ranged from -$16,269 per treatment group family for WI PROMISE to -$37,882 for Arkansas PROMISE. The negative net benefits were driven by programs' direct costs. The estimates might understate the long-term benefits of PROMISE because some impacts accumulate over time. We estimated programs' net benefits over the 20 years after RA (still only a fraction of the youth's potential working lives) and found that the impact on youth earnings would need to be substantially larger than the impacts experienced in the fifth year after RA for PROMISE to generate cumulative net benefits by 20 years after RA. The required impacts on youth's annual earnings ranged

from $679 for WI PROMISE ($451 larger than the $258 estimated impact observed for Year 5) to $2,042 for ASPIRE ($2,445 larger than the -$403 estimated impact observed for Year 5), although these estimates do not account for the possibility that impacts on other outcomes, such as Medicaid enrollment, might change after the fifth year after RA. Analyses of administrative data in the future might reveal whether the impacts needed for the programs to be cost neutral eventually materialize.

F. Implications for policy, practice, and research

The findings from the PROMISE evaluation offer insights for policy, practice, and research. They include lessons learned from the evaluation, as well as knowledge gaps the findings highlight that might be explored in future work.

The effectiveness of employment-promoting services depends on how programs implement them. Research suggests that connecting youth with early work experiences is associated with better employment outcomes (Carter et al. 2012; Luecking et al. 2018; Sevak et al. 2021). Each program increased the share of youth who had a work experience during the 18 months after RA (Mamun et al. 2019a). In a related report, we found that those early impacts were likely a key mechanism for the programs' average impacts on employment and income five years after RA (Patnaik et al. 2022). However, the significant variation in the programs' impacts suggests that the way programs provide employment-promoting services matters for the longer-term impacts on youth's labor market outcomes. Arkansas PROMISE had the largest short-term impacts on youth's use of employment services, short-term employment, and earnings but it did not generate impacts on youth employment and earnings five years after RA. The differences in impacts between Arkansas PROMISE and the two programs that generated longer-term employment impacts might be related to differences in the nature of the employment experiences or how programs implemented the core PROMISE services. The summer work programs that Arkansas PROMISE offered were orchestrated events specifically created for the youth and so may not have been as representative of what they would experience in the labor market as the work experiences that NYS PROMISE and WI PROMISE facilitated. The latter two programs also used specialist staff with substantial relevant experience to provide employment-promoting services. What, if anything, should be selectively replicated from the PROMISE programs, especially given that only two programs improved youth employment? The evaluation findings do not provide enough information to determine which factors caused the differences in impacts across programs. We can only speculate that differences in implementation might have contributed to them. Future evaluations might consider factorial designs that would facilitate a rigorous examination of mechanisms as well as stronger fidelity measures and monitoring systems to help ensure that programs deliver interventions as intended.

It is challenging for programs to push youth to prioritize early employment and education at the same time; more information about which youth benefit more from one or the other of these could help programs better target services. None of the programs increased youth's educational attainment. ASPIRE reduced the share of youth who received a high school completion credential and NYS PROMISE reduced the share enrolled in school or training programs. These findings are somewhat surprising because other studies have found better educational outcomes among young people with disabilities who received transition services (New York State Education Department 1999; Fraker et al. 2012b). One possibility is that the employment focus of the PROMISE programs led some youth to prioritize paid jobs over schooling, thus nudging them to enter the labor market sooner than they would have otherwise in lieu of their educational progress. It remains to be seen whether the returns from earlier labor market entry outweigh the returns from greater education. More research is needed to understand

the relative benefits of more education compared with early employment for young people with disabilities and whether the benefits vary across subgroups of youth. This information could help practitioners strategize around the relative importance of nudging youth towards more education or early employment as well as how best to target these nudges.

Programs providing employment-focused services to youth do not necessarily reduce SSA payments in the short term. The programs did not reduce youth's reliance on SSA payments, regardless of whether they increased youth employment. This was not wholly unanticipated because youth employment and SSA payments do not have a simple inverse relationship. Investing in youth's human capital and employment potential will affect reliance on SSA benefits only if the investments significantly alter youth's long-term employment trajectories. The five-year evaluation findings provide only a limited view of this trajectory. Moreover, during this period, youth could avail themselves of provisions that would protect their benefits at the levels of earnings they were likely to achieve. Although the programs might reduce SSA payments in the long run, the features the PROMISE programs implemented were unlikely to do so in the short term. The findings also suggest that any fears that youth or their parents might have about work affecting SSI payments in the short term are unwarranted.

Youth transition programs might consider the potential benefits of offering different types or dosages of, or a narrower and more targeted set of, family support services. Although PROMISE emphasized serving families alongside youth, we found no impacts on parents' outcomes. Relatedly, for both the control and treatment groups, families' use of support services was greater for services that focused on the youth directly rather than those focusing on family members. This suggests that parents were less interested in support services that took aim at their own outcomes (such as employment-promoting services), potentially because such services did not target appropriate outcomes or were not needed. Given that family members engaged less in support services targeting their own outcomes and none of the programs improved parents' outcomes, youth transition programs might need to consider different dosages of services or other ways to improve parent outcomes. Future research could test the effectiveness of offering a narrower set of support services that focus directly on youth. Such program models could be easier and more efficient for programs to implement if targeting parents' outcomes might require different resources and staff skills, and yet would still emphasize family involvement—a key feature of evidence-based transition frameworks for youth with disabilities. Some programs did improve parents' labor market outcomes when a parent received SSA payments at RA (and so likely was not working), suggesting that services aimed at parents' outcomes can be beneficial if they are targeted to a subset of parents who need them. The fact that some programs improved parents' labor market outcomes suggests that the PROMISE services intended to improve the outcomes of youth receiving SSI were applicable to adults receiving SSA payments. One aspect of PROMISE that this report does not address is the impacts of the programs on family members other than the enrolled youth and parents. The PROMISE programs offered support services to all family members, including siblings and grandparents. These services may have yielded long-term benefits that we did not measure because we only collected data on five-year outcomes for the youth enrollees and their parents. A broader analysis of future family-oriented programs that considers all family members' outcomes might result in different cost-benefit calculations.

I. Introduction

PROMISE—Promoting Readiness of Minors in Supplemental Security Income (SSI)—was a joint initiative of four federal partners to promote positive change in the lives of youth who received SSI and their families. Under cooperative agreements with the U.S. Department of Education (ED), six state agencies across 11 states implemented model demonstration projects in which they enrolled SSI youth ages 14 through 16.[3] The programs intended to (1) offer 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 delivered them longer.[4] Under contract to the Social Security Administration (SSA), we are conducting the national evaluation of how the programs were implemented; their impacts on the education, employment, and SSA program payments of youth and their family members; and their cost-effectiveness. The U.S. Department of Health and Human Services and U.S. Department of Labor (DOL) provided support to the other two federal partners and the programs throughout the project.

This report presents the five-year impacts of the six PROMISE programs on youth and parent outcomes. These outcomes cover domains that the programs were intended to influence: education, employment, self-determination, expectations about the youth's future, health insurance coverage and expenditures, income, and participation in SSA and other public assistance programs. The impact analysis relies on an experimental design. To be eligible for PROMISE, youth had to be age 14 through 16 at the time of enrollment, receiving SSI during the PROMISE enrollment period, and living in a PROMISE program service delivery area. Eligible youth who enrolled in the study were randomly assigned to either a treatment group with an opportunity to receive PROMISE services or a control group with access to the usual services available in the community other than those offered by PROMISE. We also present findings from an analysis of the benefits and costs of the PROMISE programs and summarize findings from the PROMISE process and 18-month impact analyses we conducted previously. The PROMISE evaluation has consistently examined each of the six PROMISE programs as independent sites. The rationale for this approach is that although the six programs broadly followed the same program model, they varied substantially in their implementation of the model components. Consistent with this variation, the findings from the 18-month impact analysis showed differences across programs in the size of their impacts (Patnaik et al. 2021).

In the remainder of this introductory chapter, we discuss the motivation for the PROMISE demonstration and describe other similar demonstrations conducted by SSA and other agencies. We then present the PROMISE conceptual framework and provide an overview of the PROMISE programs and the national evaluation. The concluding section describes the report objectives and organization of the chapters that follow.

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

[4] ED extended the PROMISE cooperative agreements, originally scheduled to end on September 29, 2018, by up to one year at the discretion of the programs. The service delivery periods for each program differed depending on its agreement extension (see Table I.1).

A. Background

ED intended for the PROMISE initiative to address service access challenges and poor adult outcomes experienced by youth receiving SSI. The PROMISE model and demonstration builds on previous efforts by SSA and others to improve the outcomes of these youth. To provide a context for understanding the rationale underlying PROMISE's design and help interpret the impact findings we present in this report, we provide a brief background section on the motivation for PROMISE and SSA's previous efforts to test interventions designed to improve the employment outcomes of youth receiving SSI.

1. Youth with disabilities face barriers to services and experience poor adult outcomes

Youth with disabilities face individual, family, and systemic barriers to achieving education and employment outcomes that can undermine the foundation for their longer-term success into adulthood. Compared to their peers without disabilities, young people with disabilities are less likely to graduate from high school, attend a postsecondary education institution, attain a credential if they do attend such an institution, and be employed (U.S. Bureau of Labor Statistics 2021a; McFarland et al. 2020; Miller et al. 2020; Newman et al. 2011). For example, in 2020, the labor force participation rate was 24 percent among youth with disabilities ages 16 to 19 and 44 percent for those ages 20 to 24; the corresponding rates for youth without disabilities were 35 percent and 70 percent, respectively (U.S. Bureau of Labor Statistics 2021a).

Among youth with disabilities, those receiving SSI encounter additional challenges in their postschool outcomes, reflecting a combination of their significant health conditions, low household resources, and household reliance on SSI. 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). SSI payments make up almost half of household income when a child receives SSI (Rupp et al. 2005/2006); some of these families might be concerned about losing this important source of income if their children engage in employment. 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 December 2021, the share of youth that worked was 1 percent among those ages 16 and 17, 9 percent among those ages 18 to 21, and 14 percent among those ages 22 to 25 (personal communication with J. Hemmeter, June 14, 2022). Moreover, few youth receiving SSI use SSA program provisions that aim to help working SSI recipients keep more of the cash and health insurance benefits (U.S. Government Accountability Office 2017).

Along with the challenges faced by children with disabilities regarding their outcomes as young adults, the large number of children with disabilities who receive SSI generates concerns about the long-term well-being of these children and the federal expenditures that support them (Burkhauser and Daly 2011; Duggan et al. 2016). These concerns arise because many of them will continue to receive SSI and other public assistance as adults. In November 2021, about 1 million children received SSI payments totaling about $9 billion annually (SSA 2021b). Many individuals who enter the federal disability programs at a young age go on to receive benefits for many decades, and child SSI eligibility is an important pathway to adult SSI eligibility. Although the eligibility rules for adults differ than those for children, about 55 percent of youth SSI recipients who undergo SSA's age-18 redetermination go on to receive SSI as adults (SSA 2021c); others return to SSI or obtain Social Security Disability Insurance (DI) in later years (Hemmeter and Bailey 2015). SSI recipients who first started receiving benefits as children represent about one-quarter of all adult SSI recipients (SSA 2021b). Adults who received SSI at a young age also incur large lifetime disability program and other expenditures. One study estimated that individuals who

enter SSI or 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, or twice the average of all working-age disability beneficiaries (Riley and Rupp 2015).

Over the past decade, federal policymakers have prioritized improving the education and employment outcomes of youth with disabilities, along with reducing 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).[5] Key among them are services provided under the Individuals with Disabilities Education Act (IDEA) and WIOA. IDEA guarantees access to free and appropriate public education tailored to the needs of students with disabilities. It requires schools to undertake transition planning by the time special education students reach age 16. The plans consider postsecondary education, training, employment, and independent living goals for students with disabilities, and outline services and activities to help them achieve those goals. WIOA seeks to enhance transition services by improving program coordination, reducing service overlap, encouraging certain occupational pathways, and emphasizing competitive integrated employment over sheltered work. WIOA requires state vocational rehabilitation (VR) agencies to offer pre-employment transition services to students with disabilities and allocate 15 percent of their federal funding to those services.

Despite the availability of transition planning and services through IDEA, WIOA, and other programs, many youth and families encounter challenges 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 (U.S. Government Accountability Office 2012, 2017; Hirano et al. 2018). Although IDEA requires transition planning to occur during high school, national data indicate that many special education students (30 percent) and their parents (40 percent) never engage in post-high school transition planning with school staff (Liu et al. 2018). Many youth with disabilities do not obtain career development experiences despite their potential availability through federal and state programs (Carter et al. 2010; Liu et al. 2018). A key source for such experiences is state VR agencies, but few transition-age youth with disabilities apply for or receive VR services (Honeycutt et al. 2015). Challenges in accessing services might be more prevalent among SSI youth and their families because of their limited resources and significant health conditions (Rupp et al. 2005/2006).

2. Previous demonstrations of interventions for transition-age youth achieved short-term success but had limited long-term impacts

Before PROMISE, there were three large experimental demonstrations of interventions that aimed to improve the transition outcomes of youth with disabilities. In the early 1980s, the U.S. Department of Labor conducted the Structured Training and Employment Transitional Services (STETS) Demonstration, which enrolled 476 youth with intellectual disability ages 18 to 24 who were receiving disability benefits. The intervention involved transitional employment services that included job exposure, on-the-job training, and post-employment support. It increased the employment, earnings, and income of treatment group members although it had no impact on their benefit receipt (Kerachsky and Thornton 1987).

In the mid-1980s, SSA conducted the Transitional Employment Training Demonstration (TETD), which enrolled 745 SSI recipients ages 18 to 40 with intellectual disability. The intervention involved time-limited job development, on-the-job training, and postplacement services, and waiver exclusions for

[5] "Transition age" is typically defined as including ages 16 to 24. By design, PROMISE targeted a younger group.

income earned from a job obtained through TETD. TETD increased employment and earnings and reduced SSI payments over the six years following enrollment, and reduced SSI payments (Decker and Thornton 1995).

In the mid-2000s, SSA conducted the Youth Transition Demonstration (YTD). YTD programs delivered employment and other services to a broad population of youth with disabilities ages 14 to 25 who were receiving or at risk of receiving SSI. YTD offered work-based learning experiences, youth empowerment activities, and benefits counseling to treatment group members; the programs also promoted family involvement and linkages across community programs. Six sites nationwide each enrolled about 800 participants (Fraker et al. 2014b). YTD applied waivers that modified SSI program rules, including one allowing SSA to exclude more earnings of students in calculating their benefits. YTD's impacts on employment varied by program and diminished over time (Hemmeter 2014; Fraker et al. 2014b; Hemmeter and Cobb 2018). After one year, three of the six programs increased employment, with the impacts of two of them being large (16 and 24 percentage points). After three years, two programs continued to have positive employment impacts of about 6 to 8 percentage points (Fraker et al. 2014b). Unpublished estimates suggest that none of the programs had employment or benefit receipt impacts after three years (Hemmeter and Cobb 2018).

Looking beyond interventions that focus on youth with disabilities, research has found mixed evidence on the effectiveness of programs that serve "opportunity youth," that is, young people ages 16 to 24 who are disconnected from school and work. The Supported Work Demonstration (Hollister et al. 1984), National Job Training Partnership Act Study (Orr et al. 1996), and Job Start Demonstration (Cave et al. 1993) found no impacts on youth's earnings. However, a handful of programs improved some outcomes for some subgroups of youth. YouthBuild, a program that included a mix of education, vocational training, counseling, leadership development, and service to community, increased employment and earnings four years later (Miller et al. 2018). Job Corps, a career technical training and education program for at-risk youth ages 16 to 24, increased post-program earnings (Schochet et al. 2008). An analysis of a subset of youth with medical limitations found large positive impacts on employment and earnings and reduced dependence on disability benefits (Hock et al. 2017). Further, for older Job Corps participants, the positive employment and earnings impacts persisted 20 years after enrollment and the program reduced participation in Social Security Disability Insurance (Schochet 2021).

B. PROMISE conceptual framework

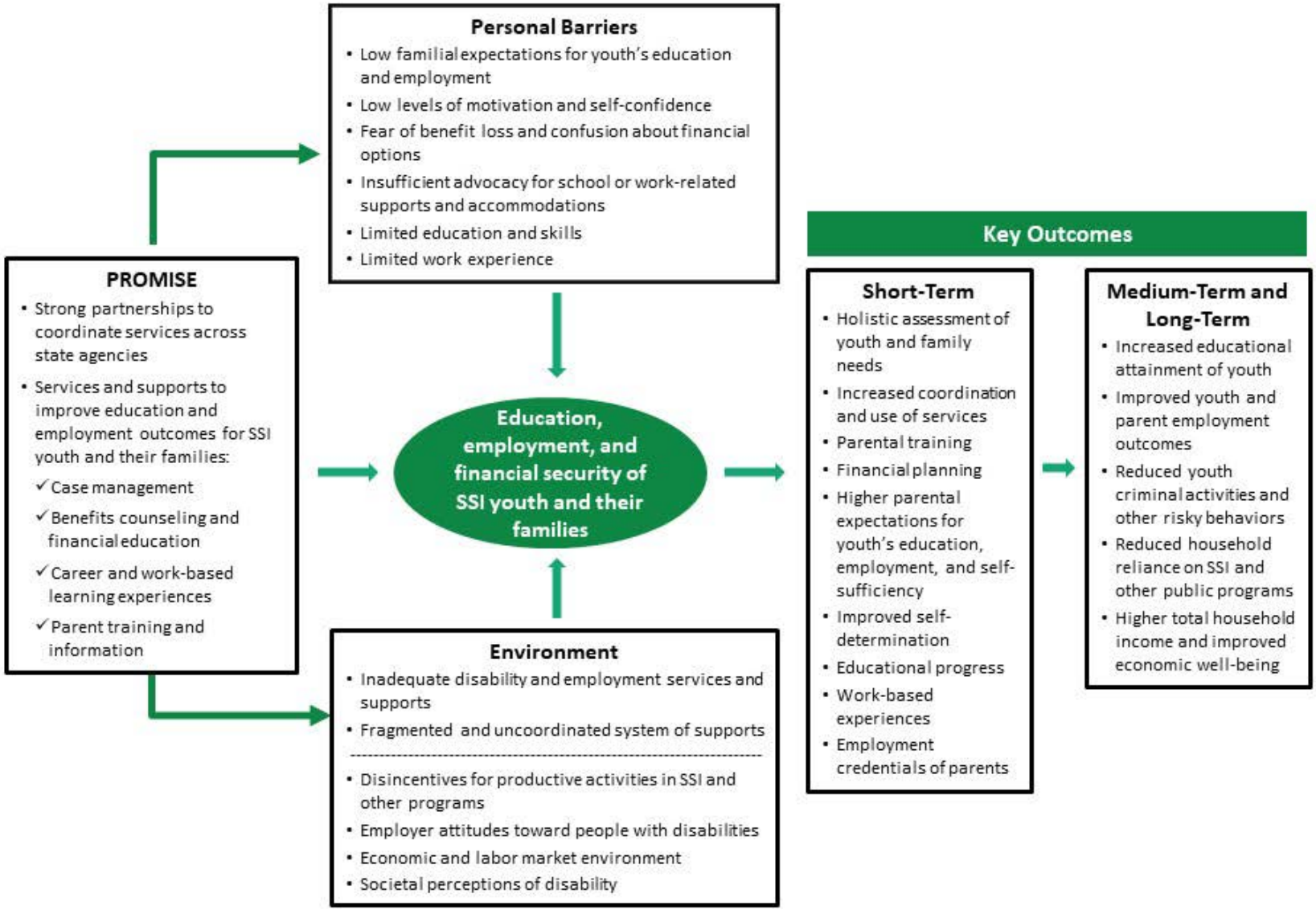
The federal partners sponsoring PROMISE envisioned programs that, through evidence-based service practices and strong partnerships, would address many of the challenges described above for youth receiving SSI. The federal partners expected that the entities awarded funding to implement the PROMISE programs would draw on their experiences with the target population and on evidence of best practices to identify innovative ways of offering services to improve the economic self-sufficiency of youth receiving SSI 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 federal, state, and local agencies that offer 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 their partners the state agencies responsible for administering programs that offer the following services to youth and families: state VR services under Title I of the Rehabilitation Act and Title IV of WIOA, special education and related services under Part B of IDEA, workforce development services under Title I of the Workforce Investment Act and Title I of WIOA, 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 through federally funded state developmental disability and mental health services programs.
- **Case management.** The programs were to offer case management to youth and their families to plan and coordinate PROMISE services and help youth and families navigate the broader service delivery system. In addition to service coordination, case management had to include transition planning for youth to establish post-school goals and facilitate their transition to appropriate post-school services.
- **Benefits counseling and financial education.** The PROMISE programs were expected to offer counseling to youth and their families on SSA work incentives, the eligibility requirements of various programs, and rules governing earnings and assets. To supplement this information, the programs also offered financial education, which might 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 to ensure that youth had access to at least one paid work experience in an integrated setting while they were in high school. In addition, the programs were required to connect youth to 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 to offer information and training in two areas to the families of youth: (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.[6]

Figure I.1 shows the conceptual framework underlying PROMISE. The core program components (the box at the far left) were intended to address the set of personal barriers for youth with disabilities (the box at the top of the figure). Examples of personal barriers include 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 center oval). The PROMISE components were also intended to address some of the systemic factors (the lowest box) that are important determinants of the education, employment, and financial outcomes of SSI youth and their families, including inadequate and uncoordinated services. In addition, the PROMISE components were intended to affect a variety of short- and long-term outcomes (the two boxes on the right side of the figure). However, the level of evidence supporting most of the core PROMISE components was primarily correlational (Honeycutt et al. 2018a). Among the core components, career and work-based learning experiences are supported by the strongest body of evidence (Luecking et al. 2018; Fraker et al. 2018; Sevak et al. 2021; Mazzoti et al. 2021).

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

Figure I.1. PROMISE conceptual framework



Source: Adapted from Fraker et al. (2014a).

Although the PROMISE model and demonstration had many similarities to YTD, they differed along several important dimensions. YTD offered services to youth, but PROMISE offered services to families as well as youth. PROMISE also focused more narrowly on younger youth (ages 14 to 16 at enrollment) compared with YTD (ages 14 to 25). State social service agencies led the PROMISE programs, whereas universities and private nonprofit service providers operated the YTD projects. PROMISE sought to improve the coordination of services for youth with disabilities across multiple state agencies and local service providers within each participating state, whereas the YTD projects' interactions with state agencies and service providers focused on referrals for financial assistance and services. Finally, PROMISE was larger in scale—its programs enrolled more than 12,000 youth and families; the YTD projects enrolled about 5,100 youth.

C. 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 extending the award period. ED selected the awardees through a competitive process that included a request for applications (ED 2013a), preparation and submission of applications by state agencies, and application review by a panel of external peers. ED issued the awards in the form of cooperative agreements that entailed an ongoing working relationship between ED and the awardees to achieve the PROMISE objectives. The awardees were state agencies that had formed partnerships with other agencies for the purpose of implementing PROMISE.

Given their substantial investment in PROMISE and the pressing needs of transition-age youth receiving SSI and their families, the federal sponsors had three key requirements for the PROMISE programs (ED 2013a). They required each program to do the following: (1) enroll a minimum of 2,000 youth in the national PROMISE evaluation; (2) develop partnerships with agencies responsible for providing services to SSI youth and their families; and (3) include the initiative's four core service components in its service offerings—case management, benefits counseling and financial education, career and work-based learning experiences, and parent training and education.

The six PROMISE demonstration programs were implemented in Arkansas (Arkansas PROMISE), California (CaPROMISE), Maryland (MD PROMISE), New York (NYS PROMISE), Wisconsin (WI PROMISE), and a consortium of six western states known collectively as Achieving Success by Promoting Readiness for Education and Employment (ASPIRE). The consortium's 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 youth receiving SSI, 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 PROMISE program. All programs began enrolling families in 2014 and offered services to them until the cooperative agreements ended, regardless of the youth's age or ongoing eligibility for SSI. For each program, Table I.1 summarizes the enrollment and service delivery periods,

the lead agency and award amount (including supplemental funding), selected partner agencies, and how the program implemented the initiative's four core service components and two additional ones—education services and other services. We note salient features of each program below.

Arkansas PROMISE delivered case management and other services to youth and their families in five multicounty regions of the state, primarily through case managers. The program offered youth education- and employment-related services—including at least two summer work experiences of 200 hours each—through staff transition specialists and local workforce programs. It offered education and training on transition and employment issues to youth and parents during monthly workshops. It also developed a summer camp that exposed youth to the environment of a college campus and included training on academic readiness, careers, self-advocacy, and health and wellness. Case managers had access to 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—across six states. In addition to the required components, ASPIRE offered self-determination training to youth and assistance with guardianship issues for parents. Late in its program implementation, ASPIRE offered funds for Achieving a Better Life Experience (ABLE) accounts.[7] The program leveraged existing services (for example, VR, centers for independent living [CILs], and Work Incentive Planning and Assistance [WIPA] services) to deliver core ASPIRE services other than case management. The program standardized services and staff training across the consortium states, and a centralized leadership team monitored implementation. Nonetheless, implementation varied widely by state with respect to the agencies and staff delivering the services, the times at which specific services became available to families, and service delivery methods.

CaPROMISE proposed a higher enrollment target and received more funding than the other PROMISE programs so it could 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 local offices of the California Department of Rehabilitation, family resource centers, and CILs to connect youth and families to existing services. The work of CaPROMISE staff was supported by technology in a number of areas, such as an informational website, a web-based data management system for staff, video resumes, and assistive technology supports (including smart touch-screen technologies).

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

[7] ABLE accounts are tax-advantaged saving accounts for people who experience disability onset before age 26. ABLE account funds are excluded in determining eligibility for public means-tested assistance programs like SSI.

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

PROMISE program/ enrollment and service delivery periods	Lead agency and award amount	Partners delivering PROMISE-specific services	Case management	Benefits counseling and financial education	Career and work-based learning experiences	Parent training and information	Education	Other services
Arkansas PROMISE Enrollment: September 2014–April 2016 Service delivery: September 2014–June 2019	Arkansas Department of Education; $35,814,845	VR, workforce investment boards, CILs, postsecondary education, and University of Arkansas College of Education and Health Professions	Program staff provided case management services to participants and families, and local monthly group training sessions for participants and families; participants developed plans for employment and education	Benefits counseling offered through CILs; financial training offered by program staff	Program staff provided employment supports and referrals to VR; participants were offered two summer work experiences of 200 hours each with job coaching services (as needed)	Program staff offered case management, training, and other services, including referrals, to parents; parents developed plans for employment and education	Program staff offered school supports, including attendance at IEP meetings and visits to postsecondary institutions	Program staff offered self-determination and self-advocacy training through monthly group trainings; summer camp held at college campus

Table I.1 (*continued*)

PROMISE program/ enrollment and service delivery periods	Lead agency and award amount	Partners delivering PROMISE-specific services	Case management	Benefits counseling and financial education	Career and work-based learning experiences	Parent training and information	Education	Other services
ASPIRE; Enrollment: October 2014–April 2016 (enrollment start differed by state) Service delivery: October 2014–May 2019 (service delivery start differed by state)	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, offered case management to participants and families, helped participants set goals, and connected families to resources and employment opportunities	Benefits counseling offered mainly through WIPA programs; financial literacy training offered by program service providers	Program staff helped participants access work experiences through existing resources—typically VR or school-based programs, assisted with job applications, and arranged volunteer opportunities	Parent training and information centers delivered parent training; program staff offered case management and linkages to resources to assist with parent education and employment goals	Program staff offered school supports, including attendance at IEP meetings and assistance with postsecondary education exploration and support	Program staff or program service providers offered self-determination training to participants; program staff supported other activities to build youth self-determination, leadership, and social skills; ABLE account funds were made available to youth who attended benefits counseling and financial education training

Table I.1 (*continued*)

PROMISE program/ enrollment and service delivery periods	Lead agency and award amount	Partners delivering PROMISE-specific services	Case management	Benefits counseling and financial education	Career and work-based learning experiences	Parent training and information	Education	Other services
CaPROMISE; Enrollment: August 2014–April 2016 Service delivery: August 2014–June 2019	California Department of Rehabilitation; $55,077,500	San Diego State University Interwork Institute, LEAs, state universities, family resource centers, and CILs	Program staff offered case management to participants and families; participants created a person-driven plan for services and an individual career action plan	Program staff hired by LEAs and trained as certified work incentives counselors offered benefits counseling and financial literacy training; use of Disability Benefits 101 (an online tool that provides state-focused information on employment, health insurance, and disability benefits)	Program staff and VR counselors dedicated to PROMISE offered employment services directly, including paid and unpaid work experiences and targeted training activities; additional supports were available through specialized program staff (such as job developers and job coaches)	Program staff offered support to parents, including resources and referrals to VR and other programs; CILs and family resource centers offered training and referrals	Program staff made referrals or offered school supports, including attendance at IEP meetings, advocacy for participants' needs, and drop-out prevention; postsecondary education linkages	Program staff made referrals for or offered (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

Table I.1 (*continued*)

PROMISE program/ enrollment and service delivery periods	Lead agency and award amount	Partners delivering PROMISE-specific services	Case management	Benefits counseling and financial education	Career and work-based learning experiences	Parent training and information	Education	Other services
MD PROMISE; Enrollment: April 2014–February 2016 Service delivery: April 2014–September 2018	Maryland Department of Disabilities; $33,090,076	Program service providers	Program staff and family employment specialists hired by a program service provider delivered case management to youth and family members, developed plans describing youth's and family members' goals and steps to achieve them	Program service providers offered benefits and financial counseling and education	Program staff hired by program service provider delivered employer outreach and job seeker services, and arranged paid and unpaid work experiences	Program staff delivered case management and employment services to parents	Program staff offered secondary school supports, including attendance at IEP meetings and postsecondary education linkages	None
NYS PROMISE; Enrollment: October 2014–April 2016 Service delivery: October 2014–August 2019	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, offered case management to youth, developed intervention plans, and made referrals for services	Program service providers offered benefits counseling and financial literacy training	Program service providers and employment specialists employed by the Research Foundation for Mental Hygiene delivered workplace assessments, career planning, unpaid/paid work experiences, and work supports	Parent centers offered case management to parents, developed intervention plans, made referrals, and delivered parent training	Program staff offered secondary school supports, including attendance at IEP meetings and postsecondary school supports	Program maintained a website with resources related to self-determination and self-advocacy, and offered day habilitation specialists to assist with independent living skills

Table I.1 (*continued*)

PROMISE program/ enrollment and service delivery periods	Lead agency and award amount	Partners delivering PROMISE-specific services	Case management	Benefits counseling and financial education	Career and work-based learning experiences	Parent training and information	Education	Other services
WI PROMISE; Enrollment: April 2014–April 2016 Service delivery: April 2014–September 2018	Wisconsin Department of Workforce Development, Division of Vocational Rehabilitation; $36,084,681	Program service providers	VR counselors developed individualized plans for employment for youth, referred youth and parents to services, and helped develop resource teams for youth and families	Work incentives counselors, through multiple providers, delivered benefits counseling; program service provider delivered financial literacy training and opened matched IDAs	Work experiences and employment supports offered through VR	Program service provider delivered parent training and referred parents to community resources	VR counselors offered school supports, including attendance at IEP meetings	VR counselors helped participants complete health promotion and literacy training; program service providers delivered social skills training

Source: Honeycutt et al. (2018a); ED (2013b); Livermore et al. (2020).

ABLE = Achieving a Better Life Experience; CIL = center for independent living; IDA = individual development account; IEP = individualized education program; LEA = local educational agency; VR = vocational rehabilitation; WIPA = Work Incentives Planning and Assistance.

NYS PROMISE operated 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, three entities partnered to deliver services: (1) research demonstration sites (RDSs)—mostly LEAs—offered case management to youth; (2) parent centers offered case management and training to parents; and (3) service providers offered employment and education services to youth, and benefits counseling and financial literacy training to youth and parents. The program assigned a case manager employed by an RDS to each treatment group youth and a family coach employed by a parent center to each treatment group parent. The case manager and family coach provided information and support and made referrals to NYS PROMISE services and community resources. The program also assigned a case manager and family coach, respectively, to each youth and parent in the control group. The program intended that case managers and family coaches would record information on control group members' educational and employment outcomes and make referrals to community resources.

WI PROMISE established resource teams throughout the state for all youth in the treatment group. The composition of a team varied with the needs of each youth; however, a team typically consisted of a school representative; a mental health case manager; a child welfare or TANF case manager; and a PROMISE VR 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 (IDAs). The program also delivered soft skills training to youth to improve their employability. In addition, self- and family-advocacy was part of the WI PROMISE service model, as was developing family service plans for family members.

D. PROMISE evaluation

The federal sponsors of the PROMISE initiative are interested in whether and how the PROMISE programs achieved their goals and whether the benefits of the programs outweighed their costs. In response to these interests, the PROMISE evaluation answers the key research questions shown in Table I.2 through three types of analyses. These questions were initially presented in the PROMISE evaluation design report (Fraker et al. 2014b).

A **process analysis** of each PROMISE program analyzed the programs' activities during the first three years after they began enrollment. 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. 2018b; Kauff et al. 2018; Matulewicz et al. 2018a; McCutcheon et al. 2018; Selekman et al. 2018).

Through program-specific **impact analyses**, the evaluation shows how each program achieved the intended improvements in the short- and long-term outcomes shown in Figure I.1 for youth and their families. The impact analyses are based on a rigorous random assignment (RA) design. The target number of youth voluntarily enrolled in the PROMISE evaluation was 2,000 for each program except CaPROMISE, which had a target of 3,078. Half of the youth who enrolled in the evaluation of each program and went through the RA process were placed in a treatment group, and the remainder in a control group. Treatment group youth could receive PROMISE services, whereas those in the control group could receive only the services available in their communities independent of PROMISE. Through the impact analyses, we assessed 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, well-being, and other outcomes. In a previous report, we documented early positive program impacts on service use, employment, earnings, education, and a variety of other outcomes 18 months after RA (Mamun et al. 2019a, 2019b). This report presents estimates of the programs' impacts five years after RA. Subgroup analyses assess whether some groups of enrollees benefited more than others from the program services. For selected analyses, we pooled data across the programs.

Table I.2. Key research questions, by evaluation component

Research question	Process analysis	Impact analysis	Benefit-cost analysis
1. How were the PROMISE programs designed, implemented, and operated, and what factors contributed to the implementation experience?	X		
2. Did PROMISE treatment group members receive more and better transition and supportive services than control group members?	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 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: Adapted from Fraker et al. (2014b).

SSI = Supplemental Security Income.

The third analysis type is 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 conducted this analysis from a range of perspectives, including that of the PROMISE treatment group families, SSA, ED, the federal government as a whole, the state programs delivering the services, and these key stakeholders collectively. We presented findings from the cost component of the benefit-cost analysis in a previous report (Mamun et al. 2019a, 2019b). In this report, we present the final benefit-cost findings, based on data collected five years after RA.

The evaluation relies on data from several sources. For the process analysis, we drew 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 18-month and five-year impact analyses were drawn from the evaluation's follow-up surveys of youth enrollees and their parents, and from the administrative records of SSA, VR, Medicare, and Medicaid programs. The follow-up surveys gathered information on youth and family characteristics and outcome measures, including service use, education, employment, earnings, self-determination, expectations, income, and non-SSA program participation. Administrative records contained information on SSA program payments, earnings, VR application and service use, and

Medicaid and Medicare enrollment and expenditures. Data for the cost component of the benefit-cost analysis came from the programs' financial documents and management information systems, and input from program staff. We combined these cost data with estimates from the five-year impact analyses and information from published sources to develop estimates of the net benefits (or costs) of each program.

E. Report objectives and organization

This final report on the PROMISE evaluation presents estimates of the impacts of the PROMISE programs on various youth and parent outcomes as of five years after enrollment. If the services offered by the programs were effective, then the enrolled youth randomly selected for the opportunity to use those services (treatment group members) should have achieved better outcomes relative to the enrolled youth randomly assigned to continue using usual services and ineligible for PROMISE services (control group members). We also present estimates of the net benefits (or costs) of the PROMISE programs based on the five-year impact estimates and estimates of the costs of delivering PROMISE services obtained from the cost analysis presented in Mamun et al. (2019a, 2019b).

The next chapter describes the approach we used to estimate impacts, benefits, 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 and 18-month impact analyses, descriptive statistics on the sample for the five-year impact analysis, findings from that analysis, and findings from the benefit-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 and other analyses.

II. Data and Methods

Two key goals of the national PROMISE evaluation are to (1) generate rigorous evidence on program impacts and (2) assess the benefits of each program against its costs. This experimental study design allowed us to accurately infer whether and to what extent each program had impacts on treatment group youth and their parents. We also collected and analyzed data on the various costs associated with providing PROMISE services. The findings from these two analyses, together with those from the process study of each program's implementation,[8] will provide a sound basis for considering the development of similar interventions. This chapter describes the data and analytic approaches we used to conduct the impact and benefit-cost analyses. Appendices A and B provide more detail about the data and methods.

A. Impact analyses

The PROMISE evaluation used an RA study design (Fraker et al. 2014a). Eligible youth who agreed to participate in the evaluation were randomly assigned to either a treatment group, which meant they were eligible to receive PROMISE services, or a control group, which meant they were not eligible for PROMISE services but could receive other services available in their communities.[9] RA produced two groups of youth with similar pre-intervention characteristics, on average (Mamun et al. 2019a). 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 report show whether each PROMISE program improved the outcomes of treatment group youth and their parents approximately five years after RA.

Because enrollment in the demonstration was voluntary, youth and families particularly interested in receiving the types of services PROMISE offered may have been more likely to volunteer for the study. For example, more than 90 percent of control group youth received some youth transition services in the 18 months after RA (Mamun et al. 2019a), which suggests that the "business as usual" environment provided youth with opportunities to engage in some services, particularly through the school system. Yet the PROMISE programs significantly increased youth's use of transition services and families' use of support services—especially in areas aligned with the core components of the PROMISE initiative: case management, career services and work-based learning, benefits counseling, and financial education. Thus, the estimated program impacts represent the effects of the PROMISE interventions relative to other services in the community that youth and families may have used, rather than relative to a counterfactual environment of "no services."

The impact analysis addresses the question: "What were the impacts of a PROMISE program on eligible youth and their families who volunteered to participate in program services?" We estimated impacts by comparing the outcomes of all youth and parents randomly assigned to the treatment group to the outcomes of all youth and parents randomly assigned to the control group—regardless of whether the treatment group members actually participated in program services. These estimates provide policy-

[8] The process analysis findings are presented in program-specific process analysis reports (Anderson et al. 2018; Honeycutt et al. 2018b; Kauff et al. 2018; Matulewicz et al. 2018a; 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. Some youth may have been in non-pay SSI status during the month of RA; these youth were considered eligible because of the frequent fluctuation between SSI non-pay and current pay status.

relevant information because they show the effect of a voluntary program when not everyone in the target population will necessarily participate.

The analyses consider a five-year follow-up period that, for some enrollees, coincided in part with the global pandemic caused by the spread of severe acute respiratory syndrome coronavirus 2 (hereafter referred to as COVID-19). The pandemic caused economic upheaval, risks to public health, and major changes to the options available for work, education, and government assistance, which in turn, might have affected PROMSIE enrollees' outcomes. Although we cannot rigorously isolate the effects of this external shock on the estimated impacts and benefits of PROMISE, we discuss the possibilities when interpreting the findings. In addition, we conducted exploratory analyses to assess the extent to which impacts differed for enrollees who responded to the survey before versus during the pandemic.

1. Data sources

The impact analysis relied on survey and administrative data. We collected data on key outcomes of youth receiving SSI and their parents who enrolled in PROMISE via a survey conducted five years after RA. For the ASPIRE program, we also used data from a baseline survey and intake form that the program collected. We also used data on race and ethnicity collected from the youth and parent 18-month surveys. Finally, we relied on data from the administrative records of several federal agencies, including SSA, the Centers for Medicare & Medicaid Services (CMS), and the Rehabilitation Services Administration (RSA). We briefly describe these sources below and provide additional details in Appendix A.

a. Youth and parent five-year surveys

We conducted a follow-up survey of youth and their parents five years after RA. We developed detailed plans for collecting survey data at the outset of the evaluation (Matulewicz et al. 2018b). There were two survey instruments: one for youth enrollees and another for their parents. Although the target respondents for the youth survey were the youth themselves, they were sometimes helped by their parents, or sometimes proxies supplied their responses. The target respondent for the parent survey was the parent who completed the PROMISE enrollment forms and provided consent to participate in the evaluation. We refer to this person as the "enrolling parent." In five of the six PROMISE programs, all evaluation enrollees who were randomly assigned were eligible to be interviewed for the survey. CaPROMISE was the exception; for that program, we sampled 2,000 of the 3,097 randomly assigned enrollees for the survey.[10]

The surveys collected information that could not be obtained readily from administrative records or other sources. Specifically, in the youth survey, we asked questions about youth's education and training, employment and work-related experiences, health and well-being, self-determination, expectations about the future, and knowledge of SSA rules and other work supports. In the parent survey, we asked about parents' educational credentials and employment experiences, individual and family well-being, and expectations for the youth.

[10] In California, we used a stratified random sampling approach, using LEAs and treatment status to define the strata, so the relative distribution of sampled cases mirrored that of all study enrollees within each stratum (Matulewicz et al. 2018b). To account for the fact that we sampled only a subset of all youth and families enrolled in the evaluation in California, we used sampling weights when analyzing outcomes based on survey data. We calculated the sampling weights as the inverse of the probability of selection for the survey sample in CaPROMISE (Matulewicz et al. 2018b).

We administered the surveys primarily by telephone. If we were unable to complete an interview by telephone, we conducted nonrespondent follow-up in person and via a self-administered paper questionnaire mailed to nonrespondents. We halted in-person locating and interviewing from March 2020 to June 2021 because of the COVID-19 pandemic. Of the parent survey respondents, 93 percent completed the survey by telephone, 4 percent completed it in person, and 4 percent completed it on paper. The figures for youth survey respondents were 91 percent by telephone, 4 percent in person, and 5 percent on paper. The median length of the survey interview was 19 minutes for the parent survey and 27 minutes for the youth survey. Appendix Table A.1 shows the survey administration timeline for each program.

The PROMISE five-year parent and youth survey response rates were high, averaging at least 80 percent for all programs (Table II.1). Response rates were similar for the parent and youth surveys. The differences in response rates between treatment and control group samples members were small, never exceeding 3 percentage points in any program. In Appendix K, we provide supplemental analyses of selected survey administration procedures and the determinants of survey response.

Table II.1. Five-year youth and parent survey response rates, by program

Sample	Arkansas PROMISE	ASPIRE	CaPROMISE	MD PROMISE	NYS PROMISE	WI PROMISE
Youth survey						
Treatment	82%	84%	82%	81%	86%	85%
Control	79%	83%	80%	81%	83%	84%
Total	81%	84%	81%	81%	85%	85%
Parent survey						
Treatment	82%	85%	83%	82%	87%	86%
Control	79%	83%	81%	81%	84%	84%
Total	80%	84%	82%	81%	85%	85%

Source: PROMISE five-year survey management system.

Note: Response rates equal the number of youth or parents who completed the survey divided by the number of youth or parents eligible for the survey. The number of youth eligible for the survey equals the research sample (shown in Table II.2) less youth who died or withdrew within five years of RA or, in the case of CaPROMISE, were not sampled for the survey. The number of parents eligible for the survey equals the research sample less parents who died or withdrew within five years of RA; were the parent of a youth who died within five years of RA; were a legal guardian employed by an agency; or, in the case of CaPROMISE, were not sampled for the survey.

ASPIRE = Achieving Success by Promoting Readiness for Education and Employment; CaPROMISE = California PROMISE; MD = Maryland; NYS = New York State; WI = Wisconsin.

b. Youth and parent 18-month surveys

We conducted follow-up surveys of youth and their parents 18 months after RA. Details of the surveys are provided in Mamun et al. (2019b). 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. We used these data to measure youth and parent race and ethnicity for the impact analyses. We also used these data in supplementary analyses of survey administration procedures (Appendix K).

c. ASPIRE baseline survey and intake form

We used data on treatment and control group members collected by the ASPIRE program at the time the youth enrolled in the evaluation. ASPIRE collected these data via surveys administered to youth and parents and via an intake form. The youth survey asked questions designed to measure health; employment; school enrollment; difficulties with activities of daily living; and whether youth had talked to a parent, teacher, or coworker about managing money, postsecondary education, or employment. ASPIRE's parent survey asked about the parent's expectations for the youth and included self-assessments of the parent's financial knowledge and ability to support the youth's independent living. On the ASPIRE intake form, the program collected information about the youth's and parents' race and ethnicity; these data replaced those collected via the PROMISE 18-month surveys in the analyses. We used all of these data to construct covariates for use in regression models that estimated the impacts of ASPIRE. None of the other PROMISE programs collected data on both treatment and control group members.

d. Administrative data

We relied on four sources of administrative data to conduct the impact analysis: (1) the PROMISE RA system, (2) SSA records, (3) CMS records, and (4) RSA records. Administrative records provided data for all youth who enrolled in PROMISE and a subset of parents (see text box).

RA system data. The RA 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 RA system.[11] The data included the name, date of birth, Social Security number (SSN), and sex for the youth and the enrolling parent, and the parent's relationship to the youth. The RA 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 RA 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 RA system used for the impact analysis included the youth and parent data

Parents identified in the impact analysis data sources:

- ASPIRE baseline survey and intake form: the enrolling parent or another parent or legal guardian
- PROMISE 18-month parent survey: the enrolling parent or another parent or legal guardian
- PROMISE five-year parent survey: the enrolling parent
- RA system: the enrolling parent
- SSA, CMS, and RSA 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

[11] To enroll in PROMISE, youth had to provide a valid SSN, which allowed us to identify relevant records in the SSA, CMS, and RSA data. Parents of enrolled youth were encouraged to provide an SSN but were not required to do so. When including the parent(s) documented on the SSI record in the SSA, CMS, and RSA data analyses, we identified the parent(s) using the SSN(s) from the SSI record. When including the enrolling parent, we identified the parent using the SSN provided by the parent at enrollment if available and validated through SSA's Enumeration Verification System.

entered by program staff, the program name, the program region,[12] the youth's RA group, the date that assignment occurred, and an indicator of whether the youth was a research case.[13]

SSA data. We obtained data on annual earnings, disability program payments, and youth's age-18 redeterminations. We used earnings data from SSA's Master Earnings File, which contains annual earnings as reported by employers to the Internal Revenue Service. The earnings data covered 2013 through 2021, which encompassed the calendar year before and five calendar years after the year of RA for all enrollees.[14] We used the disability program benefit data from April 2013 through April 2021, which covered the 12 months before RA through the five years after RA for all youth enrollees and their parents. Data on SSI receipt, including dates of application and monthly payment amounts, came from the Supplemental Security Record (SSR) for all months from April 2013 through April 2021. We also obtained data on several key baseline characteristics from SSA's SSR, including length of SSI payment receipt at RA, age at first SSI application, and the primary impairment forming the basis for the youth's SSI eligibility. Data on Old-Age, Survivors, and Disability Insurance (OASDI) program payments came from the Payment History Update System for all months from April 2013 through April 2021. The continuing disability review (CDR) data reflecting the age-18 redeterminations ranged from April 2014 through April 2021, covering the five years after RA for all study enrollees. In addition to data on outcomes related to SSA program participation,

CMS data. We obtained data on Medicaid and Medicare enrollment and expenditures for youth enrollees and their parents from the CMS Research and Data Assistance Center. The Medicaid data were for the period from April 2013 through December 2020. The Medicare quarterly data were for the period from April 2013 through April 2021, representing the 60 months after RA for all study enrollees.

RSA data. We obtained data on participation in VR for youth enrollees. We used RSA data from April 2013 through December 2020, which represents four to five years after RA, depending on the youth's date of study enrollment. We used data on whether the youth applied for or received services during that period.

2. Analysis samples

The research sample comprised all evaluation enrollees randomly assigned to either the treatment or control group. The PROMISE programs recruited youth and their families using lists of PROMISE-eligible youth provided by SSA. The programs primarily contacted youth and families by mail and telephone, although they also used text messages, emails, and in-person visits and events. Interested youth and families completed enrollment and consent forms designed by the programs. Enrollment in the PROMISE evaluation and RA occurred through the PROMISE RA system. Program staff entered data from the enrollment and consent forms into the PROMISE RA system, which then randomly assigned the youth to a study group according to customized algorithms. The RA system generated a personalized letter that the programs could use to notify the youth and family of the study group assignment results.

[12] For ASPIRE, the regions were the six states comprising the consortium. For the other programs, the regions comprised substate areas chosen by each program for implementation purposes.

[13] The programs were permitted to nonrandomly assign up to five 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 analyses.

[14] We did not have direct access to the Master Earnings File data. We worked with SSA staff to analyze these data.

Each program's process for recruiting youth and their families and formally enrolling them in the evaluation is described in more detail in the evaluation's program-specific process analysis reports.

Table II.2 shows the research sample sizes by treatment status and program. The research sample in each program comprises youth and parents covered by the impact evaluation of that program, that is, all youth who enrolled in the program and were randomly assigned as well as their parents. However, most of the follow-up data sources provided data for a subset of the research sample. Consequently, the analysis samples for the five-year impact analysis of each program depended on the specific data source.

Table II.2. PROMISE sample sizes, by program

Sample	Arkansas PROMISE	ASPIRE	Ca PROMISE	MD PROMISE	NYS PROMISE	WI PROMISE
All enrollees						
Treatment	1,027	1,033	1,646	997	1,057	1,018
Control	973	1,018	1,627	1,009	1,033	1,006
Total	2,000	2,051	3,273	2,006	2,090	2,024
Research samples						
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)[a]						
Five-year youth survey	79.8	81.5	51.8	79.6	84.5	83.9
Five-year parent survey	77.2	79.2	51.8	77.8	83.6	82.3
SSA, CMS, and RSA data—youth	100.0	100.0	100.0	100.0	100.0	100.0
SSA and CMS data—parents	98.2	91.5	84.9	93.9	94.6	96.6

Note: The research sample comprises all youth who were randomly assigned. The research sample excludes (1) youth who had siblings already enrolled in the study and were purposively assigned to the same groups as their siblings and (2) up to five youth per program who were purposively assigned to the treatment group at the program's request. The analysis samples comprise youth or parents who were included in the analyses that were based on data from the specified source. The five-year youth and parent survey sample percentages are lower than the survey responses rates because the denominators for the response rates exclude youth and parents in the research sample who were ineligible for the surveys. Youth were ineligible for the survey if they died or withdrew within five years of RA or, in the case of CaPROMISE, were not sampled for the survey. Parents were ineligible for the survey if died or withdrew within five years of RA; were the parent of a youth who died within five years of RA; were a legal guardian employed by an agency; or, in the case of CaPROMISE, were not sampled for the survey.

[a] In CaPROMISE, the percentages are smaller because the survey sample consisted of 2,000 youth and parents.

ASPIRE = Achieving Success by Promoting Readiness for Education and Employment; CaPROMISE = California PROMISE; CMS = Centers for Medicare & Medicaid Services; MD = Maryland; NYS = New York State; RSA = Rehabilitation Services Administration; SSA = Social Security Administration; WI = Wisconsin.

The analysis samples for the survey-based outcome measures depended on whether the measure was based on youth or parent survey data. Although all survey-based parent outcomes were based on parent survey data, some youth outcomes were based on the youth survey data and others on parent survey data. These parent and youth survey respondent samples formed the subsets of the research sample because of survey nonresponse (as well as survey sampling in the case of CaPROMISE). Further, because Mathematica administered the youth and parent surveys separately, in a small minority of cases only one

of the surveys was completed. Note that we consider the main analysis sample for the impact analysis to be the youth enrollees who completed the five-year youth survey; we used this sample to assess differences in the characteristics of treatment and control group members in each program at RA.

Administrative data covered all youth and most parents in the research sample (Table II.2). We were able to obtain administrative data for all youth in the research sample. Some youth and parents in the research sample withdrew from the evaluation and others died during the follow-up period. As a result, we were unable to collect follow-up administrative data on the full research sample of parents enrolled in the evaluation. Administrative records tracked most, but not all, parents of youth enrolled in the evaluation.[15] 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

The primary focus of the five-year impact analyses was to assess whether the PROMISE programs achieved their intended outcomes with respect to educational attainment, employment credentials, employment, SSI payments, other public benefits, and income. Specifically, we focused on assessing youth's outcomes in the following domains: education and training, employment and earnings, self-determination and expectations, health insurance coverage and expenditures, SSA payments and knowledge of work supports, and economic and social well-being. We assessed parents' outcomes in the following domains: employment and earnings, health insurance coverage and expenditures, SSA payments, and economic well-being.

We grouped outcomes into the key domains mentioned above; within each domain, we identified one to three primary outcome measures, as well as supplementary outcome measures. We selected primary outcomes relevant to the programs' goals and target population and used the impacts on the primary outcomes as the basis for evaluating the PROMISE program's effectiveness. In total, we examined 14 primary outcomes across six domains for youth and 10 primary outcomes across four domains for parents. We also estimated impacts on supplementary outcomes to enhance our understanding of the primary outcome impact estimates.

We limited the number of primary outcome measures 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 were the basis for tests of the main hypotheses related to the impacts of the programs. By restricting the number of main hypotheses being tested, we reduced 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 were the basis for evaluating PROMISE, we used the estimated impacts on supplemental outcomes to explain the primary impact findings and draw broader conclusions in some instances. If we found no impact on the primary outcome in a domain but did find a consistent pattern of impacts on related supplementary

[15] We used the following procedure to identify parents for inclusion in the analysis sample. Using information in the SSR, SSA identified a youth's parents (if available) as of the month of PROMISE enrollment. If the enrolling parent was either the youth's mother or father, the analysis sample included any parents identified in the SSR. If the enrolling parent was not the youth's mother or father or there were no parents identified on the SSR, the analysis sample included the enrolling parent only if that person provided a valid SSN.

measures, we inferred that the program may have had an impact in the domain not captured by the primary outcome.

a. Youth outcomes

In this section, we describe the six domains of youth outcomes we examined in the five-year impact analyses (Table II.3) and the rationale for why PROMISE might be expected to affect such outcomes. For all dollar-denominated measures, we used the consumer price index for all urban wage earners to convert them into constant 2020 dollars.

Youth's education and training. There is evidence that transition services can improve educational 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 have lower rates of unemployment (U.S. Bureau of Labor Statistics 2021b). Research suggests that enhanced transition services are associated with greater enrollment in postsecondary education (Fraker et al. 2012; New York State Department of Education 1999). We examined whether the programs affected the shares of youth enrolled in education or training programs and with a General Educational Development (GED), high school diploma, or certificate of completion. In addition, we examined youth's enrollment in postsecondary education, the types of schools attended (if enrolled), highest grade completed, enrollment in a training program, receipt of a training credential, school suspensions or expulsions, receipt of educational and training accommodations or supports, and services for postsecondary schooling.

Youth's employment and earnings. One of the primary objectives of PROMISE was to put youth on a path toward consistent, long-term, paid employment, which would support their self-sufficiency. There were several mechanisms through which the programs could have affected youth's employment and earnings. First, the program model emphasized helping youth to gain employment experience; specifically, the goal was for each youth to have at least one paid work experience in an integrated setting while they were in high school. Each of the six programs succeeded in connecting youth to jobs in the short term: each program increased the share of youth employed in a paid job in the 18 months after RA (Mamun et al. 2019a). Carter et al. (2012) found that paid work while in high school is predictive of post-school employment for youth with disabilities. However, youth who are SSI recipients may be less responsive to interventions than those youth with disabilities who are not recipients (Berry 2000). Second, youth employment might have been affected by the benefits counseling the PROMISE programs were required to provide, which should have resulted in a better understanding of SSA policies and work incentives, and, relatedly, the implications of employment for ongoing benefit eligibility. Past studies indicate that receipt of benefits counseling is associated with increased employment among SSI and DI beneficiaries (Tremblay et al. 2006; Livermore et al. 2011). Third, the programs could affect long-term employment and earning by affecting determinants of those outcomes, such as youth's educational attainment, training credentials, and self-determination. We examined whether the programs affected youth's employment and earnings, labor force participation, work hours, weeks worked, types of jobs held, and application for and use of VR services.

Youth's self-determination and expectations. Over the last few decades, there has been a considerable amount of attention on the importance of self-determination in improving the transition outcomes of youth with disabilities, including employment and independent living (Wehmeyer 2014; Shogren et al. 2015; Wehmeyer and Palmer 2003; Wehmeyer and Schwartz 1997), as well as quality of life and life satisfaction (Lachapelle et al. 2005; Shogren et al. 2006). Accordingly, PROMISE programs sought to

promote youth's independence, self-sufficiency, and self-advocacy through trainings, workshops, and other activities. It was hypothesized that the PROMISE interventions would lead to greater self-determination and improved expectations among youth and their parents about the youth's future education and employment. We examined the extent to which PROMISE affected youth's self-determination, including their autonomy, psychological empowerment, agentic action (action that is purposive), and self-realization. We also examined youth's and parents' expectations about the youth's employment, education, financial independence, and independent living at age 25.

Youth's health insurance coverage and expenditures. There were several mechanisms through which the programs might have affected youth's health insurance coverage and expenditures. First, if programs increased youth employment and income, it could affect access to or the types of health insurance (for example, as obtained through Medicaid or a job). Second, the case management and benefits counseling services the programs provided may have connected uninsured individuals to sources of public or other health insurance or Medicaid waiver services. Third, by providing referrals for social and health services and helping youth to become productively employed, PROMISE programs could have indirectly affected youth's health, which in turn could have affected health insurance expenditures. We examined whether the PROMISE programs affected youth's health insurance coverage and type, as well as their participation and expenditures in public health insurance programs such as Medicaid and Medicare.[16]

SSA payments and knowledge of work supports. A key long-term objective of PROMISE was to reduce the dependence of youth and their families on SSA disability programs. The PROMISE programs sought to reduce youth's participation in SSA programs and the amount of SSA payments received in the long term by improving youth's understanding of these programs and self-sufficiency through employment. We examined the extent to which PROMISE affected the likelihood that youth received SSA (SSI or OASDI) payments and the amount of those payments in each year after RA, as well as during the five years after RA. We also examined youth's understanding of SSA policies and other work supports (see text box), and the outcome of their age-18 redetermination.

Youth's economic and social well-being. An ultimate objective of PROMISE was to improve youth's economic well-being by increasing their income and reducing their dependence on public assistance programs. We examined the extent to which the programs affected youth's income from earnings and SSA payments. In addition, we assessed whether the programs affected other dimensions of youth well-being as they

SSA policies and other work supports considered in the analyses

SSI student earned income exclusion: Youth under age 22 who are in school can earn up to $1,820 per month or $7,350 per year and not have it counted when SSA calculates SSI benefits.

SSI earned income exclusion: One-half of one's earnings over $85 are not counted when SSA calculates SSI benefits.

PASS: Youth receiving SSI can set aside money to be used to help them reach a work goal; this money does not affect SSI benefits.

ABLE account: Up to $100,000 saved in an ABLE account does not count as an asset when SSA calculates SSI eligibility and payments.◢

[16] An individual is eligible for Medicare if he or she has been participating in the DI program for at least two years. Though we expected only a small share of youth to have been participating in Medicare, we examined Medicare enrollment and expenditures because PROMISE might have increased the likelihood of participating in it by increasing youth's employment and thereby increasing the likelihood that youth were insured by DI.

transitioned to adulthood, such as living arrangements, relationship status, health, household income, and involvement with the criminal justice system.[17]

Table II.3. Youth domains and outcomes (measured at the time of the five-year survey unless otherwise specified)

Domains	Primary outcomes	Supplementary outcomes
Education and training	• Enrolled in an educational or training program • Has a GED, high school diploma, or certificate of completion	Enrolled in postsecondary education; type of school attending (if any); highest grade completed; enrolled in a training program; received any training credential in the past year; any school suspensions or expulsions in the past year; receives any educational accommodation; receives any training accommodation; received supports or services for postsecondary schooling in the past year
Employment and earnings[a]	• Employed in a paid job in the past year • Earnings in the past year • Earnings during the five calendar years after RA	Employment in the past year: any employment, weekly hours worked, employed in a paid job offering fringe benefits, any employment in integrated settings, any employment outside of school-sponsored activities, any employment with coaching, received supports or services in getting or keeping a job; employment at the time of the five-year survey: any paid employment, average weekly earnings, weekly hours worked, labor force participation; employment and earnings in each calendar year after RA; ever employed during Years 1–5 after RA; VR services during the five years after RA: applied for VR services, received VR services
Self-determination and expectations	• Self-determination score • Expects to be financially independent at age 25	Scores on subdomains of self-determination: autonomy score, psychological empowerment score, self-realization score, agentic action score; youth expects to: get postsecondary education (beyond high school/GED), live independently at age 25, be employed in a paid job at age 25; parent expects youth to: get postsecondary education (beyond high school/GED), live independently at age 25, be financially independent at age 25, be employed at age 25; parent believes it important that youth be employed eventually
Health insurance coverage and expenditures	• Covered by any health insurance • Average monthly Medicaid and Medicare expenditures during the five years after RA	Covered by private health insurance; covered by private health insurance purchased through an ACA health exchange; Medicaid and Medicare participation in each year after RA; percentage of months enrolled in either Medicaid or Medicare during Years 1–5 after RA; average monthly Medicaid and Medicare expenditures in each year after RA; Medicaid participation in each year after RA; percentage of months enrolled in Medicaid during Years 1–5 after RA; average monthly Medicaid expenditures in each year and during Years 1–5 after RA; Medicare participation in each year after RA; percentage of months enrolled in Medicare during Years 1–5 after RA; average monthly Medicare expenditures in each year and during Years 1–5 after RA

[17] Youth with disabilities are more likely than their peers without disabilities to have contact with the criminal justice system (Wittenburg and Loprest 2007; Wagner et al. 1993), which is associated with poor educational and employment outcomes (Honeycutt and Mann 2013). Through engaging youth in positive activities, such as education and work experiences, the PROMISE programs may reduce the likelihood that they will have contact with the justice system.

Table II.3 (*continued*)

Domains	Primary outcomes	Supplementary outcomes
SSA payments and knowledge	• Received SSA payments in Year 5 after RA • SSA payments in Year 5 after RA • SSA payments during Years 1–5 after RA	Aware of the following SSA policies: children receiving SSI are not automatically eligible for SSI as adults, people receiving SSI can work for pay, people receiving SSI must report earnings to SSA; aware of the following work supports: SSI student earned income exclusion, SSI earned income exclusion, PASS plans, ABLE account; SSA payment status and amounts in each year after RA; SSA payment status during Years 1–5 after RA; SSI payment status and amounts in each year and during Years 1–5 after RA; OASDI benefit status and amounts in each year and during Years 1–5 after RA; age-18 redetermination status five years after RA
Economic and social well-being	• Income in the past year • Income during the five calendar years after RA	Income in each year and during the five calendar years after RA; household income in the past year; household receives TANF, SNAP, or housing assistance; amount of public assistance in the past month; living independently; married or in a marriage-like relationship; responsible for a child/children; ever arrested; number of arrests; arrested in past year; ever incarcerated; length of incarceration; self-reported health status; received help in getting accommodations for school, work, or living independently in past year

[a] Unless specified otherwise, all outcomes refer to paid jobs.

ABLE = Achieving a Better Life Experience; ACA = Affordable Care Act; GED = General Educational Development; OASDI = Old-Age, Survivors, and Disability Insurance; PASS = Plan to Achieve Self-Support; RA = random assignment; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; SSI = Supplemental Security Income; TANF = Temporary Assistance to Needy Families; VR = vocational rehabilitation.

b. Parent outcomes

In this section, we describe the four domains of parent outcomes we examined in the five-year impact analyses (Table II.4) and the rationale for why PROMISE might be expected to affect such outcomes. As with the youth outcomes, we used the consumer price index for all urban wage earners to convert dollar-denominated measures into constant 2020 dollars.

Parents' employment and earnings. The PROMISE program model aimed to increase parents' employment credentials and outcomes. The six programs were required to provide information and training to parents that could improve their education and employment outcomes. As with the youth, PROMISE may have affected parents' employment and earnings by referring them to support services, helping them find work-based experiences, increasing their understanding of work supports through benefits counseling, and improving their employment credentials. We examined the extent to which PROMISE affected parents' labor force participation, employment rates, and earnings at various points in time.

Parents' health insurance coverage and expenditures. The mechanisms through which the PROMISE programs may have affected parents' health insurance coverage and expenditures were similar to those discussed for youth. They may have affected access to or the types of health insurance through employment, connected uninsured individuals to sources of public or other health insurance, or indirectly affected parents' health, possibly affecting health insurance expenditures. We examined whether the PROMISE programs affected parents' health insurance coverage and their participation and expenditures in Medicaid and Medicare.

SSA payments. The PROMISE programs sought to reduce families' participation in SSA programs by increasing parents' understanding of these programs, financial literacy, and employment (and thus financial independence). We examined the extent to which PROMISE affected the likelihood that either parent received SSA (SSI or OASDI) payments and the amount of those payments in each year after RA, as well as in total during the five years after RA.

Parents' economic and social well-being. An ultimate goal of PROMISE was to improve the economic well-being of the families of youth with disabilities. We assessed the extent to which the PROMISE programs affected parents' income from earnings and SSA payments, household income, and household participation in TANF, the Supplemental Nutrition Assistance Program (SNAP), and housing assistance programs.

Table II.4. Parent domains and outcomes (measured at the time of the five-year survey unless otherwise specified)

Domains	Primary outcomes	Supplementary outcomes
Employment and earnings	• Either parent worked for pay in the past year • Parents' earnings in the past year • Parents' earnings during the five calendar years after RA	Highest educational attainment achieved by either parent; parents' employment in the past year: number of parents who worked for pay, number of weeks worked, weekly hours worked, either parent was offered fringe benefits through a job; parents' employment at the time of the five-year survey: either parent is in the labor force, either parent is working for pay; parents' employment and earnings in each calendar year after RA; parents' employment during the five calendar years after RA
SSA payments	• Either parent received any SSA payments in Year 5 after RA • SSA payments in Year 5 after RA • SSA payments during Years 1–5 after RA	SSA payment status and amounts in each year and during Years 1–5 after RA; SSI payment status and amounts in each year and during Years 1–5 after RA; OASDI benefit status and amounts in each year and during Years 1–5 after RA
Economic well-being	• Parents' income in the past year • Parents' income during the five calendar years after RA	Parents' income in each year and during the five calendar years after RA; household receives TANF, SNAP, or housing assistance; household income in the past year
Health insurance	• Either parent is covered by any health insurance • Average monthly Medicaid and Medicare expenditures during Years 1–5 after RA	Medicaid and Medicare participation in each year after RA; percentage of months enrolled in either Medicaid or Medicare during Years 1–5 after RA; average monthly Medicaid and Medicare expenditures in each year after RA; Medicaid participation in each year after RA; percentage of months enrolled in Medicaid during Years 1–5 after RA; average monthly Medicaid expenditures in each year and during Years 1–5 after RA; Medicare participation in each year after RA; percentage of months enrolled in Medicare during Years 1–5 after RA; average monthly Medicare expenditures in each year and during Years 1–5 after RA

OASDI = Old Age, Survivors, and Disability Insurance; RA = random assignment; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; SSI = Supplemental Security Income; TANF = Temporary Assistance to Needy Families.

4. Estimation approach

Here, we summarize the approach we used to estimate PROMISE impacts.

The basic impact estimation approach was to compare average outcomes for the treatment and control groups while using a regression-based adjustment to control for baseline characteristics. RA, when implemented correctly, should result in research groups that are, on average, similar in their characteristics at the time they enrolled in the evaluation. As a result, by design, a simple comparison of mean values of outcomes between the treatment and control groups should provide an unbiased estimate of program impacts. Nonetheless, regression adjustment improved the statistical precision of the estimates and enabled us to control for chance differences in baseline characteristics between treatment and control group members. All regression models included a core set of covariates, including the youth's sex, race, age, and type of disability. For ASPIRE and CaPROMISE, we also included state and region fixed effects, respectively, to account for the stratified RA implemented for these programs. If we found any statistically significant differences in baseline characteristics for a particular program (based on the five-year youth survey respondent sample), we included that characteristic as a covariate in regressions for that program.[18] Appendix Table B.1 shows the covariates used for each program.

We used ordinary least-squares regression models and calculated heteroskedasticity-robust standard errors. We used two-sided *t*-tests to determine whether the estimated program impact was statistically significantly different from zero. We reported the *p*-values from these tests, which indicate the likelihood of finding a difference due to chance alone. We considered an impact to be statistically significant if the *p*-value was less than 0.10. We also noted instances where the estimated impact was marginally not significant (that is, where the *p*-value was greater than or equal to 0.10 and less than 0.15). When examining survey-based outcomes, we specified probability weights to account for nonresponse and survey sampling (described in the next section).

In this report, we use graphical figures to illustrate the primary impacts on outcomes. In Appendix Tables C.2a–f through C.11a–f, we present the estimated impacts on all outcomes, along with relevant statistics, including the estimated regression-adjusted impacts; the observed control group means; and additional inference statistics, such as standard errors, effect sizes, and sample sizes.

We also assessed the sensitivity of the estimated impacts to our modeling choices (Appendix Tables C.12a–f through C.21a–f). We tested the sensitivity of the impact estimates to the use of regression adjustment, weights, and multiple imputation to fill in missing data. We found that for most of the outcomes, the impact estimates were robust with respect to the estimation approach.

To understand whether PROMISE had different impacts on different types of youth, we estimated impacts for key subgroups of enrollees. To minimize the risk of drawing spurious conclusions due to multiple comparisons, we pre-specified subgroups that were policy relevant and large enough to provide enough statistical power for a subgroup analysis. To be responsive to the multiple comparisons problem, we also estimated subgroup impacts on primary outcome measures only. We focused on subgroups defined by the following baseline characteristics of youth: sex (females versus males); age (youth ages 14 and 15 versus age 16); primary impairment (intellectual or developmental disabilities, other mental

[18] For each PROMISE program, we present a 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.

impairments,[19] and other disabilities); and whether a parent received SSA payments at the time of RA (yes versus no). For the ASPIRE program, we also analyzed three state subgroups: Arizona; Colorado; and the remaining four states in the consortium (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. We use two-sided *t*-tests to determine the statistical significance of the regression-adjusted impact estimate for each subgroup. We also conducted a joint Wald test to determine whether the differences in the impact estimates between the subgroups were statistically significant. Because we are interested in understanding the variation of program impacts, we discuss subgroup findings when we found statistically significant differences in a program's impacts across subgroups, regardless of the impacts for each individual subgroup.

5. Other analytic considerations

a. Survey nonresponse

Response rates to the 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. 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 groups of each program were relatively small, never exceeding 3 percentage points in any program. The high overall response and low differential response between the treatment and control groups in each program alleviate concerns about potential nonresponse bias.

Even with high response rates, if respondents differ systematically from nonrespondents and we do 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 (see Appendix Tables A.6a–f through A.9a–f). We found that in all programs, respondents differed from nonrespondents on a number of baseline characteristics. These differences varied by program. To account for the difference between respondents and nonrespondents, we used nonresponse weights in analyses of 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 Appendix A, 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 the impact estimates that rely on survey data. We compared how the estimated impacts on outcomes measured with administrative records changed when we included and excluded survey nonrespondents. The results suggest that nonresponse to the survey did not introduce substantial bias into the estimated impacts (Appendix Tables C.13a–f).

b. Missing data

For the baseline characteristics used in the 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

[19] The other mental impairments category included disabilities such as chronic brain syndrome; schizophrenia; borderline intellectual functioning; and affective, anxiety, personality, substance addiction, somatoform, eating, conduct, oppositional/defiant, and attention deficit hyperactivity disorders.

from the analyses. Because the baseline characteristics were drawn mainly from administrative records, there were 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.[20]

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 survey were missing for some survey respondents because of item nonresponse; we excluded these cases from the analysis of that measure.[21] 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 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 be missing only 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 A).

B. Benefit-cost analyses

An important component of the PROMISE evaluation is the assessment of the benefits of the programs relative to their costs. In benefit-cost analyses, we considered the economic cost of operating each program (that is, the direct program costs), as well as benefits and indirect costs (such as commuting expenses) that we estimated to have manifested due to PROMISE. We developed an accounting framework for the analyses that includes estimates of benefits and costs from four perspectives: (1) the youth and families eligible for PROMISE services; (2) the federal government (separately for SSA, ED, and all other federal agencies); (3) the state programs delivering services; and (4) all stakeholders combined (defined as the sum of the previous three groups).

We estimated the following measures of benefits and indirect costs: youth and parent earnings, fringe benefits, payroll taxes, sales taxes, and work-related costs; income taxes; SSI and OASDI payments and administrative costs; TANF, SNAP, and housing assistance and administrative costs; Medicaid and Medicare expenditures and administrative costs; education-related costs; and costs of incarceration. Some of these measures are benefits from one perspective and costs for another. For example, we considered the impact estimate on OASDI benefit payments as a benefit for beneficiaries and a cost for SSA. From the perspective of all stakeholders, the benefit to beneficiaries would be fully offset by the cost to SSA. The analysis did not include costs or benefits that are difficult to monetize, such as beneficiary well-being.

In the subsections that follow, we describe the data and methods used in the benefit-cost analyses. Appendix B provides additional details about the benefit-cost methods and findings.

[20] 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.

[21] For 350 parents and 422 youth, data for some outcomes were missing because the youth or parent responded to a self-administered version of the survey, which included a limited set of questions.

1. Data sources

We relied on three key inputs to conduct the benefit-cost analyses: (1) the estimated impacts of PROMISE on youth and family outcomes from the five-year impact analyses, (2) estimates from published sources of benefits and costs not captured by the impact analyses, and (3) estimates of each PROMISE program's costs.

Because the benefit-cost analysis drew on the findings of the five-year impact analyses, it relied on many of the same sources of data, including data from the five-year surveys, and SSA and CMS administrative records (Section II.A.1 describes these data sources). When the PROMISE impact estimates did not capture the exact measures needed, we quantified benefits and costs by combining the impact estimates with data from other sources. For example, we combined external data from the U.S. Bureau of Labor Statistics on the monetary value of fringe benefits with the impact estimates on fringe benefits to assign a dollar amount to the impact of PROMISE on fringe benefits. Finally, each program's cost was estimated based on data collected by the PROMISE evaluation team.

To estimate the costs to implement each PROMISE program, we collected information about the costs associated with delivering the program components. This included costs not directly incurred by the program, such as volunteer labor and donated facilities or supplies. We collected data representing a 12-month "steady-state" period, when the programs were neither ramping up services and recruiting enrollees nor winding down services and closing out their caseloads. We focused on data related to four types of costs: (1) labor costs, (2) other direct costs, (3) indirect costs, and (4) the costs of donated goods and services. We worked with program staff to obtain relevant financial documents and conducted interviews with the program's financial administrator, program staff, and others involved in the demonstration about costs and additional services that enrollees may have received. We also collected staff activity logs reflective of two one-week periods during which staff documented their time spent performing work within each of the program's service and administration components. Each PROMISE program submitted its itemized inputs and total costs for the 12-month steady-state period. Mamun et al. (2019a and 2019b) provide more details about the program cost data.

2. Estimation approach

a. Estimating program costs

In the 18-month impact evaluation report (Mamun et al. 2019a and 2019b), we reported the costs to implement each PROMISE program. To produce these estimates, we followed a seven-step analytic framework (Handwerger and Thornton 1988). As described in detail in Appendix B, we began by adding up the costs for key components over a 12-month steady-state accounting period. Then, we combined the estimate of total program costs with data on the number of treatment group enrollees to calculate the average cost per year per treatment group family (regardless of participation in PROMISE services). We applied that average to the average duration of program enrollment (calculated as the average time from RA through the end of the program's service period) to compute the program's total cost per treatment group family.

Two caveats apply to the cost estimates. First, by design, the cost estimates reflect the average service intensity observed during the steady-state period on which the estimates were based. Youth and families might not have received services at that same intensity throughout the period of their enrollment in the program. Second, these estimates underestimate the true costs of delivering PROMISE services because

we did not account for the costs of services received from local agencies or costs related to the programs starting up or winding down.

b. Estimating program benefits and indirect costs

Benefits are defined as quantifiable gains we were able to estimate over the five-year evaluation period that result from PROMISE services, such as additional earnings due to increased employment. Indirect costs refer to additional costs beyond the program costs that may have been incurred as a result of PROMISE services—for example, the additional cost of increased SSA payments by the government or the cost of increased education for PROMISE youth and families.

We estimated benefits and indirect costs by combining the five-year impact estimates with external data drawn from published sources (see Appendix Table B.4). We used the point estimates of the program impacts even if the estimates themselves were not significantly different from zero at conventional levels of statistical significance. Following guidance offered by Boardman (2018), this approach allowed us to obtain a more accurate and complete accounting of the benefits of a program because it uses the best evidence available on the size of the impacts—our unbiased point estimates—even if they are imprecise. We assessed the sensitivity of the estimates to sampling variability (see Appendix Tables C.28, D.30, E.28, F.28 and G.28), and estimated the net benefits only using point estimates for impacts that are statistically significant (see Appendix Tables C.29, D.31, E.29, F.29 and G.29).

c. Accounting for timing of costs and benefits

Because program costs are incurred up front while benefits might be realized later and continue to accrue over time, we made two adjustments to account for differences in the timing of when benefits and costs occur. First, in the impact analysis (which the benefit-cost analysis draws from), we used the consumer price index for all urban wage earners to convert all dollar-denominated measures into constant 2020 dollars. Second, we used a discount rate of 2.7 percent to convert all future benefits and costs to their present value.

The final step in the benefit-cost analysis was to combine the benefit and cost estimates in a comprehensive assessment of the net benefits of a PROMISE program. We computed the net benefit by subtracting the value of program costs from the value of benefits (measured in 2020 dollars). A positive value for this statistic signifies that a program's benefit exceeds its costs. We report the disaggregated costs and benefits for the different accounting perspectives, along with the net benefit for each perspective. We also report the benefit-cost ratio, which is the sum of all quantitative measures of benefits and indirect costs, divided by the program costs.

d. Forecasting future net benefits

As a supplement to the benefit-cost analysis, we projected the accrual of net benefits beyond the five-year evaluation period. We did so because the benefits of PROMISE might be realized or compounded after the evaluation period ends, particularly if youth are still in school at the five-year measurement point. Focusing only on the five-year evaluation period could underestimate the net benefits of PROMISE if, as intended by PROMISE, many treatment group enrollees continue building their human capital, the dividends of which will not accrue until later.

First, we estimated how large the impacts on youth earnings in the future would need to be by 10 and 20 years after RA, assuming all other costs and benefits do not change, for the costs and benefits of

PROMISE to be equal (or "cost neutral") from the perspective of all key stakeholders, as explained in detail in Appendix B.

Second, we applied an annual growth rate to the average of enrollee earnings in the fourth and fifth year after RA to project youth earnings and SSA payments for the 6th through 20th years after RA. The estimates of the annual earnings growth represent the average annual earnings growth rate of control group youth in the National Job Corps Study (Schochet 2021). We took the average of Year 4 and Year 5 earnings before applying the annual growth rate to earnings because for more than half of the enrollees, the fifth year after RA is 2020, during which the COVID-19 pandemic might have affected enrollees' earnings.

The projections allow for earnings to grow over time and take into account how changes in earnings affect other costs and benefits, including SSA payments, taxes, and work-related costs. The projections assume that impacts on public supports and Medicaid and Medicare expenditures are constant between Years 6 and 20 such that any savings or costs generated as a result of PROMISE in Year 5 are generated annually thereafter.[22] Operationally, we set the impacts equal to either the average of the Year 4 and Year 5 impacts (in the case of health care expenditures) or the Year 5 impacts (in the case of public supports, for which we only have the five-year survey measure). Finally, we assume that impacts on incarceration and VR service use are zero after Year 6,[23] and impacts on education are zero after Year 8.[24]

Because youth's enrollment in education could deliver long-term benefits (in higher future earnings) that are not captured in the five-year evaluation window, we accounted for returns to education in Years 6 through 20 projections. We considered three possibilities regarding the returns to education youth will experience in the future: persistent high returns to education (10 percent return per additional year of school), diminishing returns to education, and no additional returns to education (beyond the return reflected in earnings during the evaluation period). Finally, we used the projected earnings and baseline data on treatment group enrollees to predict individual-level SSI and OASDI payments in the Year 6 through 20 projections. After projecting earnings and SSA payments for those years, we calculated net benefits over 10- and 20-year periods after RA under the three returns-to-education scenarios.

[22] By making this assumption, we do not account for the possibility that youth's earnings may grow by enough in the future that they become ineligible for means-tested programs such as SSI and Medicaid; we also do not account for the possibility that increased earnings may make them eligible for OASDI and Medicare. In addition, impacts on Medicaid enrollment in Year 5 might have been muted because the Families First Coronavirus Response Act of 2020 required state Medicaid programs to keep beneficiaries continuously enrolled through the end of the public health emergency. When this requirement ends, the programs' annual impacts on Medicaid enrollment and expenditures might change. The extent to which this assumption leads us to under- or over-estimate the forecasted net benefits is unknown.

[23] We assumed that incarceration and VR service use impacts captured in the five years after RA are lifetime costs and so do not include them in Years 6 through 20.

[24] Enrollees would be ages 23 to 25 in Year 9; we assumed they would be less likely to be enrolled in school at these ages or older and therefore, less likely to incur education costs.

III. Arkansas PROMISE

Summary of five-year impacts and net benefits of Arkansas PROMISE

- Arkansas PPROMISE did not improve any of the of the evaluation's primary youth outcomes; it decreased the likelihood that youth had health insurance.
- Arkansas PROMISE had no impact on youth's enrollment in education or training, employment, earnings, self-determination, expectations of financial independence, SSA payments, or Medicaid and Medicare expenditures.
- Analyses of supplementary outcomes offer evidence that Arkansas PROMISE increased youth's employment at the time of the five-year survey, and use of supports or services for getting or keeping a job or postsecondary education during the year before the survey.
- The program had no impact on parents' employment, earnings, SSA payments, or income; it reduced the likelihood that parents had health insurance and increased their Medicaid and Medicare expenditures. Nonetheless, it increased parents' employment, earnings, and income among families in which a parent received SSA benefits at RA.
- Across all key stakeholders, Arkansas PROMISE resulted in a net cost of $37,882 per treatment group family over five years. For treatment group youth and families, it delivered an average net benefit of $4,089 over five years. ◢

A. Program overview and a review of prior findings

To provide a context for the five-year impacts of Arkansas PROMISE we present in subsequent sections, we first summarize key features of the program, the findings from the process study of the first three years of program operations (Honeycutt et al. 2018b), and the findings of the 18-month impact study (Mamun et al. 2019a).

1. Program overview

The University of Arkansas College of Education and Health Professions (UA) was the lead agency for Arkansas PROMISE, contracted by the Arkansas Department of Education. UA provided oversight and coordination of recruiting youth and families, delivering services, and involving partners. Five partner organizations provided direct services to participating youth and their families: the Arkansas Department of Workforce Services, Arkansas Rehabilitation Services; Sources for Community Independent Living Services; the University of Arkansas Center for the Utilization of Rehabilitation Resources for Education, Networking, Training, and Service; and the University of Arkansas Partners for Inclusive Communities. Two other organizations supported program activities but did not provide direct services; four others partnered with the program for targeted roles.

Arkansas PROMISE assembled resource teams to improve the coordination of services for participants. The teams consisted of case managers (called "connectors," which the program hired directly); transition specialists from the state VR agency, who focused on education and employment issues; staff and job coaches from local workforce investment boards, who supported participants during their summer work experiences; and existing community work incentive coordinators, who provided benefits counseling and financial education. The program used monthly trainings, which team members conducted during the academic year (September through May), to share program-specific information (such as updates on

summer activities and events) and information about transition and employment issues to groups of youth and families.

Arkansas PROMISE intended that its 50 connectors would be the participants' primary point of contact with the program. The connectors had responsibility for case management but also assisted with school and employment services and worked collaboratively with the PROMISE resource team. They performed advocacy roles for participants and families by accompanying them to meetings with schools, community organizations, and agencies. Connectors worked with youth to develop PROMISE plans, which identified career and education goals and the steps needed to achieve them. These plans served as a resource in meetings between participants and program staff, and as a guide for service provision. Connectors also assisted youth and families with developing resources by (1) accessing the program's discretionary case management funds and (2) making referrals to community resources.

Career exploration and work-based learning experiences were important components of Arkansas PROMISE. Ten transition specialists conducted career exploration services, related assessments, and work-based learning experiences, though almost all program staff had some responsibility for promoting or supporting these components. The program expected that each participating youth would have two summer work experiences of 200 hours each that paid competitive wages, were integrated into the community, and reflected the youth's interests.

In addition to those mentioned above, Arkansas PROMISE offered other services to participants. The program delivered benefits counseling and financial education services primarily through its monthly trainings and existing community work incentive coordinators. Transition specialists offered education services to improve high school graduation rates. The program also hired a staff member in early 2015 to serve as a liaison between the program and local schools. That individual educated connectors and transition specialists on school policies pertaining to transition and met with the high school staff to discuss PROMISE-specific issues. The program offered youth a one-week, all expenses-paid summer camp to promote their academic readiness and social skills. Toward the end of program operations, the program expanded its services with supplemental funding by (1) hiring retention specialists to engage disconnected youth and their families; (2) hiring staff to provide technical assistance to connectors, transition specialists, job coaches, and employers on workforce development; and (3) offering personal attendant services and expanded job coaching services.

Arkansas PROMISE connectors primarily worked with participating youth but also met with their parents and other family members. These activities depended on how receptive individuals were to the offered services. The connectors worked with parents to develop their own PROMISE plans (analogous to the plans developed with participating youth, including employment and education goals). They also met with parents during case management meetings and offered referrals to employment or educational services, as well as to organizations that could help them meet their basic household needs, such as for food and housing.

To encourage participant engagement, Arkansas PROMISE made three adjustments to its program during implementation. First, it converted its recruitment staff to retention staff following completion of recruitment and enrollment activities. The program tasked them with conducting outreach to youth and families not engaged in services. Second, the program developed an incentive system to encourage youth's engagement with specific program services; it offered prizes, such as travel bags, Xbox consoles, and iPads, based on points earned for activity participation. Third, as the program ended, it encouraged youth's connections to service providers in four areas (education, SSA programs, the state VR agency,

and workforce investment boards). Program staff helped youth open ABLE accounts, with the amount of the initial deposits based on the number of providers with which youth met.

Arkansas PROMISE operated in 25 of the state's 75 counties. The counties initially were grouped into four administrative regions: 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). The program later subdivided the central region into Pulaski County (which contains Little Rock, the capital) and the remaining counties in the central region.

2. Summary of process analysis findings

An in-depth process study of Arkansas PROMISE during the first three years of program operations documented the structure and service model of the program and described its implementation during the period from August 2014 through August 2017 (Honeycutt et al. 2018b). Here we summarize the key findings from that analysis.

The key interventions of Arkansas PROMISE were intensive case management and work-based experiences. Arkansas PROMISE delivered intensive case management services to youth, consistent with its program design, primarily through its connectors. These services included periodic contacts, identification and documentation of participants' goals, monthly trainings, summer camps, and resource development. The existing service environment provided few opportunities for youth with disabilities to access services similar to those Arkansas PROMISE provided. Participating youth and families had an average of 18 in-person meetings with program staff and received an average of 22 contact attempts of other types during the three-year observation period, though both were below the program's stated goals of monthly in-person meetings and weekly contacts. By August 2017, 90 percent of participating youth had a PROMISE plan and, on average, participating youth attended 22 percent of the monthly trainings available to them. The program offered participating youth the opportunity to attend a week-long residential summer camp on a college campus; 29 percent attended the camp in either or both of the first two years it was offered. The families of 59 percent of participating youth had received case management funds; those that did so received an average of $546 in total. In addition, more than two-thirds of youth participating in the program had a work experience in at least one summer between 2015 and 2017; almost one-quarter had work experiences in two or more summers. Between 42 and 46 percent of those who started summer work experiences each year achieved the program's target of working 200 hours.

Arkansas PROMISE engaged parents and other family members along with participants. Parents of 87 percent of participating youth had developed their own PROMISE plans, and the parents of 15 percent of participating youth had been referred to either education or employment services. Arkansas PROMISE viewed attendance by parents at the program's monthly trainings as important to their ongoing engagement with the program. The percentage of monthly trainings attended was slightly lower for parents (19 percent) than for participating youth.

The program delivered benefits counseling and financial education, primarily through group trainings. Arkansas PROMISE delivered benefits counseling and financial education to participating youth, primarily through the program's monthly group trainings. Three years into program services, slightly more than half of participating youth had attended at least one monthly training involving benefits counseling, and almost half had attended at least one monthly training involving financial education. The program rarely delivered individualized benefits counseling by community work incentive coordinators.

Also, few youth outside of Arkansas PROMISE used existing services from community work incentive coordinators. Thus, the program's group training format for benefits counseling may have offered substantially more information to treatment group youth than control group youth obtained.

Potential for program impacts on key outcomes. The process analysis suggested that the conditions were favorable for finding positive impacts of Arkansas PROMISE on youth and families. Evidence in three areas implies a marked contrast in the service experiences of treatment and control group youth. First, a large share (92 percent) of treatment group youth participated in the program, and most of them had received key services three years into program operations, as had their parents. Second, control group youth had only limited access to services similar to the intensive case management and employment services that Arkansas PROMISE provided. Third, there was little risk that 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 even if they had been so inclined.

3. Summary of 18-month impact analysis findings

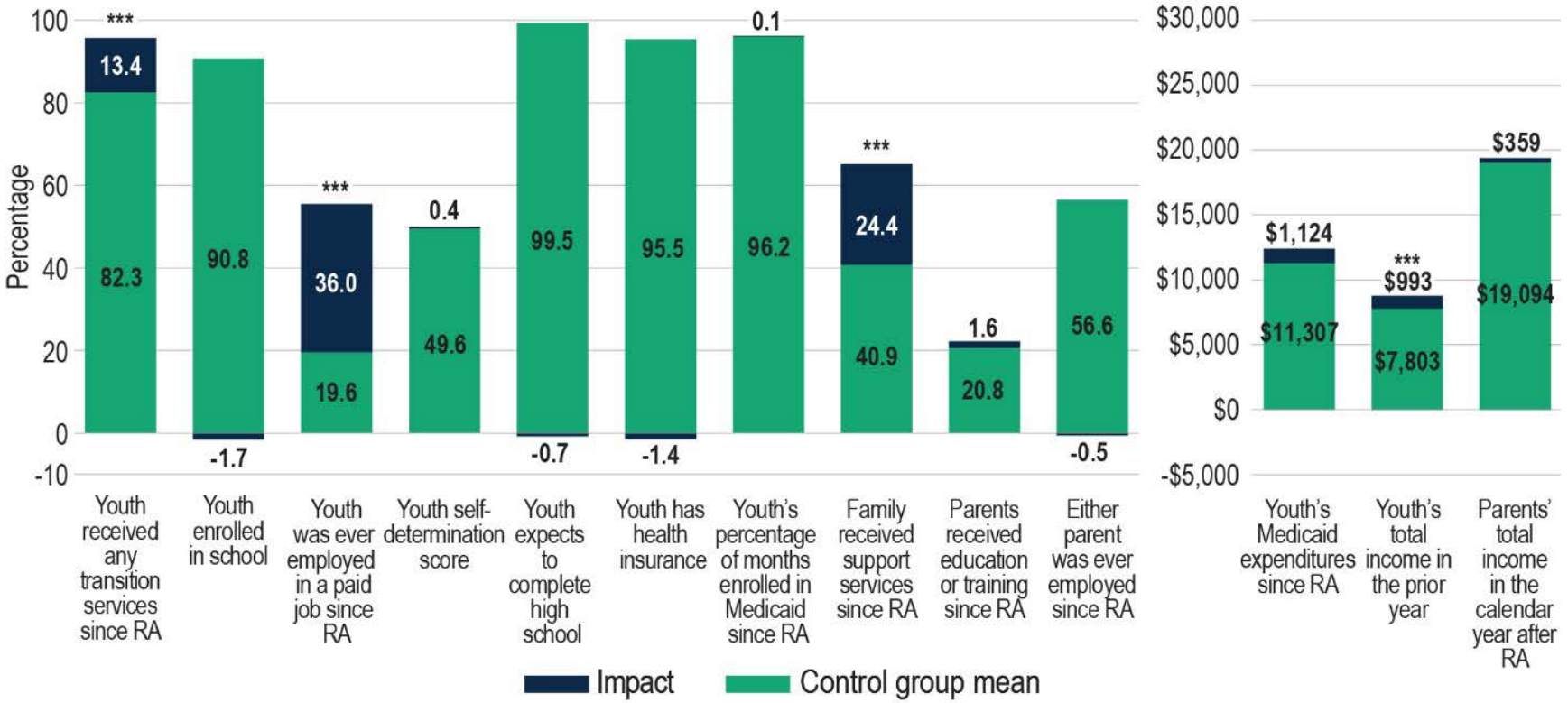
During the first 18 months after RA, Arkansas PROMISE had favorable impacts on youth outcomes related to service use (Figure III.1). Although youth had access to transition services in the community, Arkansas PROMISE increased the share of youth who used at least some transition services as well as the share who used specific transition services, such as employment-promoting services (career planning, job skills training, help with a job search, and on-the-job supports), benefits counseling, financial education, training in self-advocacy or self-determination, and VR services.

Arkansas PROMISE also increased youth's likelihood of paid employment, annual earnings, and income from employment and SSA payments, as well as job-related training. For example, about 20 percent of youth in the control group reported having a paid job in the 18 months following RA; Arkansas PROMISE increased this share by 36 percentage points. As another example, youth's annual income (from earnings and SSA payments) during the year before the 18-month survey was an average of $7,803 in the control group; Arkansas PROMISE increased this amount by $993.

The program had no impact on youth's school enrollment, self-determination, expectation to complete high school or GED, probability of having health insurance, and Medicaid participation at 18 months after RA. The absence of impacts on school enrollment, high school expectations, health insurance, and Medicaid participation was likely due to the high prevalence of these outcomes among youth (meaning there was little room for improvement), despite the program having a specific focus on some of these outcomes (such as plans that identified education goals and self-determination activities through monthly meetings and summer camps).

Aside from service use, Arkansas PROMISE did not generate any impacts on most family outcomes during the 18 months after RA. The program increased the use of support services by parents and family members other than the participant and increased their use of key support services, such as case management, education or training supports, employment-promoting services, benefits counseling, financial education, and parent training and information on the youth's disability. Parents' earnings in the month before the survey increased, as did their expectations for their youth regarding getting postsecondary education, being financially independent at age 25, and being employed in a paid job at age 25. However, it had no impact on parents' employment, education and training, or income from earnings and SSA payments.

Figure III.1. Arkansas PROMISE impacts on youth primary outcomes in the 18 months after RA



Source: Mamun et al. 2019a.

Note: All outcomes are measured at the time of the 18-month surveys unless otherwise specified.

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

RA = random assignment.

B. Baseline characteristics of the five-year follow-up sample

The main analytic sample for the five-year impact analysis of Arkansas PROMISE consisted of 1,441 randomly assigned youth who completed the five-year follow-up survey (Appendix Table C.1). In this section, we describe the baseline characteristics of this sample and comment on any differences between the treatment and control group youth within the sample. Except for data on youth's and parents' race and ethnicity, which come from survey responses, all baseline characteristics are based on data from SSA administrative records.

Demographic characteristics. Youth who enrolled in Arkansas PROMISE were more frequently male, non-Hispanic Black, and lived in their parents' household. About two-thirds of the youth were male. At RA, 39 percent of the youth were age 14, 27 percent were 15, and 34 percent were 16. About 98 percent of youth reported English as their preferred written and spoken language. Nearly 9 in 10 youth lived with their parents at the time they applied for SSI; of the remaining youth, most lived in their own households or alone. The largest racial and ethnic group was non-Hispanic Black (48 percent), followed by non-Hispanic White (18 percent), non-Hispanic other or mixed race (7 percent), and Hispanic (7 percent). Data on race and ethnicity were missing for 20 percent of the sample. The racial and ethnic composition of parents was similar to that of the youth, but with a larger share that was non-Hispanic White (23 percent) and a smaller share that was missing (15 percent).

Impairment. Of youth's primary impairments, as recorded in baseline SSA administrative data, the largest groups were those with other mental impairments (43 percent) and intellectual or developmental disabilities (43 percent). The remaining categories were physical disabilities (10 percent); other or unknown disabilities (3 percent); and speech, hearing, or visual impairments (1 percent).

SSA program participation. Nearly all youth (about 94 percent) received SSI payments during the month of RA. On average, they had qualified for SSI at age 7. A smaller share of youth (about 15 percent) received OASDI payments during the month of RA. Across all youth, average annual SSI payments during the year before the RA month were $7,218 and average SSA payments were $7,636. More than one in four youth lived in a household with multiple SSI-eligible children. About 69 percent had no parents receiving SSA payments at the time of RA.

Earnings. Very few youth (less than 1 percent) had any earnings in the calendar year before RA, which is not surprising, given their young ages. On average, youth had earned $9 in that period. Most (70 percent) had at least one parent with earnings in the calendar year before RA. Across all youth, parent earnings averaged $15,650 that year.

Differences between the treatment and control groups. Youth in the treatment and control groups had similar characteristics, as expected, given the RA study design. We compared the two groups across 25 characteristics and found two statistically significant differences. Compared with the control group, youth in the treatment group were about 3 percentage points less likely to receive SSI at RA and about 5 percentage points less likely to have only one parent included in the administrative data. We obtained unbiased estimates of program impacts by comparing the treatment and control groups while accounting for these differences in baseline characteristics through regression adjustment.

C. Five-year impacts on youth

This section documents the evidence on whether the services Arkansas PROMISE provided led to impacts on youth outcomes in several domains during the first five years after RA. Arkansas PROMISE reduced the share of youth with health insurance and had no impact on other primary outcomes: enrollment in education or training; receipt of a high school completion credential; employment; earnings; self-determination; expectations of financial independence; Medicaid and Medicare expenditures; SSA payments; or income (Figure III.2). Overall, we found little evidence that the program's impacts on youth outcomes differed based on youth's age, sex, impairment, or parents' receipt of SSA benefits at the time of enrollment; we describe the exceptions to this pattern when discussing the findings below.

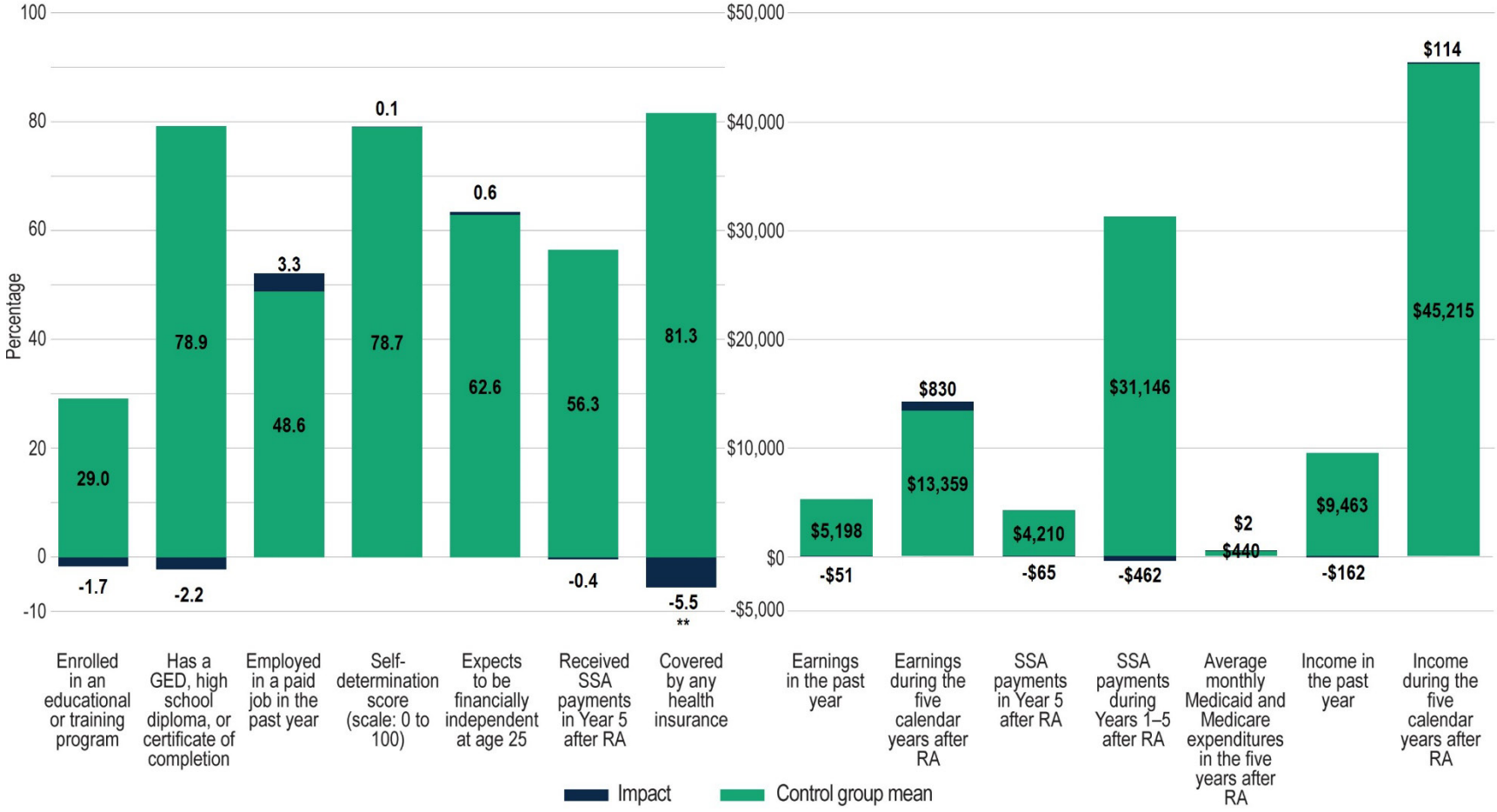
1. Arkansas PROMISE had no impact on youth's enrollment in education and training programs or obtaining a high school completion credential

Arkansas PROMISE had no impacts on the primary outcomes of youth's enrollment in an education or training program and receipt of a high school diploma or equivalent credential at the time of the five-year survey (Figure III.2 and Appendix Table C.8). At the time of the five-year survey, about 29 percent of the youth were enrolled in an educational or training program; this share was similar for the treatment and control groups.. Consistent with expectations and the ages of the youth, the share of youth who had a GED, certificate of completion, or high school diploma increased between the 18-month and five-year surveys. About 79 percent of youth in the treatment and control groups had a GED, certificate of completion, or high school diploma at the time of the five-year survey, whereas only 9 percent had such a credential at the time of the 18-month survey. The program did not affect the share of youth who had received a high school completion credential five years after RA.

Additional analyses suggest that other than receipt of postsecondary educational accommodations, Arkansas PROMISE had no impacts on supplementary outcomes related to education and training (Appendix Table C.8). The program increased receipt of postsecondary educational supports during the past year by 4 percentage points (a 21 percent relative increase). It did not affect youth's enrollment in postsecondary education, the type of school attended, the highest grade completed, enrollment in a training program, school suspensions or expulsions in the past year, or receipt of other types of educational or training accommodations.

The absence of impacts for education and training is counter to Arkansas PROMISE's emphasis on education and its expectations for youth. As noted, the program encouraged its staff to meet with school staff and hired a liaison to facilitate program staff's knowledge about school issues. Education was a part of each participant's PROMISE plan and one of the four services with which the program encouraged participants to connect at the end of the program. It also conducted activities on the campuses of postsecondary education institutions to expose participants to those environments. The absence of impacts on education and training suggests that Arkansas PROMISE's offerings in this domain were not sufficiently different from usual education services that control group members and their families could access. During the time of Arkansas PROMISE's implementation, entities in the state, including the state's department of education and VR agency, promoted various resources for school staff to aid in the transition of students with disabilities (Honeycutt et al. 2018b). These activities might have bolstered the education experiences of both treatment and control group youth and counterbalanced those the program offered. Consistent with this, nearly 8 in 10 control group youth had a GED, high school diploma, or certificate of completion at the time of the survey, a larger share than the average across the PROMISE programs.

Figure III.2. Arkansas PROMISE impacts on youth primary outcomes in the five years after RA



Source: Youth five-year survey; SSA data.

Note: All outcomes are measured at the time of the five-year youth survey, unless otherwise specified. Monetary values are in 2020 dollars. See Appendix Tables C.8–C.17 for more details.

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

GED = General Educational Development; RA = random assignment; SSA = Social Security Administration.

2. Arkansas PROMISE initially had large impacts on youth's employment and earnings, but they diminished over time

Arkansas PROMISE had no impact on the primary outcomes related to youth's employment and earnings (Figure III.2 and Appendix Table C.9). Almost half of the control group youth were employed in a paid job during the year before the five-year survey. Their earnings in that year were $5,198, and earnings in the five calendar years after RA were $13,359. Arkansas PROMISE did not affect these outcomes.

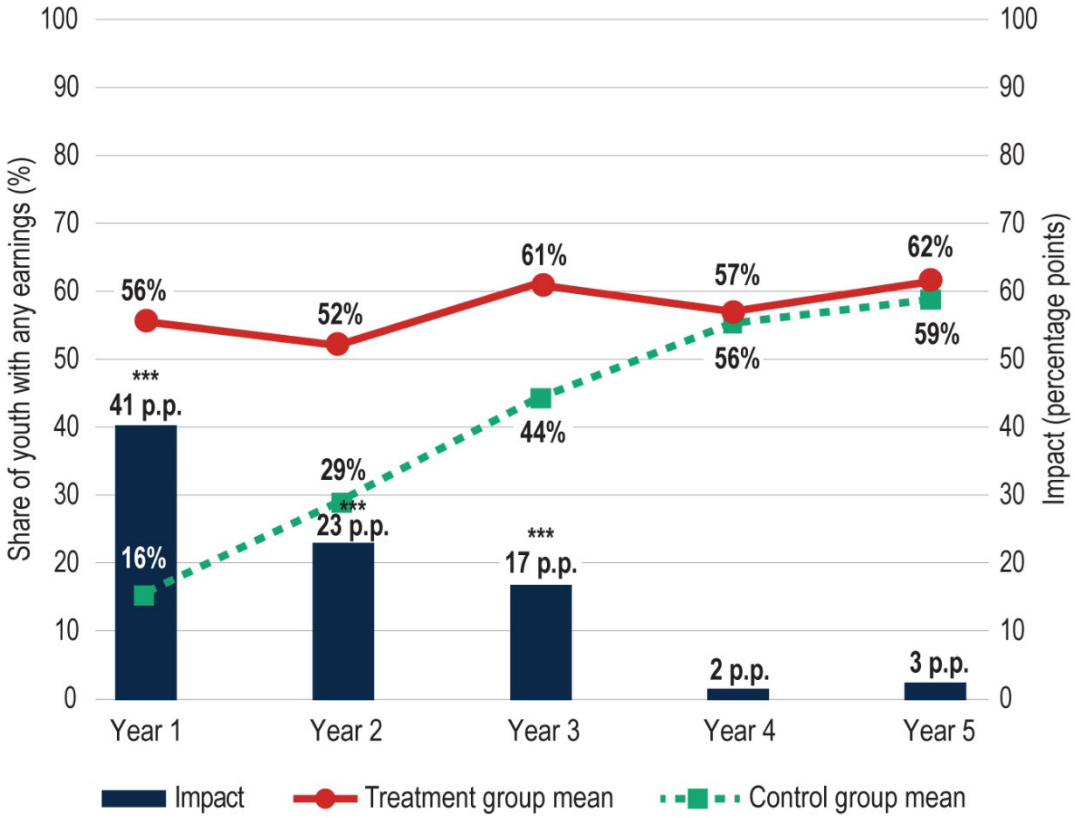
The program's impacts on employment were larger in the short term than the long term (Figure III.3). In each calendar year after RA, more than half of treatment group youth had earnings, a larger share of them were employed than control group youth, and the impacts were significant in three of the five years. However, over time, the size of the impacts on employment declined as control group youth's outcomes caught up to those of the treatment group. For example, in the first calendar year after RA, 16 percent of control group youth were employed; Arkansas PROMISE raised this share by 41 percentage points (a relative increase of 261 percent). In the fifth calendar year after RA, 59 percent of control group youth were employed; the program's impact of 3 percentage points (a relative increase of 8 percent) is not statistically significant (p-value=0.25). Across all five years, the program increased the likelihood of ever being employed by 18 percentage points over the control group's rate of 73 percent. A somewhat similar pattern occurred with earnings (Figure III.4). Earnings increased over time for the control group (from $350 in the first calendar year after RA to almost $5,600 in the fifth calendar year after RA). The program had significant impacts on earnings in the first two years, and treatment group youth had higher earnings in four of the first five calendar years after RA. The subsidized work experiences provided by Arkansas PROMISE might explain the early impacts on youth earnings.

Analyses of other employment measures also showed mixed impacts for Arkansas PROMISE (Appendix Table C.9). For the supplementary outcomes related to employment in the past year, the program affected only one outcome: it increased use of supports or services for getting or keeping a job by 4 percentage points (a 27 percent relative increase). This impact is consistent with the positive impact the program had on applications for and receipt of VR services. Treatment group youth were 13 percentage points more likely to have applied for VR services and 9 percentage points more likely to use them; these impacts represent increases of 84 percent and 82 percent, respectively, relative to the control group. The program had no impact on other measures of employment in the past year, such as any paid or unpaid employment, average weekly hours worked, employment in a job with fringe benefits, or employment settings. The program had an impact of 4 percentage points on the share of youth who had paid employment at the time of the five-year survey. This impact represents a 14 percent increase over the control group youth's rate of 30 percent. Treatment group youth had outcomes similar to control group youth for other employment outcomes measured at the time of the five-year survey, such as weekly earnings, hours worked, and labor force participation.

Though the five-year impacts on employment are not congruent with program expectations, the findings likely reflect the program's emphasis on employment through its summer work experiences. Those experiences provided participants with earnings early in their involvement with the program and did so at a time when control group youth were not working. About two-thirds of participants had a summer work experience in the first three years of program implementation, with almost half working for 200 or more hours (Honeycutt et al. 2018b). Analyses by program staff found that youth who used job readiness training, received an interest-based job placement, and had personalized connections to workforce agency staff had a greater number of hours worked in summer work experiences (Williams et al. 2019). That study also found that access to transportation and on-the-job supports had no relationship with hours

worked. That control group youth made up the difference in employment and earnings so quickly after RA suggests that the early employment experiences, along with the program's services related to employment and connecting youth with the state VR agency, were not enough to put treatment group youth on permanent trajectories that differed from those of the control group.

Figure III.3. Arkansas PROMISE youth employment rates, by calendar year after RA

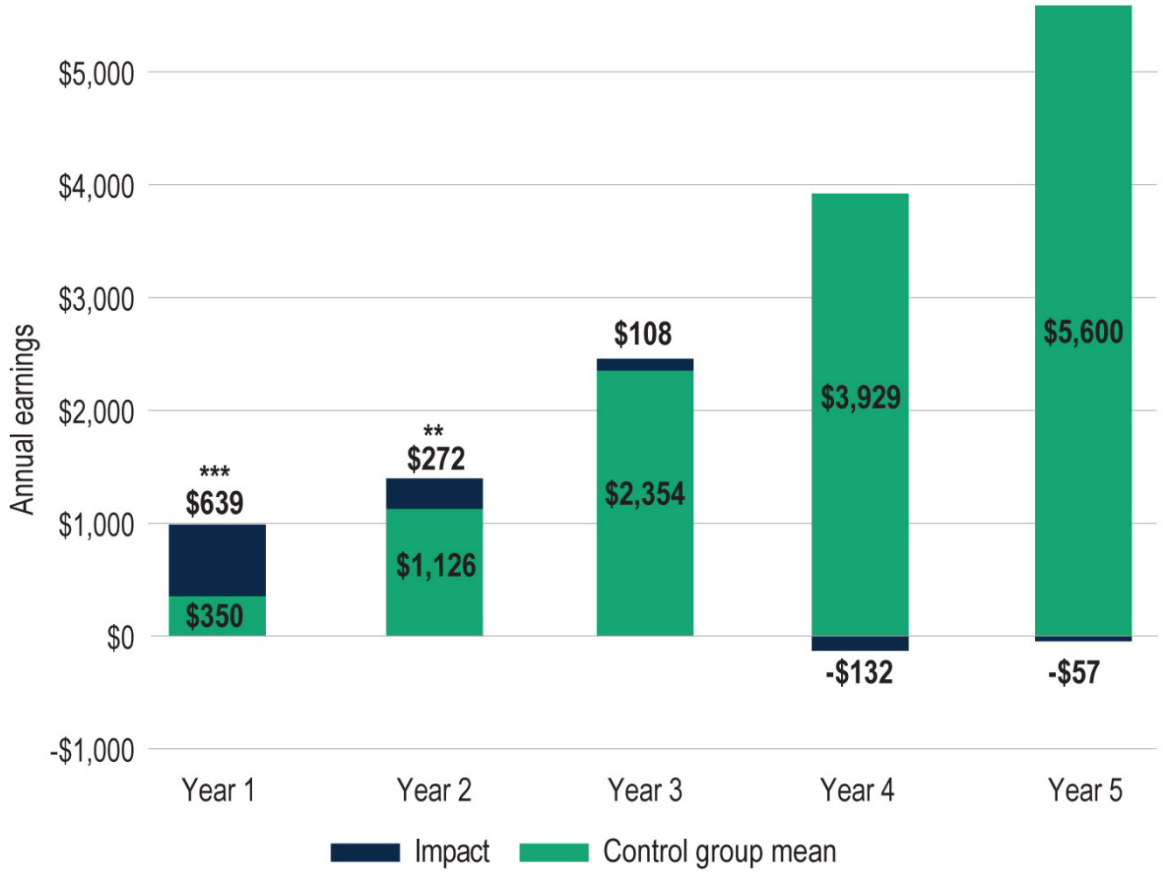


Source: SSA data.

Note: See Appendix Table C.9 for more details. Due to rounding, the sum of control group mean and impact may not equal the treatment group mean.

*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.
p.p. = percentage point; RA= random assignment.

Figure III.4. Arkansas PROMISE youth earnings in each calendar year after RA



Source: SSA data.

Note: See Appendix Table C.9. for more details. Earnings are measured in 2020 dollars.

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

RA = random assignment.

3. Arkansas PROMISE had no impact on youth's self-determination or their expectations of financial independence

Arkansas PROMISE had no impact on youth's self-determination or on the four subdomains of self-determination (Figure III.2 and Appendix Table C.10). On a scale from 0 to 100, where a higher number indicates greater self-determination, both the control and treatment groups had an average score of 79.

The program also did not affect the share of youth who expected that they would be financially independent at age 25. About 63 percent of the control group expected they would be financially independent at age 25 (which was lower than the 85 percent observed at 18 months after RA [Mamun et al. 2019a]); Arkansas PROMISE did not increase the expectations of treatment group youth relative to control group youth.

Additional analyses indicate the program did not have impacts on other youth expectations about the future or the expectations of their parents, with one exception: treatment group youth were 6 percentage points less likely to expect to complete postsecondary education (Appendix Table C.4.a). This result is

contrary to the program's intent for this outcome but is consistent with the lack of education impacts. One explanation might be that the program increased participants' focus on employment over their focus on postsecondary education through its various activities; however, the process study findings do not reveal any support for this hypothesis (Honeycutt et al. 2018b).

Arkansas PROMISE's services related to self-determination and expectations might not have been of sufficient quality or intensity to positively affect outcomes in these areas for participants and their parents. The program included a self-advocacy curriculum as part of its monthly trainings, though staff reported that the curriculum might have been too complicated for youth and families. The program also included self-advocacy components as part of its summer camp; however, in the first two years, less than one-third of participants attended the camp (Honeycutt et al. 2018b). Early assessments of impacts in these areas (Mamun et al. 2019a) also found no impacts for youth. It is notable that at 18 months after RA, the program had positive impacts on parents' expectations of the youth with respect to postsecondary education, financial independence, and employment; by five years after RA, both control group and treatment group parents had lower expectations.

4. Arkansas PROMISE had no impact on youth's SSA payments

Arkansas PROMISE had no impact on youth's likelihood of receipt or the amount of SSA payments received in Year 5, nor did it affect the total amount of SSA payments received during the five years after RA (Figure III.2 and Appendix Table C.11). During Year 5, 56 percent of control group youth received any SSA payments, representing a decline in youth's participation in SSA programs over time; 97 percent of youth received SSA payments during the first 18 months after RA. In Year 5, the average SSA payments among control group youth were $4,210; the program did not affect this amount or the likelihood of benefit receipt. The program also did not affect the total amount of SSA payments that youth received during the five years after RA, which averaged $31,146 in the control group.

The pattern of no impacts generally held when examining SSA payments by year and separately for SSI and OASDI (Appendix Table C.6.a). The one exception was with SSI and SSA payments in Year 2, in which treatment group youth had reductions of benefits by $241 and $209, respectively. These impacts might reflect the program's offer of summer employment experiences, along with earnings impacts observed in the first two calendar years after RA (Appendix Table C.9). The lack of consistent impacts on SSA payments follows from the program's lack of impacts on earnings.

In additional analyses, we found that Arkansas PROMISE increased youth's knowledge of selected SSA policies and other work supports, particularly ABLE accounts (Appendix Table C.6.a). About three-quarters of control group youth (74 percent) agreed with the statement "People who receive SSI benefits must report any money they get from working to the Social Security Administration"; the program increased that share by 7 percentage points. Between 5 and 7 percent of control group youth were aware of ABLE accounts, the student earned income exclusion, and PASS plans; relative to the control group, treatment group youth had rates that were 33, 8, and 4 percentage points higher, respectively. The program had no impacts on youth's knowledge of other SSA policies queried or their age-18 redetermination status.

The positive impacts on the youth's knowledge of some SSA policies and work supports are evidence of the efficacy of Arkansas PROMISE delivery of benefits counseling, primarily through the program's monthly group trainings (Honeycutt et al. 2018b) and opening ABLE accounts at the end of the program as an incentive for youth to complete activities that connect them to other service providers.

5. Arkansas PROMISE reduced the likelihood that youth had health insurance but did not affect their Medicaid and Medicare expenditures

Arkansas PROMISE decreased the share of youth who had any health insurance at the time of the five-year survey but did not affect the average monthly Medicaid and Medicare expenditures during the five years after RA (Figure III.2 and Appendix Table C.12). Most (81 percent) control group youth had some health insurance at the time of the five-year survey; the rate for treatment group youth was 6 percentage points lower. As expected, given their SSI eligibility, most control and treatment group youth had public health insurance. The coverage rate among control group youth declined since the survey conducted 18 months after RA, when 96 percent of youth had health insurance; the program had no effect on health insurance coverage at that time (Mamun et al. 2019a). Additional analyses suggest the impacts of the program differed by sex. The program reduced the share of male youth who had any health insurance by 8 percentage points but did not affect the share among female youth (Appendix Table C.21).

The reduction in health insurance coverage appears to be driven by a reduction in private health insurance (Appendix Table C.12). The program reduced the share of youth with private health insurance purchased through an Affordable Care Act (ACA) health exchange by 0.6 percentage points; there is some evidence it might have reduced the share with private health insurance, though the point estimate of 2 percentage points is not statistically significant (p-value = 0.22).

There were no significant impacts on Medicaid and Medicare coverage or expenditures. Average monthly Medicaid and Medicare expenditures were $440 for youth in the control group and Arkansas PROMISE did not impact this. The program increased the share of youth participating in Medicaid in the first year after RA, perhaps as a result of staff making some youth aware of their eligibility and helping them sign up for the program, but there were no impacts in later years.

The impact on health insurance coverage was unexpected and does not follow from the program's service model. Further, nothing from the process analysis or about the insurance market in Arkansas during this period explains these results. Although the state's uninsured rate increased from 2016 to 2019, Medicaid enrollment declined and employer-provided health insurance remained constant. The state instituted work requirements with Medicaid eligibility standards, but the requirement applied only to adults ages 30 and older and was subsequently discontinued.

6. Arkansas PROMISE had no impact on youth's income from earnings and SSA payments, but affected a few supplementary outcomes related to well-being

Arkansas PROMISE did not affect the primary outcomes in the youth well-being domain: youth's income from earnings and SSA payments in the year before the five-year survey and income over all five calendar years after RA (Figure III.2 and Appendix Table C.7.a). Control group youth had an average income of $9,463, and their income during the five calendar years after RA was $44,215; the income amounts for treatment group youth were no different. Though the program had no impacts on supplementary outcomes for most calendar years after RA, it increased income during the first calendar year after RA by $388. This result is likely due to the positive earnings impacts in the first calendar year after RA.

Analyses of supplementary outcomes suggest that Arkansas PROMISE reduced youth's involvement with the criminal justice system and increased their connections to services (Appendix Table C.13). Control group youth had rates of ever being incarcerated of 7 percent, with an incarceration length of 43 days; the program reduced these numbers by 3 percentage points (a 47 percent reduction) and 32 days (a 75 percent

reduction), respectively. The program also increased youth's likelihood of receiving help in getting accommodations for school, work, or living independently in the past year by 4 percentage points, which might have resulted from the program's efforts to connect youth and families to resources. The program increased the amount of SNAP benefits received by the youth's household in the past month by $19 (a relative increase of 19 percent). The program had no impact on other measures of economic and social well-being: productive activities (including schooling, training, and looking for or engaging in employment); other economic outcomes of their household; living independently, married or in a marriage-like relationship, and responsible for at least one child; other measures reflecting engagement with the criminal justice system; and health status.

D. Five-year impacts on parents

This section documents the evidence on whether the services that Arkansas PROMISE provided led to impacts on parent outcomes during the first five years after enrolling in the program. The impact estimates show that the program reduced the likelihood that parents had health insurance and increased their Medicaid and Medicare expenditures; it had no impacts on any other primary outcomes (employment or earnings, SSA payments, or income) (Figure III.5). Generally, we found little evidence that the program's impacts on parent outcomes differed based on their youth's age, sex, impairment, or their own receipt of SSA benefits at the time of enrollment; we describe the exceptions when discussing the findings below.

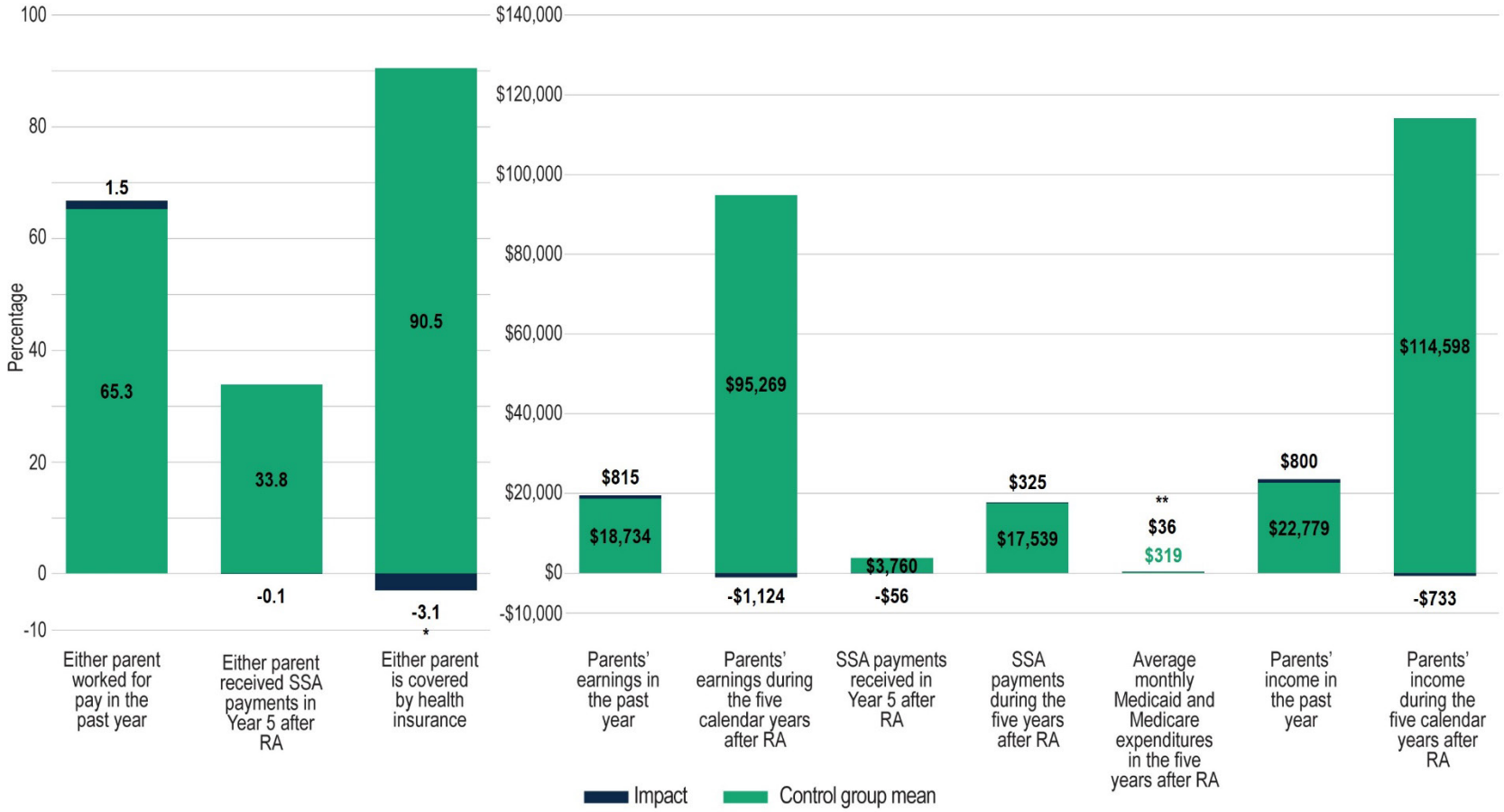
1. Arkansas PROMISE had no impact on parents' employment or earnings

Arkansas PROMISE did not affect the likelihood that either parent worked for pay in the year before the five-year survey, parents' earnings in that year, or their earnings during the five calendar years after RA (Figure III.5 and Appendix Table C.14). In about two out of every three control group families, at least one parent worked for pay in the year before the five-year survey. On average, the parents of control group youth earned $18,734 in the year before the survey and $95,269 over the five calendar years after RA. Arkansas PROMISE did not affect any of these earnings-related outcomes.

The program had differential impacts on parents' employment and earnings by parents' SSA payment receipt status at RA. Among the 30 percent of families that had at least one parent who received SSA payments at RA, Arkansas PROMISE increased the rate of either parent working for pay in the past year by 10 percentage points (a 34 percent relative increase) (Appendix Table C.22). For youth whose parents did not receive SSA payments, the program had no impact. Similarly, parent earnings increased by $3,862 as a result of the program when at least one parent received SSA (a 63 percent relative increase). Among families with no parent receiving SSA payments, the program had no impact. These patterns suggest that the program's services to families benefited those in which SSA payments were received by at least one parent in the year before RA, and thus may have been more economically disadvantaged than other PROMISE families. The program also had differential impacts on parents' earnings by sex. The program reduced earnings among parents of female youth by $7,622 (a 9 percent decrease) and had no impact for parents of male youth.

Additional analyses suggest that Arkansas PROMISE also had no impacts on supplementary outcomes related to employment and earnings (Appendix Table C.14). These outcomes include parents' labor force participation, education, employment at the time of the five-year survey, weeks worked, usual weekly hours worked, or employment or earnings during the five calendar years after RA.

Figure III.5. Arkansas PROMISE impacts on parent primary outcomes in the five years after RA



Source: Parent five-year surveys; SSA data.

Note: All outcomes are measured at the time of the five-year youth survey unless otherwise specified. Monetary values are in 2020 dollars. See Appendix Tables C.8–C.17 for more details.

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

2. Arkansas PROMISE had no impact on parents' SSA payments

Arkansas PROMISE did not affect the likelihood that a parent received SSA payments in the fifth year after RA, the amount of SSA payments parents received in that year, or the total amount of SSA payments they received during the five years after RA (Figure III.5 and Appendix Table C.15). In the fifth year after RA, about 34 percent of control group families had at least one parent who received SSA payments; overall, the annual SSA payments to parents averaged $3,760. During the five years after RA, control group families received a total of $17,539 in SSA payments for parents. The program did not affect these outcomes. Its impacts on parents' SSA payments differed by youth's sex. The program increased parents' SSA payments during the five years after RA by $2,676 (a 15 percent relative increase) among parents of female youth but had no impact on SSA payments to parents of male youth (Appendix Table C.21). Nothing from the process analysis suggests an explanation for this finding, although it may be connected to the finding that the program reduced earnings among parents of female youth.

The supplementary outcomes for parents' SSA payments—receipt and amount of SSA payments, SSI payments, and OASDI benefits by year and across all years—largely were similar between control and treatment group parents (Appendix Table C.9.a). The two exceptions were a decrease in the likelihood of SSI payment receipt in the fourth year after RA and an increase in SSI payment amounts in the first year.

3. Arkansas PROMISE reduced the likelihood that parents had health insurance and increased parents' average monthly Medicaid and Medicare expenditures in the five years after RA

Consistent with findings for youth, Arkansas PROMISE reduced the proportion of parents covered by health insurance at the time of the five-year survey (Figure III.5 and Appendix Table C.16). About 91 percent of control group parents had health insurance at the time of the five-year survey. The program decreased this rate by 3 percentage points. This finding is unexpected, given that the employment rates of treatment group parents were no different than those of the control group parents, and we did not observe any impacts on parents' health insurance coverage at 18 months after RA. The finding appears to be driven by a reduction in Medicare participation in later years. The program reduced the share of parents enrolled in Medicare in the fourth year after RA by 2 percentage points; there is suggestive evidence that it also reduced the share in the fifth year after RA (which coincided with the five-year survey), though the point estimate of 1.8 percentage points is marginally not significant (p-value = 0.12).

During the five years after RA, average monthly Medicaid and Medicare expenditures for parents were $319 among control group families, and Arkansas PROMISE increased this by $36. This increase was driven by impacts on expenditures during the first few years after RA. The program increased Medicare expenditures in the second year after RA and Medicaid expenditures in the third and fourth years, perhaps by increasing parents' knowledge of the health insurance available through Medicare and Medicaid or by encouraging them to take advantage of these programs. In sum, the program initially increased parents' Medicaid and Medicare expenditures but then later reduced their Medicare participation, resulting in the seemingly paradoxical finding that it reduced the likelihood that parents had health insurance at the time of the five-year survey but increased average Medicaid and Medicare expenditures during the five years after RA.

The COVID-19 pandemic may have affected parents' health insurance. Among parents surveyed before the pandemic, in 94 percent of control group families at least one parent had health insurance, while this share was 9 percentage points smaller among treatment group families. (Appendix Table C.25). Whereas, among parents surveyed during the pandemic, the two groups were no different on this measure; in about

9 in every 10 families at least one parent had health insurance. Control group parents surveyed during the pandemic were less likely to have health insurance relative to their treatment group counterparts surveyed before the pandemic, while the opposite was true for treatment group parents. The pandemic might have caused some parents to lose their jobs and access to private health insurance; this might have disproportionately affected control group parents as they had higher coverage rates before the pandemic. In addition, it may be that Medicaid and other supports in place after the pandemic started benefited treatment group parents. Arkansas PROMISE tripled the share of families among the treatment group that received benefits counseling services during the 18 months after RA, compared to the control group (Mamun et al. 2019a). If Arkansas PROMISE increased parents' knowledge of and connections to public programs and helped them better advocate for themselves, treatment group parents might have been better positioned to take advantage of such supports. Consistent with this

4. Arkansas PROMISE had no impact on parents' income

Arkansas PROMISE did not affect parents' income from earnings and SSA payments in the year before the survey or during the five years after RA (Figure III.5 and Appendix Table C.17). On average, control group parents' income from earnings and SSA payments were $22,779 in the year before the survey and $114,598 during the five years after RA; the program did not affect these outcomes. Its impact on parents' income differed depending on whether parents received SSA payments at RA (Appendix Table C.22). The program increased parents' income in the year before the survey among families who had at least one parent who received SSA payments at RA but had no impact on the income of parents in other families. This finding is consistent with the pattern of impacts on parents' earnings. As with the subgroup differences on parents' employment and earnings, these differences might reflect the fact that families with multigenerational SSA program beneficiaries might have participated in—and benefited from—the family-oriented services related to case management, employment, and benefits counseling the program offered.

In additional analyses, the program did not affect parents' household incomes or the likelihood that any member of the household participated in non-SSA public assistance programs, such as SNAP, TANF, or housing assistance (Appendix Table C.17). The absence of impacts on these outcomes is consistent with the absence of program impacts on parents' employment and earnings.

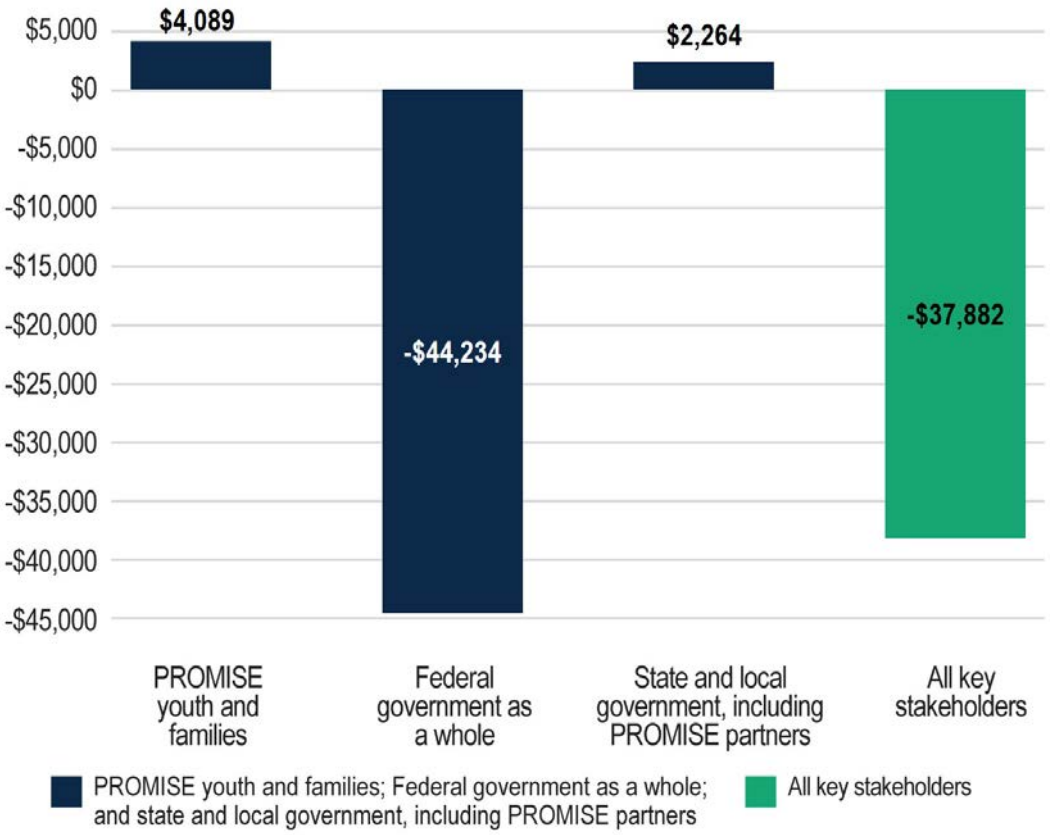
E. Benefits and costs

In conducting the Arkansas PROMISE benefit-cost analysis, we focused on estimating the net benefits (or costs) for each key stakeholder group, as well as across all stakeholders, during the five years after RA. The net benefit (cost) is based on (1) the estimated impacts of the program on all youth and families who were offered the opportunity to participate in the program, regardless of their statistical significance; and (2) the calculated cost of delivering Arkansas PROMISE per treatment group family.

1. Across key stakeholders the costs of Arkansas PROMISE outweighed its benefits, but youth and families benefited from participation on average

Across all key stakeholders, we estimate that Arkansas PROMISE resulted in a net cost of about $37,882 per treatment group family over the five years after RA (Figure III.6). The cost of delivering the program ($40,578 per treatment group family) was the primary driver of this finding, which ultimately was larger than the benefits Arkansas PROMISE generated through its impacts on youth and family outcomes ($4,089 per treatment group family) during the five years after RA.

Figure III.6. Arkansas PROMISE benefits and costs to key stakeholders over the five years after RA



Source: Youth five-year survey; SSA data; external data.

Note: Monetary values are in 2020 dollars. See Appendix Table C.27 for more details.

RA = random assignment.

Here we summarize the high-level benefit-cost findings for each stakeholder group. Detailed estimates are shown in Appendix Table C.27.

- **Youth and their families.** On average, youth and families benefited from Arkansas PROMISE. Each family experienced about $4,089 in net benefits during the five-year follow-up period. Increased public supports other than SSA benefits were the largest driver of these benefits, followed by increased earnings for youth and Medicaid and Medicare expenditures for parents. These benefits were partially offset by increased taxes and work-related expenses and decreased SSI benefits for youth and decreased earnings and fringe benefits for parents.
- **The federal government.** Arkansas PROMISE produced a net cost to the federal government of $44,234 per treatment group family. ED assumed most of the costs associated with program delivery ($40,289 per family). SSA experienced a net benefit of $134 per family. Although the federal government benefited from youth's increased tax payments and reduced SSI payments and administrative costs, those benefits were too small to offset the costs of program delivery and increased public supports.

- **State and local Arkansas PROMISE partners.** State and local PROMISE partners incurred $289 in program delivery costs and VR costs but produced a net positive benefit of $2,264 per treatment group family driven by the reduced costs of incarceration.

2. The impacts on earnings would need to be sizeable for Arkansas PROMISE to be cost neutral across all key stakeholders after 20 years

We considered the program's benefits and costs beyond the five-year evaluation period. First, we calculated the impact on youth earnings needed for the program to be cost neutral across all key stakeholders by 20 years after RA. Arkansas PROMISE would need to generate an average annual impact on youth earnings of $2,003 per year (Appendix Figure C.1). Generating an impact of this size is highly unlikely given that the point estimate of the program's impact on youth earnings in the fifth year after RA was -$57. Second, because the five-year evaluation period could underestimate the earnings growth for youth if a large share of them were building their human capital, we considered how net benefits would accrue 20 years after RA. Because Arkansas PROMISE did not increase educational attainment for youth, the net benefits do not increase when we factor in positive returns to education. Under a scenario where a 10 percent return per year of education persists over time, the net benefit across all key stakeholders would be -$47,051 over 20 years (Appendix Table C.30). Under a high future earnings scenario wherein we forecasted earnings using the upper bound of the 95 percent confidence interval of the estimated impact on earnings (in place of the Year 5 earnings impact estimate), the net benefit across all key stakeholders over 20 years would be -$29,453.

F. Summary and discussion

1. Summary of key findings

Table III.1 summarizes the Arkansas PROMISE impacts on the primary youth and parent outcomes. Overall, Arkansas PROMISE did not improve any of the primary youth or family outcomes. Over five years, it generated a net cost across all key stakeholders of $37,882 per treatment group family; for PROMISE youth and families, it delivered an average net benefit of $4,089.

Table III.1. Arkansas PROMISE: Summary of five-year impacts on primary outcomes, by domain

Domain	Primary outcome	Impact summary
Youth		
Education and training	Enrolled in an educational or training program	0
	Has a GED, high school diploma, or certificate of completion	0
Employment and earnings	Employed in a paid job in the past year	0
	Total earnings in the past year	0
	Earnings during the five calendar years after RA	0
Self-determination and expectations	Self-determination scale	0
	Youth expects to be financially independent at age 25	0
Health insurance	Covered by any health insurance	-
	Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA	0
SSA payments and knowledge of work supports	Received SSA payments in Year 5 after RA	0
	SSA payments in Year 5 after RA	0
	SSA payments during Years 1–5 after RA	0
Economic and social well-being	Income from earnings and SSA payments in the past year	0
	Income during the five calendar years after RA	0
Parents		
Parents' employment and earnings	Either parent worked for pay in the past year	0
	Parents' earnings in the past year	0
	Parents' earnings during the five calendar years after RA	0
Parents' SSA payments	Either parent received SSA payments in Year 5 after RA	0
	SSA payments received in Year 5 after RA	0
	SSA payments during the five years after RA	0
Parents' economic well-being	Parents' income from earnings and SSA payments in the past year	0
	Parents' income during the five calendar years after RA	0
Parents' health insurance	Either parent is covered by any health insurance	-
	Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA	+

Note: All outcomes are measured at the time of the five-year youth survey unless otherwise specified. See Appendix Tables C.8–C.17 for more details.

+/++/+++ 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.

GED = General Educational Development; RA = random assignment; SSA = Social Security Administration.

2. Discussion

The finding that Arkansas PROMISE had no impacts on youth's primary outcomes involving education, employment, and earnings is somewhat surprising, given the success of the program in engaging youth and delivering intended services. As noted in the process and 18-month impact reports (Honeycutt et al. 2018b; Mamun et al. 2019a), the program connected youth to an array of employment, education, and transition services, and had positive impacts on service use and paid employment.

Although Arkansas PROMISE had early impacts on youth employment and earnings, those results reflect the program's goal to ensure youth had paid work experiences while participating in the program. Many youth took up the program's summer work experiences. However, these early experiences did not give treatment group youth any long-term advantages over their counterparts, and control group youth closed the early gaps in employment rates and earnings levels within five years of RA.

We posit four possible reasons why Arkansas PROMISE did not generate impacts for youth five years after RA—three of which may also apply to the other programs and are discussed further in Chapter IX.

First, it could still be too early to assess these impacts. Although the program did not increase youth employment in the year before the survey, it did increase employment at the time of the survey, which hints at the possibility that impacts may still manifest over the long run. The program also increased use of VR services and supports or services in getting or keeping a job, and treatment group youth might continue to access these services. As they do so, they might follow stronger career pathways that lead to higher job satisfaction, better skill and credential gains, and higher earnings.

Second, the PROMISE programs operated during the passage and implementation of WIOA, which changed the transition service landscape in significant ways. Both treatment and control group youth might have benefited from these changes, thus diluting the impacts of Arkansas PROMISE. However, the evidence from the 18-month impact study and this report—specifically, the impacts on VR service use during the five years after RA—suggest that WIOA did not eliminate the contrast in service use between treatment and control group youth and thus cannot fully explain the lack of consistent impacts.

Third, the COVID-19 pandemic, which occurred during the fifth calendar year after RA for 74 percent of enrollees, might have dampened the impacts of Arkansas PROMISE. Among all youth in Arkansas, annual unemployment doubled from 6 percent in 2019 to 12 percent in 2020 (Inanc et al. 2022). We found some evidence to suggest that the program might have increased youth earnings among youth surveyed before the onset of the pandemic, more so than youth surveyed afterward (Appendix Table C.25).

Finally, the service model Arkansas PROMISE implemented might not be effective. As noted in Section III.A.2, the main services that the program offered—and that youth used—were case management and work-based learning experiences. These services were pillars of the overall PROMISE service model, and the program supplemented these services with various education, benefits counseling, and self-determination services, along with financial supports for families to address emergent needs. The program engaged participants and succeeded in their take-up of early employment experiences, along with other services related to employment, connections with the state VR agency, and case management. Yet the Arkansas PROMISE service model did not lead to impacts on employment or other key outcomes by the fifth year after RA. Given the program's implementation success, the service model the program implemented might not offer sufficient supports that lead to better outcomes for youth receiving SSI.

A positive effect of Arkansas PROMISE involved the differential impacts observed for parents receiving SSA payments at RA. The program strongly emphasized family services, offering them case management, benefits counseling, and service referrals, often at the same time as staff worked with their youth. Family members could attend the same monthly trainings as their youth, and many did so. Most parents completed PROMISE plans that identified their goals for employment and education. The fact that parents who received SSA payments had positive employment and earnings impacts points to the advantages of the program in offering encouragement, supports, and information. These parents, it should be noted, had substantially lower employment rates and earnings than parents who did not receive SSA

payments, so the program might have been better positioned to work with households that faced greater economic disadvantages.

Another positive result for Arkansas PROMISE involved the impacts on benefits-related knowledge. Arkansas PROMISE emphasized a group training approach to benefits counseling as part of its monthly meetings with youth and their families. It also opened ABLE accounts for participants as they completed services. The program's activities in these areas increased youth's knowledge about the need to report earnings to SSA, the availability of some SSA work supports, and ABLE accounts. Though the program did not have consistent impacts on employment or SSA payments, it would be interesting to assess whether this increased knowledge resulted in differential use of SSA work supports and earnings reporting, and, if so, how that use may affect employment and benefit payments.

The negative impact of Arkansas PROMISE on the likelihood of youth and parents having any health insurance cannot be explained by the program's services. For youth, this impact appears to be driven by reduced private health insurance coverage. For parents, the impact appears to be driven by decreased Medicare participation among parents in years 4 and 5 after RA. Although Arkansas expanded its federal Medicaid program, it instituted work requirements that applied to adults ages 30 to 49. Medicaid enrollment for children and adults up to age 64 increased to a peak of 725,000 people in 2018, and then declined to 696,000 in 2019; the number who were uninsured increased from 2016 through 2019 by more than 30,000 people, and those with employer-provided insurance remained relatively constant (Kaiser Family Foundation 2021). Changes in the state's Medicaid program should have affected treatment and control group members equally; the negative impact for treatment group youth and their parents does not follow from the program's emphasis on providing participants with information and resources they could use to manage services and benefits after the program ended.

Arkansas PROMISE reduced youth's involvement with the criminal justice system, which is somewhat surprising because the program did not directly address issues related to justice involvement. However, other programs, such as the YTD in Miami and the Transition to Independence Process Model, provide some evidence for programs that reduced the justice system involvement of youth with disabilities (Bohs et al. 2021; Fraker et al. 2018; Karpur et al. 2005). This finding is important, given the descriptive evidence that points to adverse effects of an arrest record for youth with disabilities. For example, having an arrest record is negatively associated with competitive employment for this population (Wehman et al. 2014). Being arrested is also associated with other outcomes such as a lower likelihood of receiving SSI at age 19 (Hemmeter et al. 2009). The program's impacts on justice involvement could thus have significant long-term effects both for youth (possible beneficial outcomes in avoiding arrests and incarceration) and the justice system (reduced costs).

The benefit-cost analysis shows a large cost for Arkansas PROMISE relative to its benefits, although the benefits likely are underestimated because of the five-year window and the possibility that impacts will continue to accrue and may even grow in size over time.

IV. ASPIRE

Summary of five-year impacts and net benefits of ASPIRE

- ASPIRE did not improve any of the of the evaluation's primary youth outcomes; it decreased the share of youth that had obtained a high school diploma or equivalent credential.
- The program had no impacts on youth's enrollment in education or training, employment, earnings, self-determination, expectations of financial independence, SSA payments, health insurance coverage, or Medicaid and Medicare expenditures.
- ASPIRE had no impacts on parents' employment, earnings, SSA payments, health insurance coverage, Medicaid and Medicare expenditures, or income.
- Across all key stakeholders, the program resulted in a net cost of $26,839 per treatment group family over five years. For treatment group youth and families, it resulted in an average net cost of $1,490 over five years.

A. Program overview and a review of prior findings

To provide context for ASPIRE's five-year impacts presented in subsequent sections, we first summarize key features of the program, the findings from the process study of the first three years of program operations (Anderson et al. 2018), and the findings of the 18-month impact study (Mamun et al. 2019a).

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 leadership team—all of whom were employees of the Utah State Office of Rehabilitation—provided overall leadership for the program and facilitated regular communication among and standardized trainings for the ASPIRE states. Each state had (1) a lead agency with which 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.

Intensive case management was the cornerstone of the ASPIRE approach to serving youth with disabilities. The program assigned treatment group youth and 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 resources, such as assistance with housing, utilities, food, accessibility needs, or IDAs.

Subcontractors located in each state typically provided the core ASPIRE interventions other than case management. 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. To maximize program fidelity and implementation consistency across the states, the ASPIRE leadership team provided the consortium states with templates for the scope of work in the subcontracts for intervention service providers. 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

An in-depth process study of ASPIRE during the first three years of program operations documented the structure and service model of the program and described its implementation during the period from September 2014[25] through October 2017 (Anderson et al. 2018). Here we summarize the key findings from that analysis.

Low take-up of many services. Most treatment group youth engaged with the program but did not receive the targeted level of case management. During its first three years, ASPIRE engaged 86 percent of treatment group youth as participants. Youth were defined as participants if they had an intake meeting with a case manager and at least one other substantial contact with program staff. 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, 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 had two goals for providing career exploration and opportunities to youth: 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 met the former goal by the end of October 2017, with 31 percent engaged in competitive employment. It did not meet the latter goal. By the end of the third year of program operations, 51 percent of youth had participated in at least one career exploration or employment activity during each year of enrollment.

The program 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 provision for parents per year, six hours of financial education per year, and six hours of self-determination training per year. Fewer than half of the families received each service, and an even smaller minority (fewer than 10 percent of families) 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. Service take-up patterns varied by intervention; however, take-up rates were consistently lower in Arizona, the state with the largest share of enrollees, than in other ASPIRE states.

Challenges in delivering services. Program staff and administrators attributed low service take-up 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 some families' belief that the ASPIRE

[25] The program began enrolling participants 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.

interventions were not relevant because of the age or other circumstances of their youth. Some consortium states experienced delays in implementing the interventions because of difficulties in identifying qualified service providers, which also dampened service take-up.

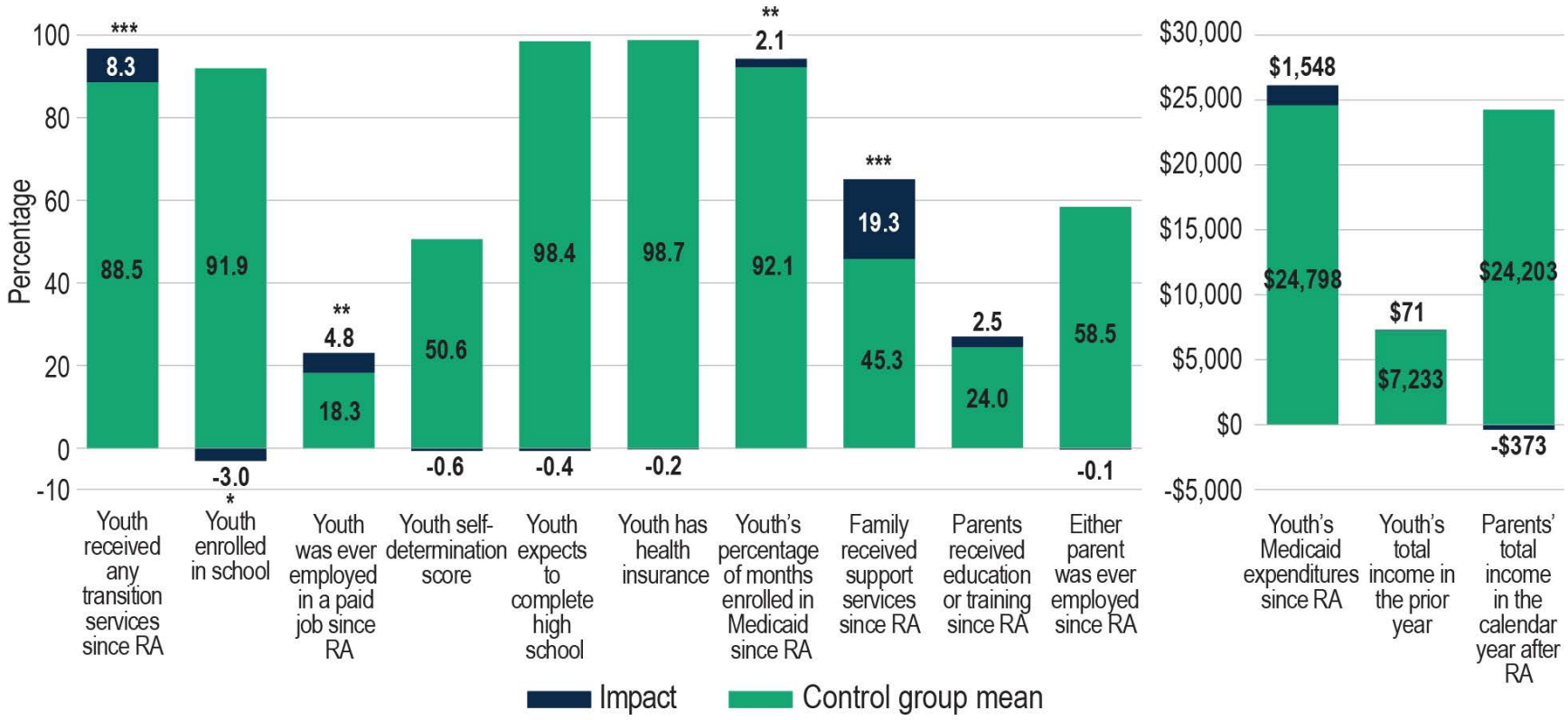
Availability of services for the ASPIRE control group. Services available to treatment group members differed substantially from those available to the control group, and there was little risk that control group youth received services through ASPIRE. Although the ASPIRE case managers were also study recruiters, they did not serve any clients other than the ASPIRE treatment group. Because the program operated independently from schools and other programs that served the target population, there was no systematic avenue through which control group families could unintentionally connect with ASPIRE. The intensive case management focused on the transition needs of youth with disabilities that ASPIRE offered was not broadly available in the consortium states. Although most ASPIRE subcontractors did not limit their services only to treatment group participants, ASPIRE partners believed that in the absence of the program, few youth and families took up these services because they either lacked awareness of them or were not motivated to seek them out. Therefore, they believed the service experiences of treatment and control group youth were markedly different.

3. Summary of findings from the 18-month impact analysis

By 18 months after RA, ASPIRE had generated positive impacts on several youth outcomes, including those related to service delivery and paid employment (Figure IV.1). ASPIRE connected more youth to transition services, including case management, employment-promoting services, benefits counseling, financial education, and training supports. Treatment group youth were more likely than control group youth to report having received services they perceived as somewhat or very useful. Although ASPIRE reduced the youth's school enrollment, it increased their receipt of job-related training credentials. 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. ASPIRE increased the share of youth who held a paid job during the 18 months after RA. It also increased the share of months that youth were enrolled in Medicaid. It had no impact on youth earnings, income, health insurance coverage, and youth's self-determination and expectations about completing high school.

Similarly, ASPIRE had positive impacts on several family outcomes during the 18 months after RA, especially those related to service delivery. ASPIRE increased the families' use of any support service, as well as specific services, including case management, education or training supports, benefits counseling, financial education, information on the youth's disability, and parent networking support. It had no impact on parents' education and training, nor did it affect their income from earnings and SSA payments.

Figure IV.1. ASPIRE impacts on youth and parent primary outcomes in the 18 months after RA



Source: Mamun et al. 2019a.

Note: All outcomes are measured at the time of the 18-month surveys unless otherwise specified.

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

RA = random assignment.

B. Baseline characteristics of the five-year follow-up sample

The youth survey respondent sample for the five-year impact analysis of ASPIRE consisted of randomly assigned youth who completed a five-year follow-up survey. Except for data on youth's and parents' race and ethnicity, all baseline characteristics are based on data from SSA administrative records.

Demographic characteristics. About one-third of the youth in the sample were female (Appendix Table D.1). At the time of RA, 38 percent of the youth were age 14, 32 percent were 15, and another 31 percent were 16. More than 9 in 10 youth expressed a preference for English as their written and spoken language. Most youth (84 percent) lived with their parents at the time they applied for SSI; of those who did not, most lived in their own households or alone. The largest racial and ethnic group was non-Hispanic White (38 percent), followed by Hispanic (37 percent) and non-Hispanic Black (11 percent). Data on race and ethnicity were missing for less than 1 percent of the sample. The racial and ethnic composition of the parents was roughly similar to that of the youth, though a larger proportion were non-Hispanic White (46 percent) and a smaller proportion were Hispanic (32 percent).

Impairment. The most common primary impairments (as recorded in SSA administrative data) were intellectual or developmental disabilities (45 percent) followed by other mental impairments (29 percent) and physical disabilities (19 percent).

SSA payments. Most youth survey respondents (91 percent) received SSI payments during the month of RA. On average, youth were age 7 at their most recent SSI application. A small share of youth (10 percent) received OASDI payments at RA. On average, youth received $7,380 in SSA payments (SSI and OASDI) during the year before the RA month. About one in five youth lived in a household with multiple SSI-eligible children. About 30 percent had a parent who was receiving SSA payments at RA.

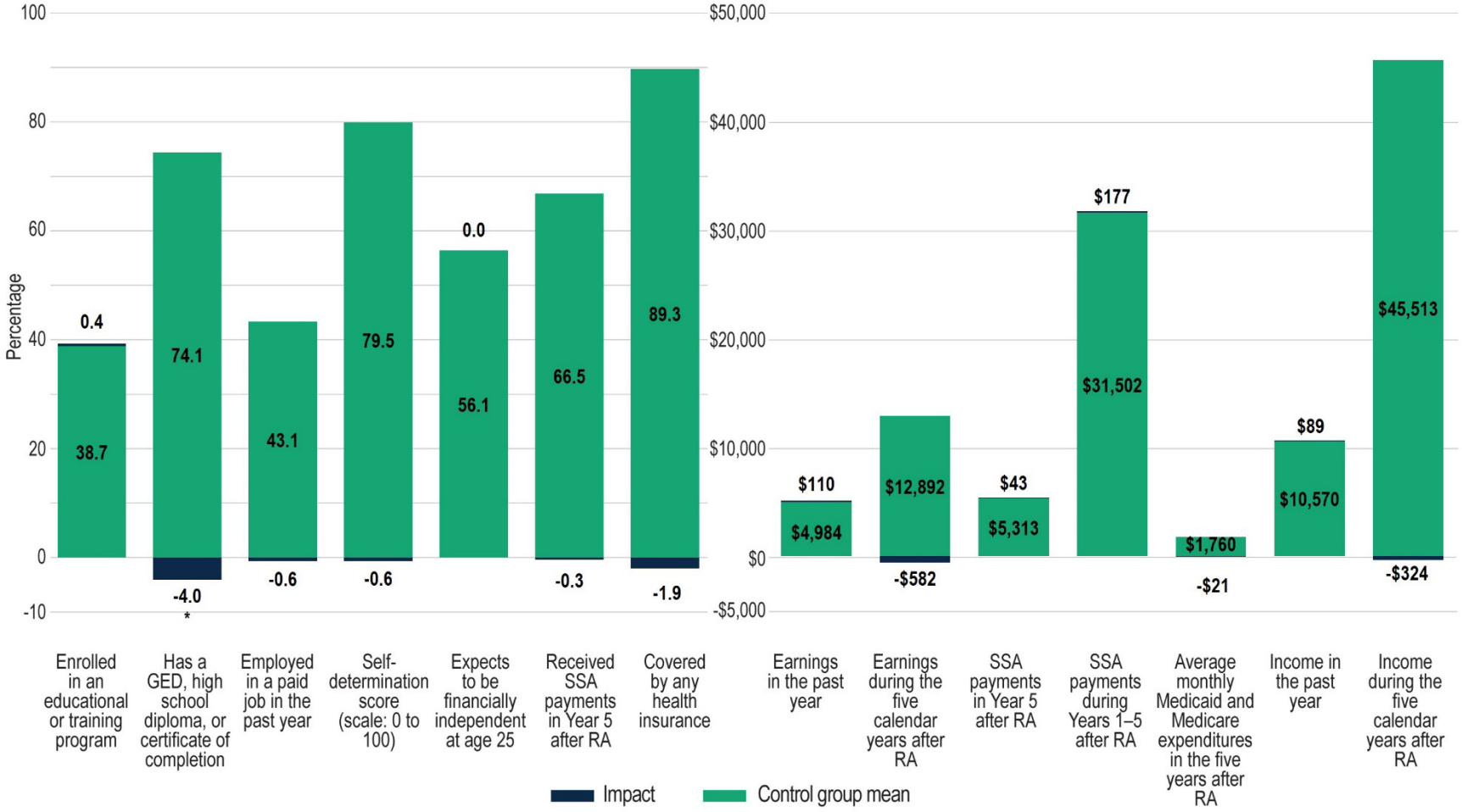
Earnings. Few youth (less than 2 percent) had earnings during the calendar year before RA. Youth's average earnings in that year were $11. About 73 percent of youth had a parent with earnings in the calendar year before RA; average annual parental earnings were $19,819.

Differences between the treatment and control groups. On average, youth in the treatment and control groups had similar characteristics, as expected, given their RA to each group. We compared the two groups across 25 characteristics at the time of RA and found two small, but statistically significant differences. Treatment group youth had different living arrangements than control group youth; a larger share lived in their own household and a smaller share lived in another household and received support. Treatment group youth also were more likely to be receiving OASDI at RA. Because we controlled for youth and parent characteristics, we can identify unbiased estimates of program impacts.

C. Five-year impacts on youth

This section documents the evidence on whether ASPIRE's services led to impacts on youth outcomes in several domains during the first five years after RA. They show that the program had no impact on enrollment in an educational or training program and decreased the share of youth who had a high school diploma or equivalent credential (Figure IV.2). It had no impact on youth earnings, SSA payments, self-determination, health insurance coverage, or Medicaid and Medicare expenditures five years after enrollment. We found little evidence that the program's impacts on youth outcomes differed by youth and parent characteristics at enrollment; we describe the exceptions when discussing the findings below.

Figure IV.2. ASPIRE impacts on youth primary outcomes in the five years after RA



Source: Youth five-year survey; SSA data.

Note: All outcomes are measured at the time of the five-year youth survey unless otherwise specified. Monetary values are in 2020 dollars. See Appendix Tables D.8–D.17 for more details.

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

GED = General Educational Development; RA = random assignment; SSA = Social Security Administration.

1. ASPIRE had no impact on youth's enrollment in education and training and reduced the likelihood of high school completion, but increased receipt of job-related training credentials

ASPIRE had no impact on enrollment in school or training and a negative impact on obtaining a high school diploma, GED, or certificate of completion (Figure IV.2 and Appendix Table D.8). About 39 percent of the youth were enrolled in an educational or training program at the time of the five-year survey; this share was similar for the treatment and control groups. Almost three-quarters of youth in the control group had a GED, certificate of completion, or high school diploma in the year before the five-year survey. ASPIRE reduced this share by 4 percentage points (a 6 percent relative decrease).

In additional analyses, we found that ASPIRE reduced the share of youth enrolled in a GED program or other adult education program at the time of the survey. It also reduced the share of youth whose highest grade completed was 12th grade and increased the share who had attended some college. It increased the share of youth who had a school suspension or expulsion in the past year by 1 percentage point. ASPIRE had no impact on other education-related outcomes, such as enrollment in postsecondary education or receipt of educational accommodations.

ASPIRE increased the share of youth who attained a job-related training credential in the past year by 3 percentage points (a 40 percent relative increase). The negative impacts on high school completion and GED course enrollment, combined with the positive impact on receiving a training credential, suggest that the program might have prompted some youth to find employment-related training a more attractive option than continued schooling. These results are consistent with the findings of the 18-month impact analysis that the program reduced the youth's school enrollment and increased their receipt of job-related training credentials.

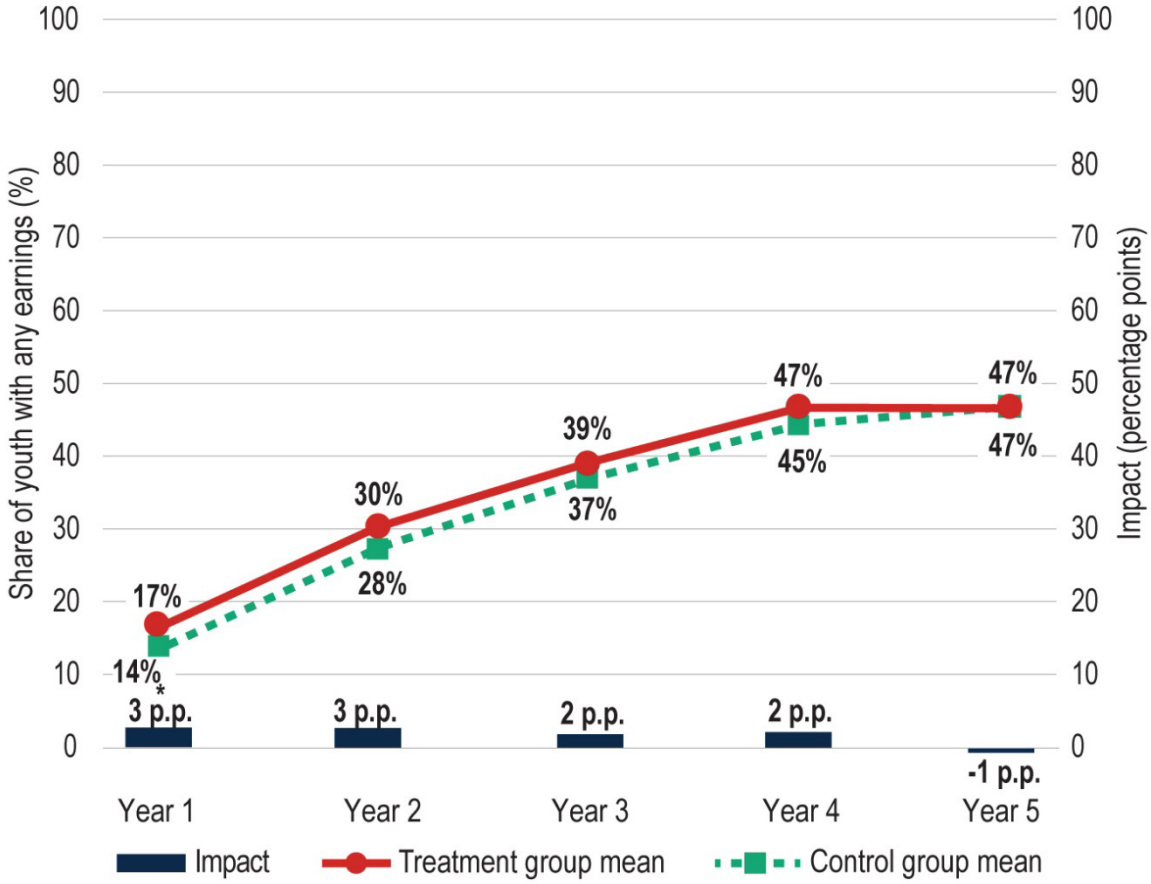
2. ASPIRE had no impact on youth's employment and earnings

ASPIRE did not affect the likelihood of youth being employed during the year before the five-year survey, their earnings during that year, or their earnings during the five years after RA. About 43 percent of control group youth had a paid job in the year before the five-year survey, and average earnings among the entire control group was almost $5,000; these outcomes did not differ significantly for treatment group youth (Figure IV.2 and Appendix Table D.9). During the five years after RA, youth in the control group earned $12,892 on average; the program did not affect this amount for the treatment group.

Over the five-year study period, employment rates in the control group grew from 14 percent in the first calendar year after RA to 47 percent in the fifth calendar year after RA (Figure IV.3). ASPIRE increased the share of youth employed in the first year after RA by 3 percentage points (a 17 percent relative increase) but had no impact on the likelihood of employment during the years thereafter. A similar pattern occurred with earnings (Figure IV.4). Earnings increased over time for the control group (from $348 in the first calendar year after RA to $5,447 in the fifth calendar year after RA). The program had no impact in any year. Having a paid job in the year after RA 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. ASPIRE's goal was for 30 percent of youth ages 16 and older who had been enrolled in the program for at least two years to have been employed. The absence of employment impacts after the first year might reflect that only half of youth had participated in at least one career exploration or employment activity during each year of enrollment, thus falling short of the program's goal to have all treatment group youth meet this criterion. Although it met its goal for 30

percent of youth to have at least one paid experience after reaching age 16,[26] the general absence of impacts on employment might mean that the program set this target too low; more than 30 percent of control group youth were employed during each year, starting with the third year after RA when youth were ages 17 to 20.

Figure IV.3. ASPIRE employment rates, by calendar year after RA



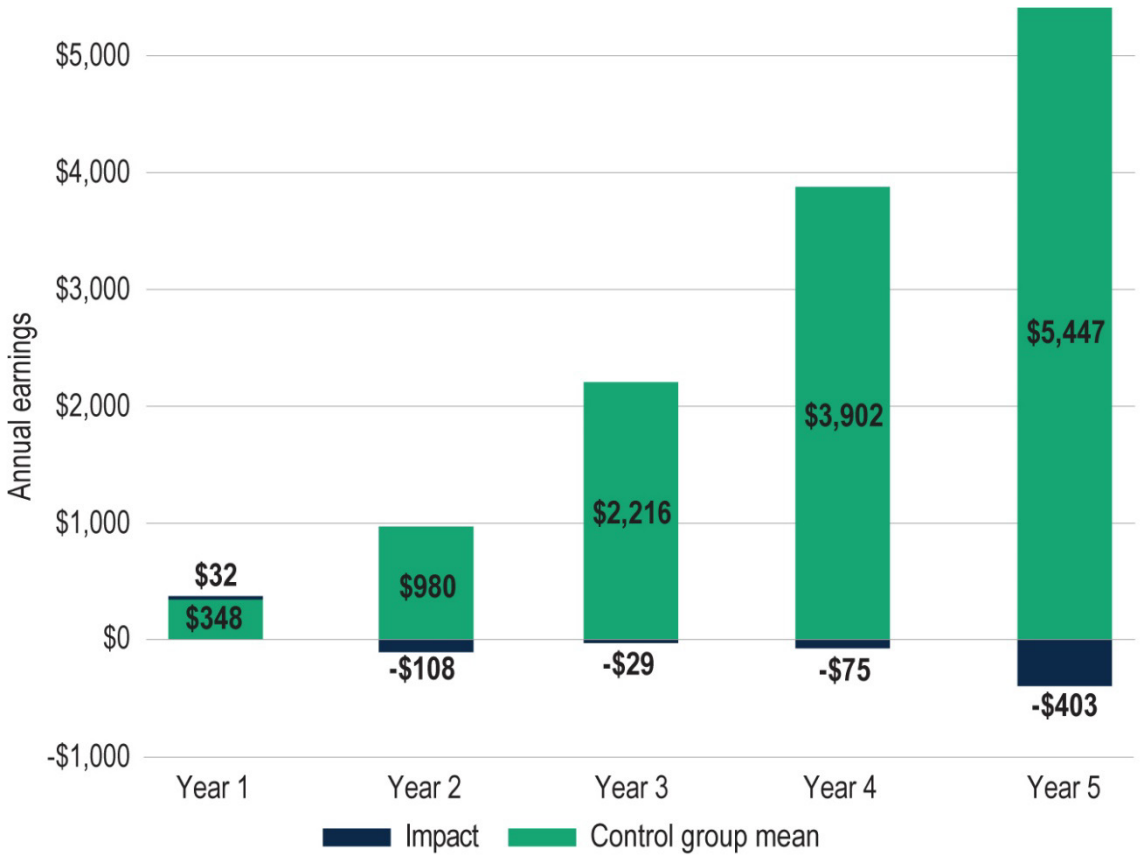
Source: SSA data.

Note: See Appendix Table D.9 for more details. Due to rounding, the sum of control group mean and impact may not equal the treatment group mean.

*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.
p.p. = percentage point; RA = random assignment.

[26] The 30 percent goal was based on the national employment rate of youth ages 16 to 19 *without* disabilities at the time (Anderson et al. 2018).

Figure IV.4. ASPIRE youth earnings in each calendar year after RA



Source: SSA data.

Note: See Appendix Table D.9 for more details. Earnings are measured in 2020 dollars.

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

RA = random assignment.

ASPIRE had large impacts on VR application and service use. It increased the rate of VR application by 15 percentage points (a 62 percent relative increase) and VR service use by 14 percentage points (a 73 percent relative increase). These findings reflect that VR was a primary avenue through which ASPIRE case managers sought to connect youth with career exploration and work-based learning experiences.

In additional analyses, we found that ASPIRE had no impact on youth's weekly earnings, hours worked, or labor force participation. Similar shares of treatment and control group youth were also employed in a paid job offering fringe benefits and received supports or services to get or keep a job.

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

ASPIRE had no impact on youth's self-determination, as measured by a self-determination composite scale, or on their expectations about being financially independent at age 25 (Figure IV.2 and Appendix Table D.10). Youth in the control group had an average score of 80 on a scale of 0 to 100, which did not differ from the treatment group average. The program also had no impact on any of the subcomponents of self-determination, including autonomy, psychological empowerment, self-realization, and agentic action.

The five-year impact findings align with the findings from the 18-month evaluation and ASPIRE's own formative evaluation using an alternative scale (Ipsen et al. 2019a).[27] Both studies found no impacts on youth's self-determination. By the third year of the program, less than half of youth had participated in self-determination training (Anderson et al. 2018). Low take-up might partly explain the absence of impacts on youth self-determination.

The five-year survey asked youth and their parents about their expectations for the future regarding the youth's educational attainment and independence at age 25. The primary outcome was whether the youth expected to be financially independent at age 25. About 56 percent of control group youth had this expectation and this did not differ for the treatment group. Subgroup analyses indicate that impacts on youth expectations about financial independence differed by disability type. Among youth whose impairments were other than intellectual, developmental, or mental, ASPIRE reduced by 13 percentage points the share who believed they would be financially independent at age 25 (a 19 percent relative decrease); the program did not affect the financial independence expectations of other youth (Appendix Table D.23). In other analyses, we found no impacts on other youth expectations, such as the expectations to receive postsecondary education, live independently at age 25, and be employed at age 25.

The program's impacts on parents' expectations were similar to those of the youth. ASPIRE had no impact on whether parents expected youth to get a postsecondary education, live independently, be employed, or be financially independent at age 25. However, the program increased by 3 percentage points the share of parents who believed it was important that youth be employed eventually (a 4 percent relative increase). The program's focus on connecting youth with employment-promoting services might have contributed to this impact.

4. ASPIRE had no impact on youth's SSA payments but increased awareness of work supports

ASPIRE had no impact on the share of youth who received SSA payments in the fifth year after RA, SSA payment amounts during that year, or SSA payments during the five years after RA (Figure IV.2 and Appendix Table D.11). About two-thirds of control group members received SSA payments in the fifth year after RA; the average annual payment across all control group members was $5,313. Over the five years after RA, SSA payments to the control group totaled $31,502 per youth on average. The program had no impacts on the share of youth receiving SSA payments or the amount received.

ASPIRE increased youth's knowledge of SSA and other work supports, though levels of awareness remained low even among treatment group youth. About 8 percent of control group youth were aware of the SSI student earned income exclusion, and 7 percent were aware of PASS plans; the program increased these shares by 5 and 6 percentage points, respectively (Appendix Table D.11). It also increased knowledge of ABLE accounts by 45 percentage points, representing a more than fivefold increase. This large impact was likely driven by a financial incentive ASPIRE introduced during the later years of the program to increase engagement with program services—namely, a $2,500 cash deposit into an ABLE account if the enrollee attended six or more hours of financial education, received a written benefits summary and analysis plan, and activated an ABLE account. This incentive increased participation in the

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

program's trainings over time (Ipsen et al. 2019b) and likely contributed to the large impact on youth's awareness of ABLE accounts.

Although ASPIRE increased youth's awareness of two key SSI program work supports, it had no impact on youth's knowledge of the other SSA program features queried by the five-year survey. It also had no impact on youth's age-18 redetermination status as of five years after RA.

5. ASPIRE had no impact on youth's health insurance coverage or Medicaid and Medicare expenditures

ASPIRE had no impact on the share of youth with health insurance at the time of the five-year survey. Most (89 percent) control group youth had health insurance, and most of them had public health insurance (Appendix Table D.12). The program did not change youth's coverage rates or type. Youth in the control group had average monthly Medicaid and Medicare expenditures of $1,760, and the program did not impact this amount. The program increased Medicaid participation in the first year after RA, likely because case management and benefits counseling made families aware of their Medicaid eligibility and supported them in accessing these benefits. However, during the second through fifth years after RA, there were few significant differences between the treatment and control groups in their Medicaid and Medicare enrollment or average monthly expenditures.

6. ASPIRE had no impact on youth's overall economic and social well-being

ASPIRE had no impacts on the two primary measures of youth's economic well-being: income received during the year before the five-year survey and income during the five calendar years after RA (Figure IV.2 and Appendix Table D.13). We measured income as the sum of earnings from paid jobs and SSA payments. On average, control group youth received $10,570 from earnings and SSA payments during the year before the five-year survey, and $45,513 in income over the five calendar years after RA. The treatment group had a similar income in both time periods. We found evidence that the program's impact on youth income differed by age; it reduced income during the five years after RA for youth who were age 16 at RA and had no impact for youth who were age 14 or 15 at RA.

We also measured the youth's annual income from SSA payments and earnings during each calendar year after RA; the control group's income grew between the first and fifth years after RA, from $7,954 to $11,124. The treatment group showed a similar growth in earnings, and its average annual income in each year was not statistically different from that of the control group. These findings are consistent with the impacts we estimated separately for earnings and SSA payments.

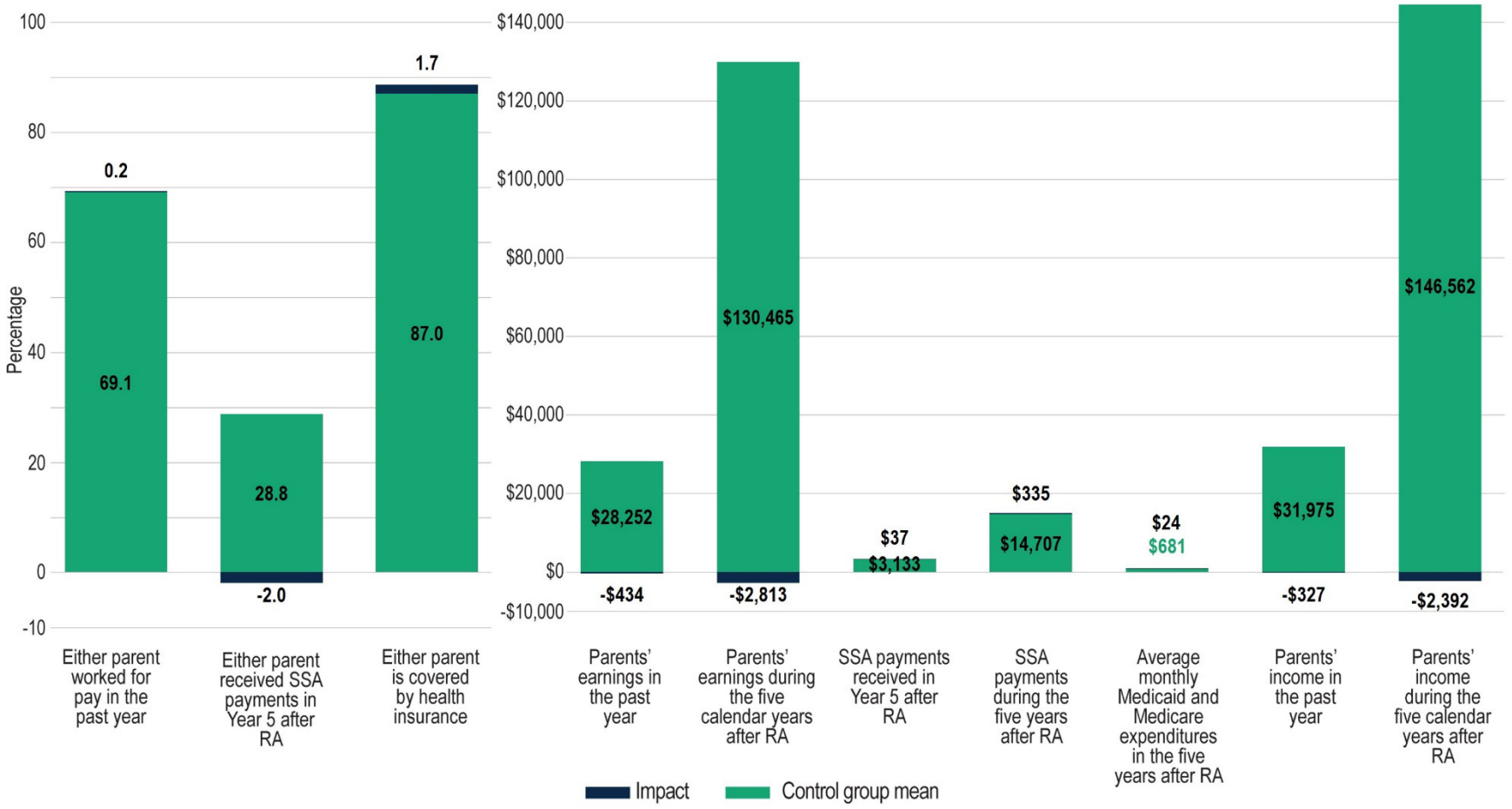
ASPIRE increased the receipt of certain public supports. It increased TANF and SNAP benefits received by the household in the past month by $8 (a 267 percent relative increase) and $19 (an 18 percent relative increase), respectively. The program had no impact on the amount of housing assistance received, nor did it affect overall household income.

Similar shares of youth in the control and treatment groups were living independently, married or in a marriage-like relationship, and responsible for at least one child. ASPIRE also did not affect youth's self-reported health status or their involvement with the criminal justice system.

D. Five-year impacts on parents

This section documents the evidence on whether the services ASPIRE provided led to impacts on parents' outcomes in several domains five years after enrollment in the program. ASPIRE had no impacts on parents' employment, earnings, SSA payments, income, health insurance coverage, or Medicaid and Medicare expenditures (Figure IV.5). Overall, we found little evidence that the program's impacts on parent outcomes differed based on youth and parent characteristics at the time of enrollment; we describe the exceptions to this pattern when discussing the findings below.

Figure IV.5. ASPIRE impacts on parent primary outcomes in the five years after RA



Source: Parent five-year survey; SSA data.

Note: All outcomes are measured at the time of the five-year parent survey, unless otherwise specified. Monetary values are in 2020 dollars. See Appendix Tables D.8–D.17 for more details.

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

RA = random assignment; SSA = Social Security Administration.

1. ASPIRE had no impacts on parents' employment and earnings

We found no evidence that ASPIRE affected parents' employment and earnings in the year before the five-year survey or earnings during the five calendar years after RA (Figure IV.5 and Appendix Table D.14). In 69 percent of control group families, at least one parent worked for pay in the year before the five-year survey. On average, control group parents earned $28,252 in the year before the five-year survey and $130,465 in the five calendar years after RA. The program did not affect the share of parents working for pay or earnings in the year before the five-year survey. Treatment and control group parents' employment rates in each of the five calendar years after RA also did not change much over time.

The programs' impacts on parents' earnings during the five calendar years after RA differed by youth impairment and by region. The program reduced earnings among parents of youth with other mental impairments by about 13 percent but had no impacts among other parents' earnings (Appendix Table D.23). It had no impact on parents' earnings during the five calendar years after RA in Colorado and Arizona but reduced them for parents in other states (Appendix Table D.26). We found no evidence of impacts on other employment-related outcomes, including labor force participation, employment at the time of the five-year survey, weeks worked, or usual hours worked.

2. ASPIRE had no impact on parents' SSA payments

We found no evidence that ASPIRE affected any of the primary outcomes related to SSA payments (Figure IV.5 and Appendix Table D.15). Almost 30 percent of families had at least one parent who received SSA payments in the fifth year after RA. On average, control group parents received $3,133 in SSA payments in the fifth year after RA and a total of about $14,707 in the five calendar years after RA. The program had no impact on these outcomes.

3. ASPIRE had no impact on parents' health insurance coverage or Medicaid and Medicare expenditures

ASPIRE had no impact on the likelihood that at least one parent was covered by health insurance at the time of the five-year survey (Figure IV.5 and Appendix Table D.16). In most control group families (87 percent), at least one parent was covered by health insurance; the program did not affect this outcome. The program had no impact on parents' average monthly Medicaid and Medicare expenditures during the five years after RA. Among control group families, the average monthly Medicaid and Medicare expenditures for parents during the five years after RA was $681, and the program did not change this amount.

In supplementary analyses we found that the program had no impact on the share of families where at least one parent had private health insurance at the time of the survey. Among both the treatment and control groups, 31 percent of families had at least one parent with private health insurance at the time of the survey. The share of families where at least one parent participated in either Medicaid or Medicare ranged from 78 percent in the first year after RA to 70 percent in the fifth year after RA for both groups.

4. ASPIRE had no impact on parents' income in the past year or during the five years after RA

We assessed impacts on the sum of their income from earnings and SSA payments in the year before the five-year survey and across all five years after RA. In the control group, the average parental income in the year before the five-year survey was $31,975 and the average income across the five years after RA

was $146,562; the program did not affect either measure of income (Figure IV.5 and Appendix Table D.17). We also measured the parents' annual income from earnings and SSA payments during each calendar year after RA. The control group's income grew between the first and fifth year after RA from $26,219 to $31,578. The treatment group experienced a similar growth in income; the annual amounts did not differ significantly from that of the control group in any year

Similar to the pattern found for earnings, the programs' impacts on parents' earnings during the five calendar years after RA differed by youth impairment. ASPIRE reduced income during the five calendar years after RA among parents of youth with other mental impairments by $15,931 but had no impact among other parents. It had no impact on income for parents in Colorado and Arizona but reduced income by $14,186 among other parents.

E. Benefits and costs

In conducting the ASPIRE benefit-cost analysis, we focused on estimating the net benefits (or costs) for each key stakeholder group, as well as across all stakeholders during the five years after RA. The net benefit (cost) is based on (1) the estimated impacts of ASPIRE on all youth and families who were offered the opportunity to participate in the program, regardless of their statistical significance; and (2) the calculated cost of delivering ASPIRE per treatment group enrollee.

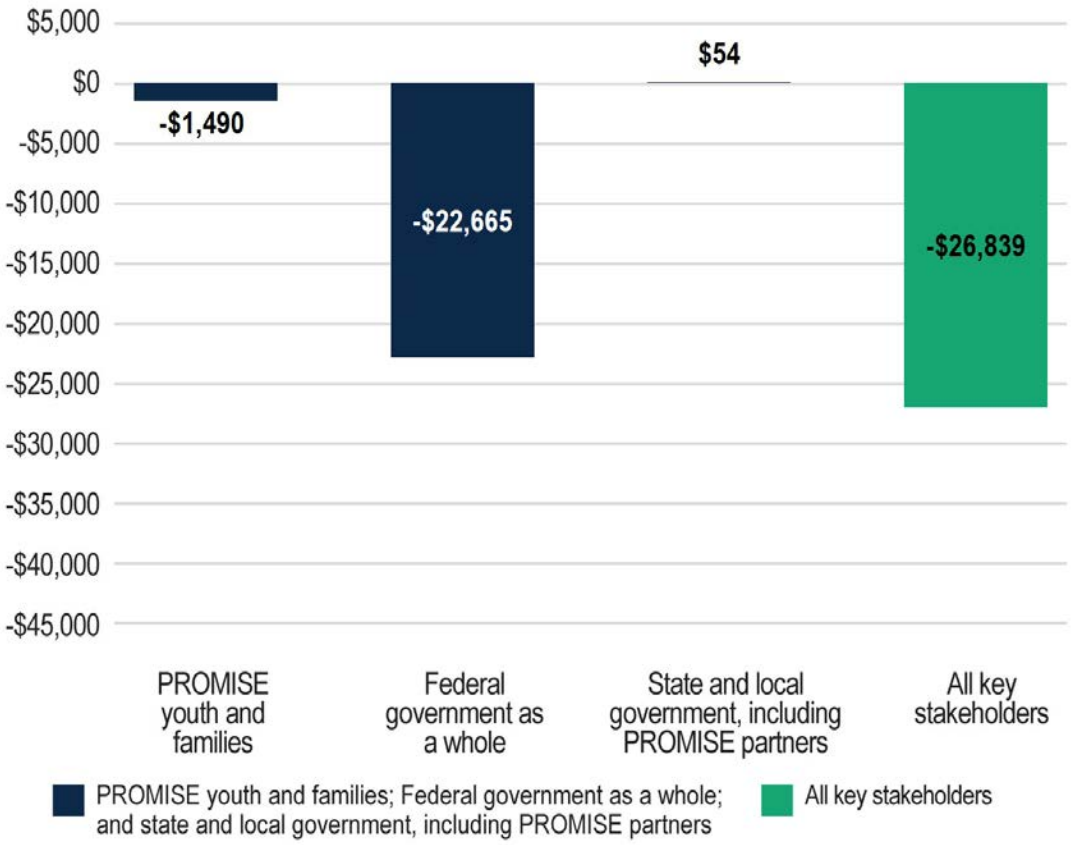
1. ASPIRE's costs outweighed its benefits for all key stakeholders, including youth and their families

Across key stakeholders, ASPIRE resulted in a net cost of $26,839 per treatment group family over the five years after RA (Figure IV.6). The primary driver of this finding was the cost of delivering the program ($22,749 per treatment group family), followed by the program's net negative impact on earnings, primarily through the large negative impacts on parent earnings.

Here we summarize the high-level benefit-cost findings for each stakeholder group. Detailed estimates are shown in Appendix Table D.27.

- **Youth and their families.** On average, ASPIRE's costs outweighed its benefits for youth and families. Families experienced an average of $1,490 in net costs during the five-year follow-up period. On average, treatment group youth experienced a $591 decrease in earnings, and parents experienced a much larger decrease in earnings of $2,952. Both youth and parents paid fewer taxes as a result. Although treatment group youth and families received more public supports ($1,024 more) and more SSA payments ($541 more), these benefits were dwarfed by the loss in earnings.
- **The federal government.** ASPIRE produced a large net cost to the federal government, which assumed most of the costs associated with program delivery ($22,665 per family). Federal government costs included the costs of the funding that ED provided to the states for program delivery, increased SSA benefit and administrative costs, increased public support payments and administrative costs, and foregone taxes due to the treatment groups' reduction in earnings. In total, the federal government experienced a net cost of $25,403 per family over the five-year period.
- **State and local ASPIRE partners.** The program produced a net cost of $54 per family to state and local ASPIRE partners, stemming from fewer taxes received.

Figure IV.6. ASPIRE benefits and costs to key stakeholders over the five years after RA



Source: Youth five-year survey; SSA data; external data.

Note: Monetary values are in 2020 dollars. See Appendix Table D.27 for more details.

RA = random assignment.

2. The impacts on earnings would need to be sizeable for ASPIRE to be cost neutral across all key stakeholders after 20 years

We considered the program's benefits and costs beyond the five-year evaluation period. First, we calculated the average youth earnings impact needed for the program to be cost neutral across all key stakeholders. For ASPIRE's benefits to equal costs by 20 years after RA, it would need to generate an average annual impact on youth earnings of $2,042 per year (Appendix Figure D.1). This seems implausible because the point estimate of the program's impact on youth earnings for the fifth year after RA was -$403; because ASPIRE reduced youth's educational attainment, this reduction in earnings would likely increase over time. Second, because the five-year evaluation period might underestimate growth in youth earnings if a large share of them were building their human capital, we considered how net benefits would likely accrue 20 years after RA. However, because ASPIRE reduced the likelihood that youth completed high school, the net benefits of ASPIRE do not improve under forecasting scenarios that assume a positive return to education. Under a scenario that assumes a 10 percent return per year of education persists over time, the net benefits across all key stakeholders would be -$40,721 over 20 years (Appendix Table D.30). Under a high future earnings scenario wherein we forecasted earnings using the

upper bound of the 95 percent confidence interval of the estimated impact on earnings (in place of the Year 5 earnings impact estimate), the net benefit across all key stakeholders over 20 years would be -$26,913

F. Summary and discussion

1. Summary of key findings

Table IV.1 summarizes ASPIRE's impacts on the primary youth and parent outcomes. Overall, ASPIRE did not improve any of the primary youth or family outcomes; in contrast, it reduced youth education and parents' total earnings and income. Over five years, it generated a net cost across all key stakeholders of $26,839 per treatment group family; even PROMISE youth and families experienced a net cost of $1,490.

Table IV.1. ASPIRE: Summary of five-year impacts on primary outcomes, by domain

Domain	Primary outcome	Impact summary
Youth		
Education and training	Enrolled in an educational or training program	0
	Has a GED, high school diploma, or certificate of completion	-
Employment and earnings	Employed in a paid job in the past year	0
	Total earnings in the past year	0
	Earnings during the five calendar years after RA	0
Self-determination and expectations	Self-determination score	0
	Youth expects to be financially independent at age 25	0
Health insurance	Covered by any health insurance	0
	Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA	0
SSA payments and knowledge of work supports	Received SSA payments in Year 5 after RA	0
	SSA payments in Year 5 after RA	0
	SSA payments during Years 1–5 after RA	0
Economic and social well-being	Income from earnings and SSA payments in the past year	0
	Income during the five calendar years after RA	0
Parents		
Parents' employment and earnings	Either parent worked for pay in the past year	0
	Parents' earnings in the past year	0
	Parents' earnings during the five calendar years after RA	0
Parents' SSA payments	Either parent received SSA payments in Year 5 after RA	0
	SSA payments received in Year 5 after RA	0
	SSA payments during the five years after RA	0
Parents' economic well-being	Parents' income from earnings and SSA payments in the past year	0
	Parents' income during the five calendar years after RA	0
Parents' health insurance	Either parent is covered by health insurance	0
	Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA	0

Note: All outcomes are measured at the time of the five-year youth survey unless otherwise specified. See Appendix Tables D.8–D.17 for more details.

Table IV.1 (*continued*)

+/++/+++ 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.

GED = General Educational Development; RA = random assignment; SSA = Social Security Administration.

2. Discussion

ASPIRE's general lack of impacts on key outcomes might reflect low take-up of some of its core interventions—in particular, case management, youth self-determination training, and parent training and information. Youth with higher rates of face-to-face contacts with case managers participated in career exploration activities and had higher rates of employment (Ipsen et al. 2019b; McCormick et al. 2021). However, through the third year of program operations, only a small minority of families had met the program's target for the core interventions (Anderson et al. 2018). Program staff experienced challenges in delivering case management services because many treatment group families lived in remote areas and faced transportation challenges that limited their participation (Anderson et al. 2018). A study that surveyed case managers across the six consortium states found that family crises—including those related to finances, transportation, behavioral issues, legal problems, and family conflict—reduced the engagement of youth and families in program services (Hall et al. 2020). In response to these challenges, ASPIRE leadership began allowing families to view recorded or live trainings online that met the program's requirements and case managers to deliver some of the interventions directly to family members under certain circumstances (Anderson et al. 2018).

In addition, as in the case of Arkansas PROMISE, external policy changes, including those due to WIOA, might have affected control group outcomes. The extent to which ASPIRE treatment and control group youth differentially benefited from WIOA depended on how quickly states adopted programming, whether state VR agency staff promoted those services, and whether services were implemented in schools and thus made easily accessible to youth. By October 2017, the consortium states varied in how much information they were providing to youth and parents about new or enhanced services, and how far they had progressed in planning and implementing those services. For those states further along in implementing new or enhanced services, the contrast between the experiences of treatment and control group youth may have been muted (Anderson et al. 2018). However, we did not find significant differences across states in impacts on key youth outcomes.[28]

The COVID-19 pandemic likely reduced youth employment, but we do not know whether it influenced ASPIRE's impacts by affecting the treatment and control groups differently. Almost all ASPIRE enrollees (93 percent) enrolled in 2015 or 2016, so the fifth calendar year after RA coincided with the COVID-19 pandemic. Across the ASPIRE states, youth annual unemployment ranged from 8 to 15 percent in 2020, up from 4 to 9 percent in 2019 (Inanc et al. 2022). Among control group youth, employment rates increased in each of the first four calendar years after RA but remained flat in the fifth year; the economic disruptions caused by the pandemic might have arrested the pattern of increasing employment. As in the first four calendar years after RA, the two groups had virtually identical employment rates in the fifth calendar year after RA.

Apart from improving preparedness to help with family crises, other potential ways to improve engagement among youth are to provide an external motivator, such as financial incentives, for

[28] Appendix Table D.26 presents impact estimates by state.

engagement in services, and educate youth and families about the value of PROMISE services. ASPIRE introduced two incentives during the program: the first was the chance to win $25 gift card every month for each program training attended; the second was a $2,500 cash deposit into an ABLE account if an enrollee attended more than six hours of financial literacy training, obtained a written benefits summary and analysis plan, and opened an ABLE account. The $25 gift card lottery increased engagement in services by a small amount but introducing the ABLE deposit incentive was associated with a large increase in financial education participation (Ipsen at al. 2019b). The ABLE account incentive was introduced relatively late in the service delivery period (the third quarter of 2018). The generally low engagement in program services and the effectiveness of this type of financial of incentive suggests that introducing it earlier in the service period might have increased service take-up.

In addition, educating youth and families on the value of PROMISE services might encourage more youth to engage in core interventions. Program staff reported that some families did not engage in services because they did not understand or were skeptical about how services would benefit them (Anderson et al. 2018). Treatment group youth were more likely to report having received services they perceived as somewhat or very useful. In the control group, 59 percent of youth received services they considered somewhat or very useful; the program increased this share by 22 percentage points. To the extent that youth's perceptions of services affect their engagement, future programs could educate youth enrollees about the kinds of services offered and how those services could provide value to them.

Because ASPIRE reduced parent's earnings and had no impact on youth earnings, the net benefit over five years was negative for the people the program was intended to directly help--youth and their families. Moreover, because ASPIRE did not increase most measures of educational attainment for youth, forecasts suggest that the program would result in a net cost of more than $40,000 across all key stakeholders over 20 years. However, the program increased the share of youth with training credentials, use of VR services, and knowledge of SSA work supports. We did not fully capture such human capital investment and increased knowledge in the forecasting analysis. It is possible that they could improve earnings and employment in the future.

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V. CaPROMISE

Summary of five-year impacts and net benefits of CaPROMISE

- CaPROMISE increased youth's income (from earnings and SSA payments) in the year before the five-year survey and during the five calendar years after RA.
- The program had no impact on youth's enrollment in education or training; receipt of a high school completion credential; employment, self-determination; expectations of financial independence at age 25; SSA payments; health insurance coverage; or Medicaid and Medicare expenditures. However, it increased enrollment in education and training, expectations of financial independence, and SSA payments received among older youth (age 16 at RA). It also increased youth's employment rates, earnings, and expectations of financial independence among families in which a parent was receiving SSA payments at RA.
- CaPROMISE had no impact on parents' employment, earnings, SSA payments, income, health insurance coverage, or Medicaid and Medicare expenditures .
- Across all key stakeholders, CaPROMISE resulted in a net cost of $27,140 per treatment group family over five years. For treatment group youth and families, it delivered an average net benefit of $4,183 over five years.

A. Program overview and a review of prior findings

To provide a context for the five-year impacts of CaPROMISE we present in subsequent sections, we first summarize key features of the program, the findings from the process study of the first three years of program operations (Matulewicz et al. 2018a), and the findings of the 18-month impact study (Mamun et al. 2019a).

1. Program overview

CaPROMISE was designed to provide intensive case management and offer (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. In addition to providing services directly to the youth and families enrolled in the evaluation, CaPROMISE intended to improve the service environment for all transition-age youth with disabilities by strengthening relationships among organizations that served these youth at the state and local levels.

The California Department of Rehabilitation (CDOR) was the lead agency for CaPROMISE. CDOR contracted with 18 local sites in four regions of the state to implement CaPROMISE: Northern California, Greater Los Angeles, Greater Inland Empire, and Southern Coastal. All but one of the sites were LEAs; the remaining site was run by a nonprofit organization for a consortium of three adjacent LEAs. CDOR also contracted with four centers for independent living to provide youth with training on independent living skills; 10 qualified rehabilitation professionals to provide youth with employment services; and the San Diego State University Interwork Institute to provide (1) subcontracts with and oversight of 16 family resource centers, (2) technical assistance and training to all program staff, (3) the program's MIS design and maintenance, and (4) a formative evaluation of the program.

The local sites recruited youth and their families to enroll in CaPROMISE, randomly assigned them to treatment and control groups, and provided program services to treatment group youth and families. The sites employed career service coordinators (CSCs), most of whom worked exclusively with the program, to provide case management services to treatment group youth and families and serve as the program's primary points of contact with participants. Case management entailed developing person-driven plans that identified participants' education, employment, and independent living goals; developing individualized career action plans with steps to achieve them; and coordinating resource and service use. 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. CaPROMISE's design specified CSC caseloads of 26 families each. Actual caseloads averaged 28 families, but fluctuated; at times, some CSCs had caseloads of more than 50 families.

Although CSCs delivered most of these services, they 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. Because LEAs served as local sites, addressing youth's educational needs was also a key focus of the program. CSCs were LEA staff, and the LEAs provided in-kind resources, such as access to district records (which helped CSCs locate youth), access to school buildings (where CSCs could meet with youth and families), and vehicles (for transportation support). As LEA staff, CSCs had access to the school records of treatment group youth and could collaborate with teachers and transition staff, attend individualized education program (IEP) meetings, and meet with participants in their schools. CSCs also collaborated with other school staff as colleagues to help participants pursue their education and transition goals. Although the CSCs' location in schools could have given them access to control group youth, CaPROMISE insulated CSCs from the control group by training them in research ethics, preventing them from accessing the control group's enrollment forms or entering information into the control group's MIS records, and directing the control group to contact the local site managers (as opposed to the CSCs) if they had questions.

2. Summary of process analysis findings

An in-depth process study of CaPROMISE during the first three years of program operations documented its structure and service model and described its implementation during the period from August 2014 through August 2017 (Matulewicz et al. 2018a). Here we summarize the key findings from that analysis.

The findings of the process analysis suggest that during the first three years of program operations, conditions were mostly favorable for observing positive impacts of the program on youth and families. Evidence in three areas implied a marked difference in the service experiences of treatment and control group youth.

High rate of treatment group participation and contact. During its first three years, CaPROMISE engaged 93 percent all of treatment group youth as participants, defined as meeting with a CSC and developing a person-driven plan; 98 percent of these participants developed a career action plan. On average, CSCs met the goal of making contact at least every two weeks in 85 percent of the months. Because the program's MIS did not distinguish contacts in which program staff discussed services with youth and families from those in which they delivered services, the process analysis was unable to measure service use separately from CSC contacts and referrals. However, CSCs had communicated about or delivered most key program services to most participating treatment group youth within the first three years of the program. CSCs documented program contact rates for 99 percent of participants for

career exploration and work-based learning; 84 percent for benefits counseling or financial education; and 92, 88, and 82 percent for youth development, independent living, and self-determination skill development, respectively. During this same period, 68 percent of youth had records of paid or unpaid jobs. The program also had high rates of contact with parents of treatment group youth. Nine out of 10 parents received information about parent training; 7 out of 10 received contacts for general referral services, coaching, and family resource center referrals. Some CSCs also sought to address families' immediate needs, such as inadequate housing and food insecurity.

Program structures minimized risk of control group contamination. CaPROMISE recruitment, enrollment, and service delivery were structured to minimize the risk that control group youth and families would inadvertently receive services from the program.

Absence of similar services in the community outside of CaPROMISE. Control group youth had access to transition services, but CaPROMISE services were distinctive, in that few other programs operating in the state at the start of this program served youth as young as those enrolled in CaPROMISE or focused on the family unit as a whole. Although state-funded family resource centers offered parents of all transition-age youth training and information, parents were less likely to access it absent the referrals service coordinators like the CSCs provided. Opportunities for control group youth to receive some services similar to those of CaPROMISE grew over time during program implementation. In 2016, WIOA prompted CDOR to offer pre-employment transition services to youth in high school. Although these services and transition services that other programs offered were available to youth with disabilities, they did not provide the case management and individualized support the program offered; service take-up among the control group may have been low without facilitation through intensive case management and individualized support.

3. Summary of 18-month impact analysis findings

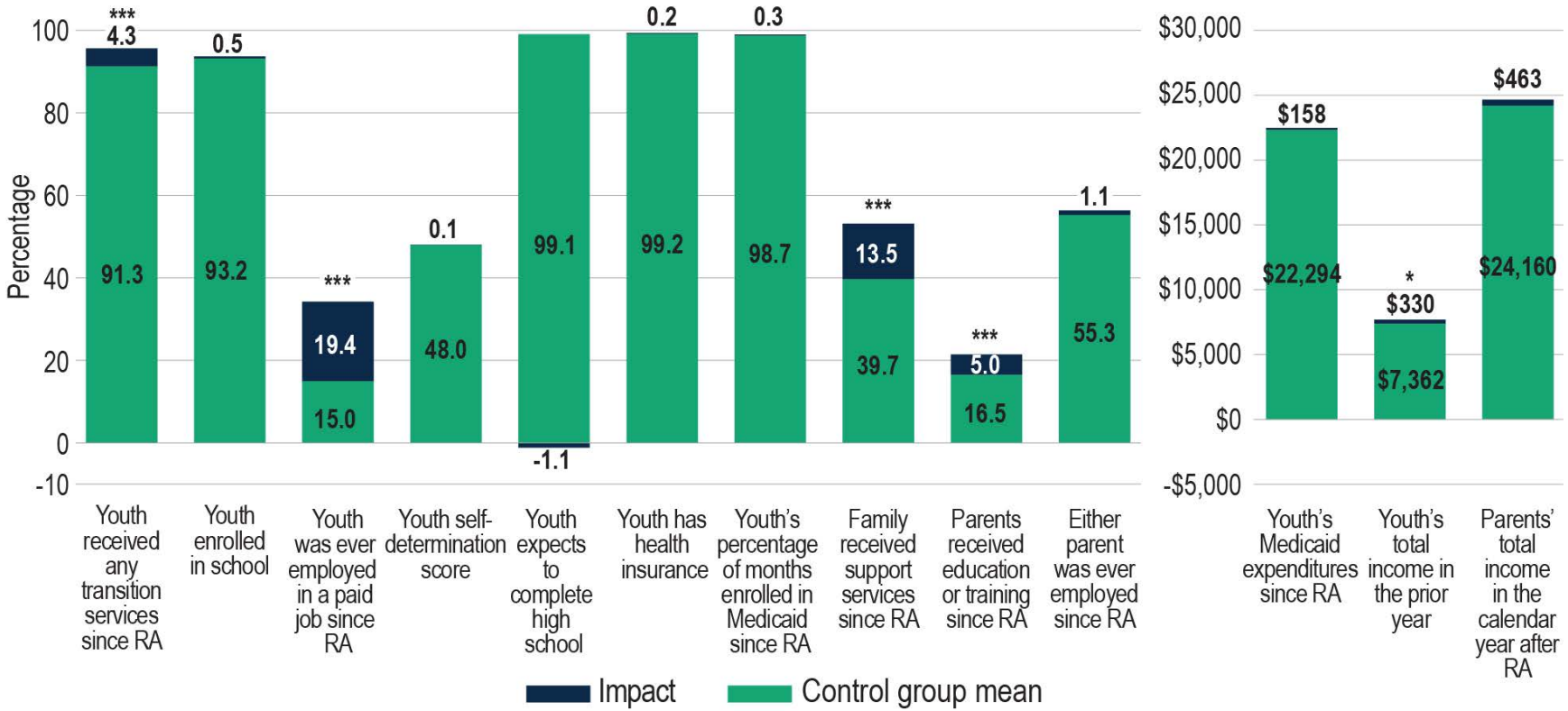
During the first 18 months after RA, CaPROMISE had positive impacts on several youth outcomes related to service use and employment (Figure V.1). Although youth had access to transition services in the community, the program increased the share of youth who used at least some transition services, as well as the share who used specific transition services, such as employment-promoting services (career planning, job skills training, help with a job search, and on-the-job supports), benefits counseling, help with financial education, training in life skills, and training in self-advocacy or self-determination.

CaPROMISE also increased youth's likelihood of paid employment, annual earnings, and income from earnings and SSA payments. For example, 15 percent of youth in the control group reported having a paid job in the 18 months following RA; the program more than doubled this percentage, increasing it by 18 percentage points. As another example, the program increased the youth's earnings from all jobs during the year before the 18-month survey by $343, a 77 percent increase over the control group average of $448. Control group youth's annual income (from earnings and SSA payments) during that period was an average of $7,362; the program increased this amount by $330.

The program had no impact on youth's self-determination, expectations for the future, health insurance coverage, or Medicaid enrollment 18 months after RA. It had no impacts on school enrollment, despite LEAs serving as local sites and addressing youth's educational needs being a key focus of the program. The absence of impacts on enrollment in school and Medicaid was likely due to the high rates of these outcomes among youth (meaning there was little room for improvement). More than 90 percent of youth were enrolled in school and nearly all were enrolled in Medicaid.

CaPROMISE generated positive impacts on several family outcomes during the 18 months after RA, especially those related to service use (Figure V.1). The program increased parents' use of support services, as well as family members other than the youth receiving SSI. It also increased families' use of key services, including case management, benefits counseling, and financial education. Although the program had no impact on family members' use of education supports or employment-promoting services, it increased parents' enrollment in education and training, and earnings. It had no impact on parents' employment rate or income from earnings and SSA payments (Mamun et al. 2019a).

Figure V.1. CaPROMISE impacts on youth and parent primary outcomes in the 18 months after RA



Source: Mamun et al. 2019a.

Note: All outcomes are measured at the time of the 18-month surveys unless otherwise specified.

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

RA = random assignment.

B. Baseline characteristics of the five-year follow-up sample

The main analytic sample for the five-year impact analysis of CaPROMISE consisted of 1,605 treatment and control group youth who were randomly selected and completed the five-year follow-up survey (Appendix Table E.1). In this section, we describe the baseline characteristics of this sample and comment on any differences between the treatment and control group youth within the sample. Except for data on youth's and parents' race and ethnicity, which come from survey responses, all baseline characteristics are based on data from SSA administrative records.

Demographic characteristics. About one-third of the youth were female. At RA, 35 percent of the youth were age 14, 31 percent were 15, and 34 percent were 16. About 65 percent of youth reported English as their preferred written and spoken language. Just over 20 percent of youth lived in their own households or alone, without a parent, at the time they applied for SSI; of the remaining youth, most lived with a parent. The largest racial and ethnic group was Hispanic (54 percent), followed by non-Hispanic Black (15 percent), non-Hispanic other or mixed race (7 percent), and non-Hispanic White (5 percent). Notably, data on race and ethnicity were missing for 19 percent of the sample. The racial and ethnic composition of parents was similar to that of the youth, but with a larger share that was non-Hispanic White (8 percent) and a smaller share that was missing (16 percent).

Impairment. 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 disabilities (49 percent). The next largest group was other mental impairments (23 percent), followed by physical disabilities (19 percent); other or unknown disabilities (7 percent); and speech, hearing, or visual impairments (3 percent).

SSA program participation. Nearly all youth (94 percent) received SSI payments during the month of RA. On average, youth had qualified for SSI at age 7. A smaller share of youth (about 7 percent) received OASDI payments during the month of RA. Across all youth, average annual SSI payments during the year before the RA month were $7,383 and average SSA payments were $7,607. Just over one in eight youth lived in a household with multiple SSI-eligible children. About 30 percent had a parent receiving SSA payments at the time of RA.

Earnings. Few youth (3 percent) had any earnings in the calendar year before RA, which is not surprising, given their young ages. On average, youth had earned $44 in that period. Most (75 percent) had at least one parent with earnings in the calendar year before RA. Across all youth, parent earnings averaged $19,134 that year.

Differences between the treatment and control groups. On average, youth and parents in the treatment and control groups had similar characteristics—as expected, given the RA study design. We compared the two groups across 25 characteristics at the time of RA and found a few statistically significant, though small, differences related to SSA program participation and earnings. Compared with control group youth, treatment group youth were less likely to receive and had lower average payments from SSI but more likely to receive and have higher average payments from OASDI. Parents in the treatment group were less likely to have earnings than control group parents. We identified unbiased estimates of program impacts by comparing the treatment and control groups while accounting for these differences in baseline characteristics through regression adjustment.

C. Five-year impacts on youth

This section documents the evidence on whether the services CaPROMISE provided led to impacts on youth outcomes in several domains during the first five years after RA. They show that the program had no impact on youth's enrollment in education or training; receipt of a high school completion credential; self-determination; expectations of financial independence at age 25; SSA payments; health insurance coverage; or Medicaid and Medicare expenditures (Figure V.2). It increased youth's employment and earnings in some but not all years after RA, and increased youth's income from earnings and SSA payments in the year before the survey and during the five years after RA. We found some evidence that the program's impacts differed based on youth's age, with larger impacts among youth who were age 16 at RA. We found little evidence that its impacts on youth outcomes differed based on youth's sex, impairment, or parents' receipt of SSA benefits at the time of enrollment; we describe the exceptions to this pattern when discussing the findings below.

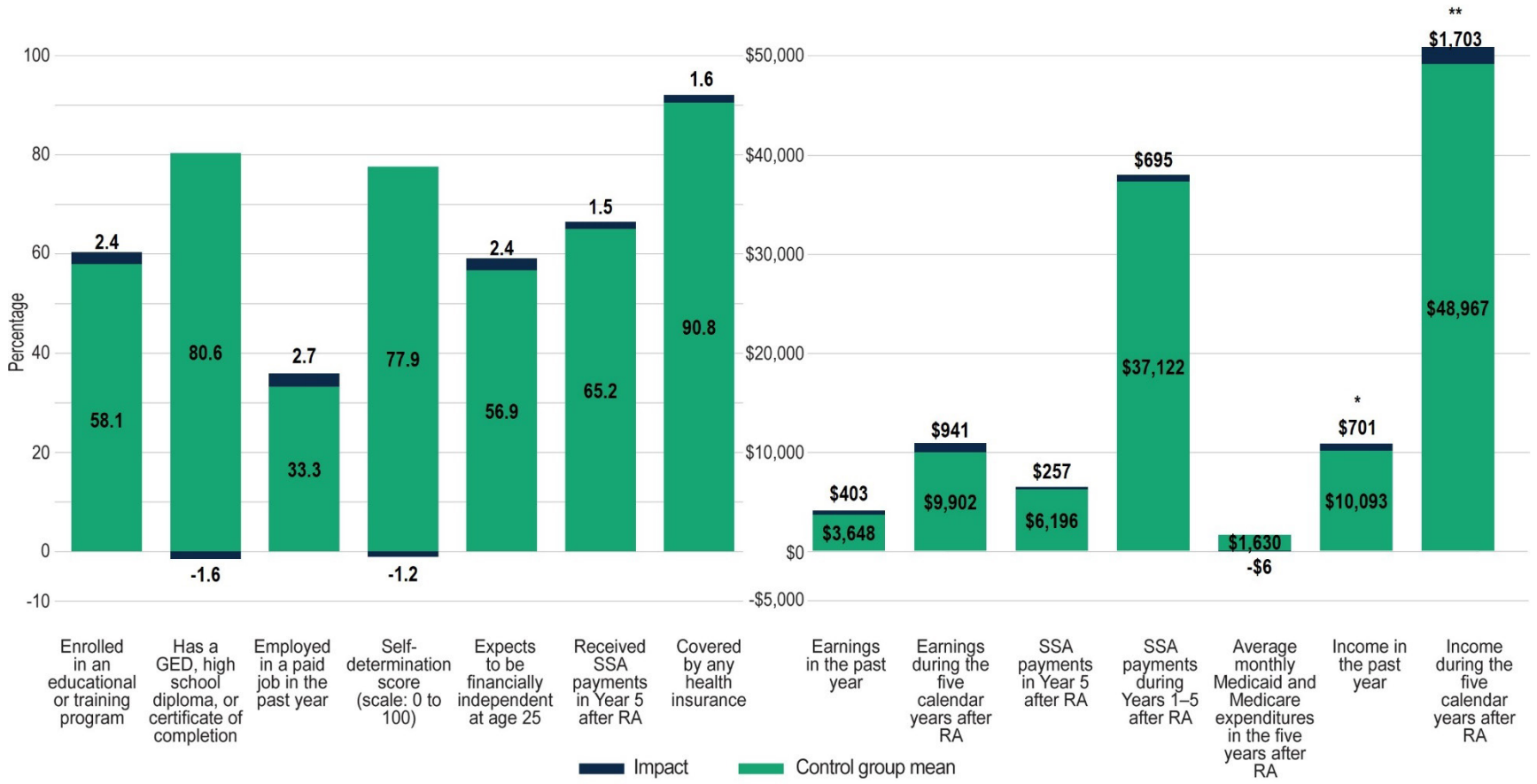
1. CaPROMISE had no impact on youth's enrollment in education and training programs or receipt of a high school completion credential

CaPROMISE had no impacts on the primary outcomes of youth's enrollment in an education or training program or receipt of a high school diploma or equivalent credential (Figure V.2 and Appendix Table E.8). At the time of the five-year survey, 58 percent of the youth were enrolled in an educational or training program; this share was similar for the treatment and control groups. The share of youth who had a GED, certificate of completion, or high school diploma grew considerably over time, which would be expected, given the ages of the participants. About 81 percent of youth in both the control and treatment groups had a GED, certificate of completion, or high school diploma at the time of the five-year survey, whereas only 11 percent had such a credential at the time of the 18-month survey. The program did not affect the share of youth who had received a high school completion credential five years after RA.

Given CaPROMISE's organizational structure, in which LEAs served as local sites, addressing youth's educational needs was a key focus of the program (Matulewicz et al. 2018a). However, the program did not affect youth's enrollment in an education or training program or their receipt of a high school diploma or equivalent credential by the five-year mark. This finding is consistent with earlier findings that the program did not affect youth's school enrollment, expectations of completing high school, or getting a GED at the time of the 18-month survey (Mamun et al. 2019a). The absence of impacts on youth's educational attainment might reflect the fact that education-related services were offered to all transition-age youth in California (for example, services provided by LEAs or the College to Career program offered at community colleges). High rates of education among the control group youth also meant there was little room for improvement.

CaPROMISE's impact on the share of youth enrolled in an educational or training program differed by age. Among youth who were age 16 at RA, the program increased this share by 10 percentage points (a 20 percent relative increase) but did not affect this share among youth ages 14 and 15 at RA (Appendix Table E.20). Although the program did not affect high school credential attainment of youth who were age 16 at RA (and age 21 at the five-year survey), because students receiving special education services can remain in high school until age 22, the large impact on the share enrolled in school could result in an impact on credential attainment over time.

Figure V.2. CaPROMISE impacts on youth primary outcomes in the five years after RA



Source: Youth five-year survey; SSA data.

Note: All outcomes are measured at the time of the five-year youth survey unless otherwise specified. Monetary values are in 2020 dollars. See Appendix Tables C.2.c–C.7.c for more details.

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

GED = General Educational Development; RA = random assignment; SSA = Social Security Administration.

In additional analyses, we found suggestive evidence that the program increased youth's use of supports for postsecondary education; about 31 percent of control group youth received this service and the point estimate of 4 percentage points is marginally not significant (*p*-value = 0.13). However, similar shares of youth in the treatment and control groups had specific levels of educational attainment; had a training credential; were enrolled in postsecondary education, training programs, and other types of school; had school suspensions; and received accommodations (Appendix Table E.8).

2. Although CaPROMISE's large early impacts on youth's employment disappeared over time, there is evidence that the program increased youth earnings during the five years after RA

CaPROMISE did not affect the primary employment outcome (employed in a paid job in the year before the five-year survey) (Figure V.2 and Appendix Table E.9). Just over one-third of the control group youth were employed in a paid job in the year before the five-year survey; this share was similar among the treatment group youth. Although the program increased the share of youth employed in each of the first four calendar years after RA, it did not impact employment in the fifth year after RA.

The program had initially large impacts on employment that declined over time (Figure V.3). During the first two calendar years after RA, it more than doubled the employment rates of treatment group youth and had significant impacts on youth employment rates in the first four calendar years after RA. Over time, the employment rates of control group youth caught up with those of the treatment group. The size of the impacts on employment declined in the third and fourth calendar years after RA and were nonexistent in the fifth year. For example, in the first calendar year after RA, 13 percent of control group youth were employed, and CaPROMISE raised this share by 20 percentage points (a relative increase of more than 150 percent). By the fifth calendar year after RA, 45 percent of the control group was employed, and the program did not increase this share significantly. This pattern of declining employment impacts over time suggests that the large, early impacts on employment were driven in part by the program's goal to ensure youth had paid work experiences while participating in the PROMISE programs and high rates of career exploration and work-based learning experiences during the first three years of the program, as documented in the process analysis. Over time, the control group youth closed most of the gap in employment rates—which was somewhat expected, given the youth's ages.

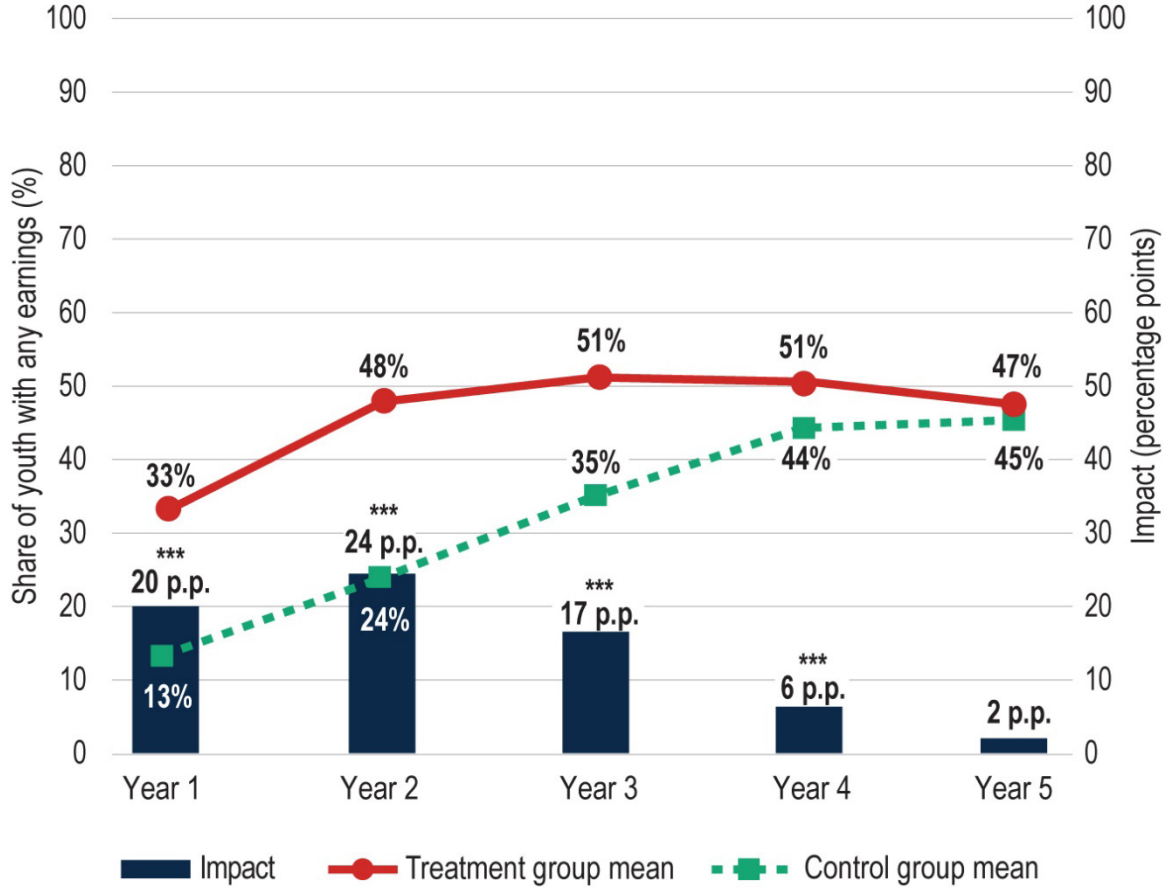
We found mixed evidence that CaPROMISE increased youth's long-term earnings. Youth in the control group earned an average of $3,648 in the year before the five-year survey; the program did not increase this amount. Over the five-year period after RA, youth in the control group earned an average of $9,902. We found evidence suggesting that the program's impact on this measure might have been large (a relative increase of 10 percent), but the point estimate of $941 is not statistically significant (*p*-value = 0.15). The program only increased earnings significantly in the first two calendar years after RA (Figure V.4). By the fifth year after RA, there was no statistically significant difference in earnings between youth in the treatment and control group.

As with the employment rates, youth in both the control and treatment group experienced earnings growth over the five calendar years following RA (Figure V.4). Control group youth earned an average of $167 in the first calendar year after RA and $4,306 in the fifth calendar year; the treatment group's earnings followed a similar pattern, although as noted previously, their earnings were significantly higher than those of the control group in the first two calendar years after RA.

The program's impacts on youth employment and earnings differed depending on youth's sex and whether a parent received SSA payments at the time of RA. It increased earnings during the five years

after RA among female youth by 37 percent but had no impact for male youth (Appendix Table E.21). Among youth with at least one parent receiving SSA payments at RA, CaPROMISE increased the share employed in a paid job in the past year by 12 percentage points (a 37 percent relative increase) and earnings in the past year by $2,184 (a 66 percent relative increase); among youth who had no parents receiving SSA payments at RA, the program had no impact on employment or earnings (Appendix Table E.22).

Figure V.3. Youth's employment rates, by calendar year after RA



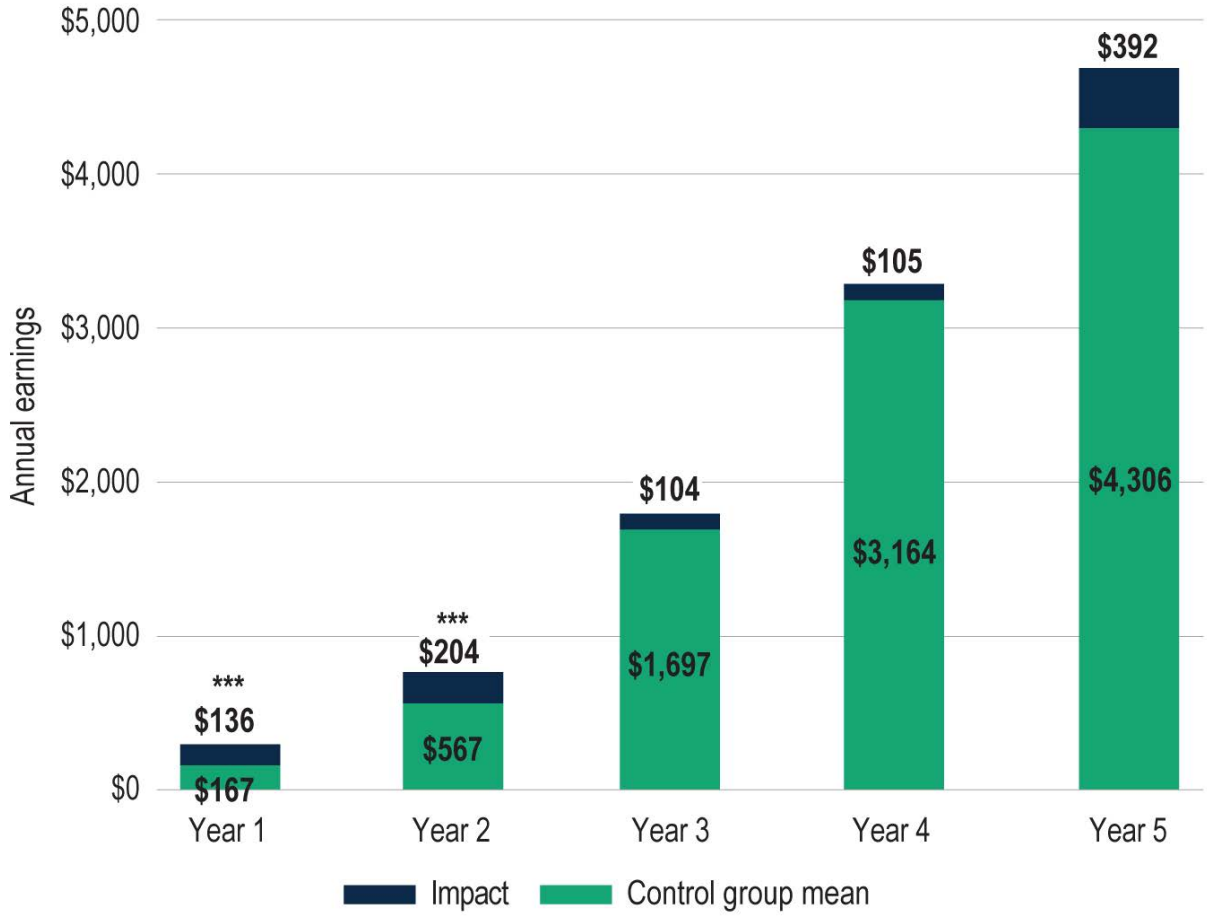
Source: SSA data.

Note: See Appendix Table E.9 for more details. Due to rounding, the sum of control group mean and impact may not equal the treatment group mean.

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

p.p. = percentage point; RA = random assignment.

Figure V.4. Youth's earnings in each calendar year after RA



Source: SSA data.

Note: See Appendix Table E.9 for more details. Earnings are measured in 2020 dollars.

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

RA = random assignment.

In additional analyses, we found that CaPROMISE had positive impacts on several other employment-related outcomes (Appendix Table E.9). The program increased VR application and service use during the five years after RA by more than fourfold. It also increased the likelihood that youth received supports or services in getting or keeping a job during the year before the five-year survey by 7 percentage points (a 44 percent relative increase). Although referral to VR was not a key component of CaPROMISE, as program operations continued, CSCs referred youth to the rehabilitation professionals that CDOR hired to provide employment services to CaPROMISE treatment group youth (Matulewicz et al. 2018a); these referrals may have led to the large impacts on VR applications and service use. CaPROMISE did not affect other supplementary employment outcomes, including employment in the past year or at the time of the five-year survey, labor force participation, employment setting, fringe benefits, hours worked, or earnings at the time of the five-year survey.

3. CaPROMISE had no impact on youth's self-determination or expectations of financial independence

CaPROMISE did not affect youth's self-determination or any subdomains of self-determination (Figure V.2 and Appendix Table E.10). On a scale from 0 to 100, where a higher number indicates greater self-determination, both the control and treatment groups had an average score of 78. The program also did not affect the share of youth who expected that they would be financially independent at age 25. About 57 percent of the control group expected they would be financially independent at age 25; this percentage did not differ among the treatment group. However, we found evidence that the program's impact on expectations of financial independence differed by age and parents' receipt of SSA payments. Among youth aged 16 at RA, CaPROMISE increased the share who expected to be financially independent by 13 percentage points (a 26 percent relative increase) but had no impact among youth ages 14 or 15 at RA (Appendix Table E.20). Among youth with a parent receiving SSA payments, the program increased the share by 18 percentage points (a 34 percent relative increase); it had no impact among youth whose parents were not receiving SSA payments at RA (Appendix Table E.22).

In additional analyses, we found that youth in the control and treatment groups had similar scores for subdomains of self-determination (autonomy, psychological empowerment, self-realization, and agentic action), youth and parent expectations for youth's postsecondary education enrollment, independent living, and employment at the age of 25 (Appendix Table E.10).

4. CaPROMISE had no impact on youth's SSA payments

CaPROMISE did not affect the likelihood of youth receiving SSA payments in the fifth year after RA or the amounts of SSA payments received in that year or during the five years after RA (Figure V.2 and Appendix Table C.6.c). During the fifth year after RA, about two-thirds of control group youth received SSA payments, representing a decline in youth's participation in SSA programs over time—97 percent of control group youth had received SSA payments during the first year after RA. The average SSA payments among control group youth was $6,196 in the fifth year after RA and $37,122 during the five years after RA; the program did not affect these outcomes.

CaPROMISE had a differential impact on youth's SSA payments by age and sex. Among youth aged 16 at RA, CaPROMISE increased the average payment over the five years by $1,988. The program had no impact on payments among youth younger than age 16 at RA (Appendix Table E.20). Among female youth, it increased the share who received SSA payments in the fifth year after RA by 7 percentage points but did not affect this outcome among male youth (Appendix Table E.21).

In additional analyses, we found that CaPROMISE increased youth's knowledge of one SSA policy. Just over 6 percent of control group youth were aware of the SSI Student Earned Income Exclusion; CaPROMISE increased this share by 3 percentage points, or 50 percent over the control group mean. The program had no impacts on youth's knowledge of ABLE accounts, the SSI earnings exclusion and PASS plans, or other SSA policies queried in the survey. It also did not affect youth's age-18 redetermination status as of five years after RA. Finally, in four out of the five years after RA, the program did not affect youth's likelihood of receiving SSA payments or the average payment. However, it increased the average SSA payment in the fourth year after RA by a small amount (4 percent) (Appendix Table E.11). This change appears to be driven by an increase in SSI payments rather than OASDI payments.

5. CaPROMISE had no impact on youth's health insurance coverage or Medicaid and Medicare expenditures

CaPROMISE had no impact on the share of youth who had any health insurance (Figure V.2 and Appendix Table E.12). Most (91 percent) control group youth had some health insurance at the time of the five-year survey; most of those youth had public health insurance as would be expected for SSI recipients. The program did not affect youth's health insurance coverage. By five years after RA, the coverage rate among control and treatment group youth declined from that measured at the 18-month survey, when 99 percent of youth had health insurance. During the five years after RA, the average monthly Medicaid and Medicare expenditures among control group youth were $1,630; CaPROMISE did not affect this amount.

6. CaPROMISE increased youth's income from earnings and SSA payments in the year before the survey

CaPROMISE increased youth's economic and social well-being, as measured by the primary outcomes in this domain. It increased youth's income from earnings and SSA payments in the year before the five-year survey by $701 (a 7 percent relative increase) and income during the five calendar years after RA by $1,703, or 3 percent over the control group mean of $48,967 (Figure V.2 and Appendix Table E.13). Program impacts on both earnings and SSI payments likely contributed to the positive impacts on youth's economic well-being during these periods. CaPROMISE's impact on income from earnings and SSA payments differed by sex. Among female youth, the program increased income during the five calendar years since RA by 9 percent relative to the control group average of $48,036; it did not affect the income of males (Appendix Table E.21); the differential impacts were driven by the differential impacts on earnings.

In additional analyses, we found that similar shares of youth in the control and treatment groups were engaged in productive activities (including schooling, training, and looking for or engaging in employment), living independently, married or in a marriage-like relationship, and responsible for at least one child (Appendix Table E.13). CaPROMISE increased youth's average number of arrests from 0.1 to 0.2 but did not affect the likelihood or duration of incarceration. The program also did not affect youth's self-reported health status or the family's receipt of public assistance from TANF, SNAP, or housing assistance. It increased the share of youth that received help in getting accommodations for school, work, or living independently in the year before the survey by about 4 percentage points (a relative increase of 25 percent)

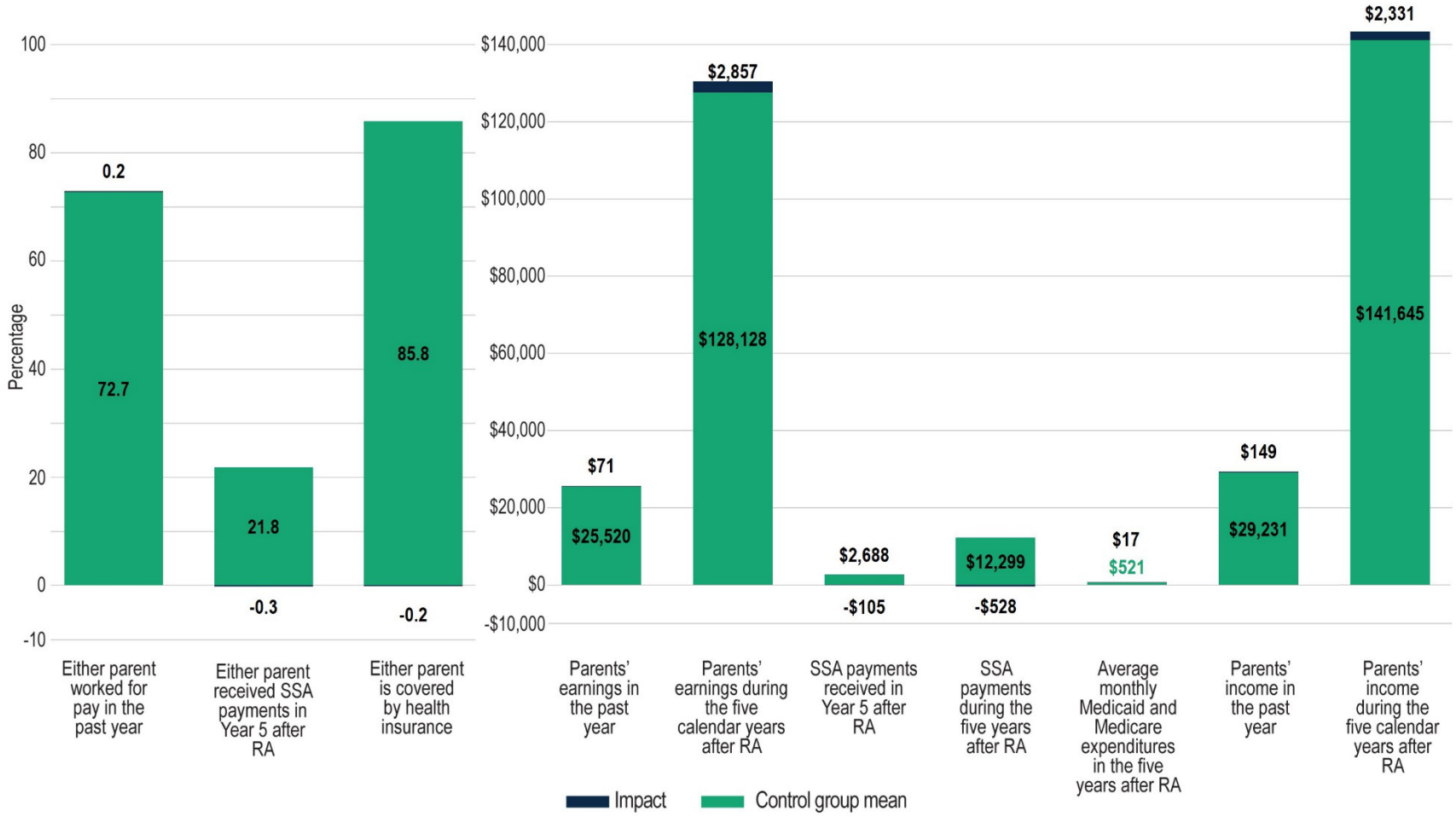
D. Five-year impacts on parents

This section documents the evidence on whether the services CaPROMISE provided led to impacts on parent outcomes during the first five years after enrolling in the program. The findings indicate that the program had no impacts on parents' employment or earnings, health insurance coverage, Medicaid or Medicare expenditures, or SSA payments five years after enrollment in CaPROMISE (Figure V.5). Generally, we found little evidence that the program's impacts on parent outcomes differed based on their youth's age, sex, impairment, or their own receipt of SSA benefits at RA; we describe the exceptions when discussing the findings below.

1. CaPROMISE had no impact on parents' employment or earnings

CaPROMISE did not affect the likelihood that parents worked for pay in the year before the five- year survey, parents' earnings in that year, or their earnings during the five calendar years after RA (Figure V.5 and Appendix Table E.14). In about 73 percent of control group families, at least one parent worked for pay in the year before the five-year survey. On average, control group parents earned $25,520 in the year before the survey and $128,128 over the five calendar years after RA. The program did not affect any of these outcomes. The program also had no impacts on other supplementary outcomes related to parents' employment, such as their labor force participation, education, employment at the time of the five-year survey, weeks worked, usual weekly hours worked, fringe benefits, or employment during four of the five calendar years after RA.

Figure V.5. CaPROMISE impacts on parent primary outcomes in the five years after RA



Source: Parent five-year survey; SSA data.

Note: All outcomes are measured at the time of the five-year parent survey unless otherwise specified. Monetary values are in 2020 dollars. See Tables E.8–E.17 Appendix Tables E.8–E.17 for more details.

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

RA = random assignment; SSA = Social Security Administration.

2. CaPROMISE had no impact on parents' SSA payments

CaPROMISE did not affect the likelihood that at least one parent received SSA payments in the fifth year after RA, the amount of SSA payments parents received in that year, or the total amount of SSA payments they received during the five years after RA (Figure V.5 and Appendix Table E.15). In the fifth year after RA, about 22 percent of control group families had at least one parent who received SSA payments; the annual SSA payments to parents averaged $2,688. During the five years after RA, control group parents received a total of nearly $12,300 in SSA payments. The program did not affect these outcomes. These patterns of no impacts held when looking at SSI payments and OASDI benefits separately.

In additional analyses, we found evidence that the program's impact on parents' SSA payments during the five years after RA differed by youth's sex (Appendix Tables E.21). CaPROMISE reduced the total SSA payments during the five years after RA to parents of male youth by $1,188 or 9 percent, without affecting payments for parents of female youth.

3. CaPROMISE had no impact on parents' health insurance coverage or Medicaid and Medicare expenditures

In most (86 percent) control group families, at least one parent was covered by health insurance at the time of the five-year survey; CaPROMISE did not affect this outcome (Appendix Table E.16). During the five years after RA, control group families had average monthly Medicaid and Medicare expenditures for parents of $521; CaPROMISE had no impact on this amount. The program also had no impact on parents' type of insurance. Among both the treatment and control groups, 23 percent of families had a parent with private health insurance. Public health insurance coverage ranged from 84 percent in the first year after RA to 78 percent in the fifth year after RA for both groups.

In additional analyses, we found that the impacts on parents' health insurance coverage and expenditures differed by the youth's impairment. The program decreased health insurance coverage among parents of youth with other mental impairments by 7 percentage points but did not affect the coverage of parents of youth with intellectual or developmental disabilities or other impairments (Appendix Table E.23). It also increased Medicaid and Medicare expenditures among parents of youth with other impairments by $74 but did not affect this outcome for parents of youth with intellectual or developmental disabilities or other mental impairments (Appendix Table E.23).

4. CaPROMISE had no impact on parents' income

The program did not affect parents' income from earnings and SSA payments in the year before the survey or during the five years after RA (Figure V.5 and Appendix Table E.17). On average, control group parents' income from earnings and SSA payments was $29,231 in the year before the survey and $141,645 during the five years after RA; CaPROMISE did not affect these outcomes. Similarly, in additional analyses, we found that it did not affect either parents' incomes in any of the five years after RA or the likelihood that any member of the household participated in other public assistance programs, such as SNAP, TANF, or housing assistance. The absence of impacts on these outcomes is consistent with the absence of program impacts on parents' employment and earnings.

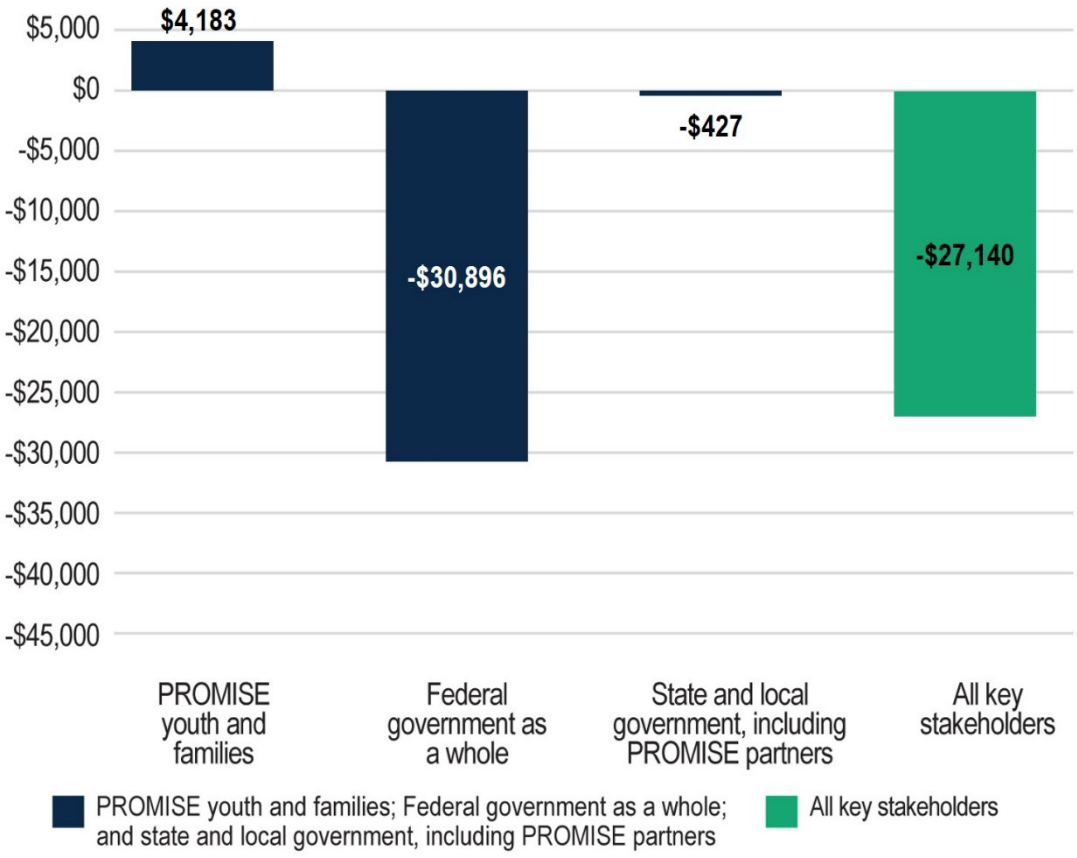
E. Benefits and costs

In conducting the CaPROMISE benefit-cost analysis, we focused on estimating the net benefits (or costs) for each key stakeholder group, as well as across all stakeholders, during the five years after RA. The net benefit (cost) is based on (1) the estimated impacts of CaPROMISE on all youth and families who were offered the opportunity to participate in the program, regardless of their statistical significance; and (2) the calculated cost of delivering the program per treatment group enrollee.

1. The costs of CaPROMISE outweighed its benefits across key stakeholders, but youth and families experienced a net benefit from participation

Across all key stakeholders, we estimate that CaPROMISE resulted in a net cost of about $27,140 per treatment group family over the five years after RA (Figure V.6). The cost of delivering the program ($31,598 per treatment group family) was the primary driver of this finding, which was ultimately larger than the $4,183 net benefit that the program generated through its impacts on youth and family outcomes during the five years after RA.

Figure V.6. CaPROMISE benefits and costs to key stakeholders over the five years after RA



Source: Youth five-year survey; SSA data; external data.

Note: Monetary values are in 2020 dollars. See Appendix Table E.27 for more details.

RA = random assignment.

Here we summarize the high-level benefit-cost findings for each stakeholder group. Appendix Table E.27 provides detailed estimates.

- **Youth and their families.** On average, youth and families benefited from CaPROMISE. Each family experienced about $4,183 in net benefits during the five-year follow-up period. Notably, increased youth and parent earnings under the program were the largest driver of these benefits, although they were partially offset by increased taxes and work-related costs (both of which accompany increased earnings).
- **The federal government.** CaPROMISE produced a large net cost to the federal government of $30,896 per treatment group family. ED assumed most of the costs associated with program delivery ($31,138 per family). SSA experienced a net benefit of $301 per family, stemming from increased tax payments from youth and parents and reduced SSA payments among parents.
- **State and local CaPROMISE partners.** The program produced a small cost of $427 to state and local CaPROMISE partners, driven by VR costs, increased public supports and increased parent Medicare and Medicaid expenditures. These costs were not fully offset by benefits from increased taxes received and reduced incarceration.

2. The impacts of CaPROMISE on earnings would need to increase considerably over time for it be cost neutral after 20 years

We considered the program's benefits and costs beyond the five-year evaluation period. First, we calculated the average impact needed for the program to be cost neutral across all key stakeholders. For CaPROMISE's benefits to equal costs by 20 years after RA, it would need to generate an average annual impact on youth earnings of $1,140 per year (Appendix Figure E.1). The point estimate of the program's impact on earnings in the fifth year after RA is $392; although the impact might grow over time if PROMISE participants had not yet fully realized the returns to VR services, achieving an average annual impact of $1,140 seems implausible.[29] Second, because the five-year evaluation period could underestimate the earnings growth for youth enrollees were building their human capital, we considered how net benefits might accrue over 20 years after RA. If we assume that a 10 percent return per year of education persists over time, the net benefits across all key stakeholders would be -$12,514 over 20 years (Appendix Table E.30). Under a high future earnings scenario wherein we forecasted earnings using the upper bound of the 95 percent confidence interval of the estimated impact on earnings (in place of the Year 5 earnings impact estimate), the net benefit across all key stakeholders over 20 years would be $5,241.

F. Summary and discussion

1. Summary of key findings

Table V.1 summarizes the CaPROMISE impacts on the primary youth and parent outcomes during the five years after RA. Overall, the program had few impacts on youth and parent primary outcomes, though it did increase youth's income. Across all key stakeholders, CaPROMISE resulted in a net cost of $27,140

[29] We assume that the estimated program impacts on earnings already account for most of the returns from impacts on VR services because findings from supplementary analyses (not shown) indicated that the programs' impacts on VR services occurred primarily in the first three years after RA.

per treatment group family over five years. However, for treatment group youth and families, it delivered an average net benefit of $4,183 over five years.

Table V.1. CaPROMISE: Summary of five-year impacts on primary outcomes, by domain

Domain	Primary outcome	Impact summary
Youth		
Education and training	Enrolled in an educational or training program	0
	Has a GED, high school diploma, or certificate of completion	0
Employment and earnings	Employed in a paid job in the past year	0
	Total earnings in the past year	0
	Earnings during the five calendar years after RA	0
Self-determination and expectations	Self-determination score	0
	Youth expects to be financially independent at age 25	0
Health insurance	Covered by any health insurance	0
	Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA	0
SSA payments and knowledge of work supports	Received SSA payments in Year 5 after RA	0
	SSA payments in Year 5 after RA	0
	SSA payments during Years 1–5 after RA	0
Economic and social well-being	Income from earnings and SSA payments in the past year	+
	Income during the five calendar years after RA	+++
Parents		
Parents' employment and earnings	Either parent worked for pay in the past year	0
	Parents' earnings in the past year	0
	Parents' earnings during the five calendar years after RA	0
Parents' SSA payments	Either parent received SSA payments in Year 5 after RA	0
	SSA payments received in Year 5 after RA	0
	SSA payments during the five years after RA	0
Parents' economic well-being	Parents' income from earnings and SSA payments in the past year	0
	Parents' income during the five calendar years after RA	0
Parents' health insurance	Either parent is covered by health insurance	0
	Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA	0

Note: All outcomes are measured at the time of the five-year youth survey unless otherwise specified. See Appendix Tables E.8–E.17 for more details.

+/++/+++ 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.

GED = General Educational Development; RA = random assignment; SSA = Social Security Administration.

2. Discussion

CaPROMISE helped put youth on an early path of paid employment. The results presented here show that the program did not increase employment in the fifth year after RA. However, additional analyses suggest

that it boosted employment over the five years following RA, though the impacts were larger in earlier than later years. Over time, employment rates for all youth—including those in the control group—rose. Nonetheless, over the five years after RA, the program increased the share of youth who were ever employed by more than 30 percent (from 60 percent to more than 80 percent). We found mixed evidence that it increased youth's earnings—a key measure of successful employment. Although it did not affect one primary earnings outcome (earnings in the year before the five-year survey), we found suggestive evidence that it increased the other primary earnings outcome (total earnings over the five years since RA) and had large positive impacts on earnings in the first two years after RA. The large impact of the program on application and receipt of VR services could result in improved employment outcomes over time.

The COVID-19 pandemic, which occurred during the fifth calendar year after RA for 78 percent of enrollees, might have muted CaPROMISE's impacts on youth's education and employment. Enrollment in California Community Colleges, the state's public system of two-year colleges, fell by 11 percent from fall 2019 to fall 2020 and by another 7 percent from fall 2020 to fall 2021 (Bulman and Fairlie 2022). To the extent that CaPROMISE encouraged treatment group youth to pursue postsecondary education, these youth might have been more susceptible than control group youth to the enrollment downturn. The COVID-19 pandemic also affected the state's employment landscape. California's youth unemployment rate doubled from 9 percent in 2019 to 18 percent in 2020 (Inanc et al. 2022). On the one hand, the pandemic's effect on the labor market could partly explain why the program had no impact in the fifth calendar year after RA after positive impacts in the first four calendar years. On the other hand, the control group's employment rate was steadily increasing in the first few years after RA, and it might have caught up to the treatment group's rate in the fifth calendar year after RA regardless of the pandemic.

CaPROMISE increased youth's income from earnings and SSA payments in the year before the survey. This finding suggests that the program boosted youth's economic well-being overall. This measure of income is the sum of two other outcomes: youth's self-reported earnings in the year before the survey and recorded SSA payments over the same period. This impact was driven by earnings; the program increased earnings in the fifth year after RA, whereas it did not affect SSA payments in that year.

The lack of persistent impacts on employment as measured by the primary outcome of employment in the fifth year after RA aligns with some but not all findings from the process analyses and other research on the services that CaPROMISE emphasized, such as employment-focused, person-centered planning. Data from the program's MIS documented high rates of contact and fidelity. Nearly all treatment group youth participants developed a career action plan (98 percent), and the program documented high and frequent rates of contact with participants. CSCs had communicated about or delivered most key program services, including career exploration and work-based learning, to most participating treatment group youth. One study found no disparities in contacts by gender, age, or type of disability (Tucker et al. 2019a). However, other research found significant differences in program contacts between families of youth who expected to get a job after high school completion and families of those who did not expect to get a job. Families of youth who did not expect to get a job had significantly more program contacts than those whose youth did expect to get one (Tucker et al. 2019b), as might be expected. Findings from our focus group discussions with youth and parents, both two and six months into program operations, revealed variation in the frequency and quality of the contact between the CSC and families; 5 out of 10 youth could not name their CSC and 7 out of 10 reported not having frequent contacts with the CSC. Despite the previously documented benefits of LEAs serving as local sites for CaPROMISE, one drawback was that CSCs in a few LEAs had to restrict their work hours to the normal hours of operation of schools because of their

status as LEA employees. This restriction likely limited their ability to tailor the delivery of services to accommodate the needs of families.

We found no evidence of impacts on most other primary youth outcomes: enrollment in schooling or training, receiving a high school credential, self-determination, expectations for financial independence, health insurance coverage, or receipt of SSA payments in the fifth year after RA. For most of these outcomes, the absence of impacts is consistent with findings from the process and 18-month impact studies. There are a few possible explanations for the absence of impacts on these outcomes, including the following:

- The absence of impacts on youth's educational attainment might reflect the fact that high rates of education among the control group youth meant there was not much room for improvement. For example, more than 80 percent of control group youth had a GED, certificate of completion, or high school diploma at the time of the five-year survey, which is higher than recent national estimates for VR applicants ages 16–24 (Honeycutt et al. 2015); 58 percent were enrolled in an educational or training program. Furthermore, we found suggestive evidence that CaPROMISE may have increased receipt of supports for postsecondary education.
- The absence of impacts on youth self-determination are consistent with the absence of 18-month impacts on this outcome (Mamun et al. 2019a). Youth in both the control and treatment groups had relatively high self-determination scores of nearly 80. Alternatively, it could be the case that the services themselves were ineffective, unnecessary (that is, if youth had high self-determination and did not need extra support), or poorly targeted (that is, if they were not offered selectively to youth who stood to benefit the most).

We found no evidence that the program improved parents' outcomes. It had no impact on parents' employment, earnings, SSA payments, or income as of five years after enrollment. These findings are consistent with the earlier evaluation findings showing no impacts on these outcomes 18 months after enrollment. Although the CaPROMISE model emphasized engagement of the whole family in case management, benefits counseling, and financial education, and the 18-month report found high rates of service use, the five-year findings indicate that the program was unable to affect parents' outcomes in the longer term. These findings are consistent with some of the challenges identified in the process analysis. Many families struggled with housing instability and anxiety over the political climate; also, mobility and changes in contact information made it difficult for CSCs to contact them.

CaPROMISE had a larger impact on several outcomes among youth who were age 16 at RA and their parents relative to youth who were younger at that time. Among youth aged 16 at RA, the program increased their enrollment in educational or training programs by 20 percent, expectations for financial independence by 25 percent, and SSA payments and income by smaller amounts. Among the parents of these youth, it decreased SSA payments by about 12 percent. It is unclear why the program had a larger and significant impact on youth who were older at RA than those who were younger; nothing from the process analysis explains this pattern of results. One hypothesis is related to WIOA, which increased counterfactual services but was not yet in place when many older youth enrolled in CaPROMISE and might have been receiving services relevant to them—that is, the relative impact of the program may have been stronger when expanded transition services due to WIOA were not in place or fully implemented.

During the five years after enrollment, the costs of CaPROMISE outweighed the benefits when viewed across all stakeholders. It resulted in a net cost of about $27,140 per treatment group family. Treatment group youth and families, the main benefactors of the program, experienced $4,183 in benefits on average

during the five-year follow-up period. However, these benefits were small compared to the program cost per treatment group family ($31,138). At the same time, we may not have measured or monetized all outcomes that could capture the benefits of the program; it may have the potential to deliver benefits in the future for two reasons. First, the increase in youth employment rates observed in earlier years could resume after the pandemic ends. Second, the program led to a fourfold increase in treatment group youth applying for and receiving VR services. Some of these youth might reap benefits from these services in the future, as their VR cases close with successful employment outcomes.

VI. MD PROMISE

Summary of five-year impacts and net benefits of MD PROMISE

- MD PROMISE increased youth's likelihood of receiving SSA payments, the amount of SSA payments received, and income from earnings and SSA payments. The impacts on income were driven by the impacts for older youth (age 16 at RA).
- The program had no impact on youth's education or training; employment and earnings; self-determination; expectations of financial independence at age 25; health insurance coverage; or Medicaid and Medicare expenditures.
- MD PROMISE had no impact on parents' employment, earnings, income, health insurance coverage or Medicaid and Medicare expenditures, although it increases parents' employment among families in which a parent received SSA payments at RA.
- Across all key stakeholders, MD PROMISE resulted in a net cost of $19,850 per treatment group family over five years. For treatment group youth and families, it delivered an average net benefit of $835 over five years.◢

A. Program overview and a review of prior findings

To provide a context for the five-year impacts of MD PROMISE presented in subsequent sections, we first summarize key features of the program, the findings from the process study of the first three years of program operations (Kauff et al. 2018), and the findings of the 18-month impact study (Mamun et al. 2019a).

1. Program overview

The Maryland Department of Disabilities (MDOD), a distinct cabinet-level state agency created in 2004, was the lead agency for the MD PROMISE program and the recipient of the cooperative agreement with ED. MDOD contracted with various organizations to provide program services, such as case management, employment-related services, benefits counseling, and financial education services statewide. In addition to providing direct services, MD PROMISE intended to be a conduit to and coordinator of existing services for transition-age youth with disabilities.

The cornerstone of MD PROMISE was assertive case management provided by intervention teams consisting of a family employment specialist and a case manager. Distinguishing features of assertive case management compared with traditional case management approaches include multidisciplinary case management teams and delivering most services in the community—for example, at home or in the workplace. The program's design specified an average caseload for an intervention team of 35 youth (and their family members) at any given time.

Family employment specialists were responsible for helping participants set and achieve employment goals. MD PROMISE aimed to engage 80 percent of treatment group youth in an unpaid work experience and 70 percent in a paid work experience by the end of program operations. Unpaid work experiences could include informational or job interviews, worksite tours, job shadowing, volunteer service in the community, unpaid internships, and apprenticeships. To achieve these goals, family employment specialists provided job search services and conducted employer outreach. The family employment

specialists aimed to help youth obtain a paid work experience in which an employer paid youth wages. If unable to help youth secure such a position, the family employment specialist referred the youth to an existing program (for instance, through local workforce centers) for placement in a job. As a last resort, the specialist could directly arrange a job placement with wages paid using program funds. The parents or guardians of participating youth were eligible for employment-related services as well, though the program set no benchmarks for the percentage who would receive these services, and family employment specialists provided services to very few.

Case managers addressed issues with participants unrelated to employment. They assessed youth and family needs; helped families identify their goals and plans for achieving them; engaged participants in program services; provided linkages to community resources; and collaborated with other services providers, such as transition specialists from the Department of Rehabilitation Services. Case managers provided education services by attending IEP meetings and otherwise collaborating with school special education staff; facilitating supports such as tutoring or transportation to school; and providing linkages to postsecondary education services, such as college fairs and tours, support with applications for school or financial aid, and assistance in accessing coursework or disability support services. MD PROMISE also intended that case managers would provide information and support to parents during individual meetings and connect them to existing resources and trainings in the community; the program design did not include specific trainings or group activities for parents and guardians or other family members, but treatment group families had the option to participate in services such as financial education.

Benefits counseling through MD PROMISE was provided by federal- and state-certified counselors and, unlike the counseling typically provided through WIPAs, focused on the family unit rather than the individual SSI recipient. Counseling for those who were not working focused on the opportunities that various work incentives offered through SSI and other programs. Counseling for those who were working focused on assessing the impact of increased earnings on benefits and ensuring that appropriate work incentives were in place. The program anticipated that all treatment group youth and family members would receive some form of benefits counseling.

2. Summary of findings from the process analysis

An in-depth process study of MD PROMISE during the first three years of program operations documented its structure and service model and described its implementation during the period from April 2014 through April 2017 (Kauff et al. 2018). Here we summarize the key findings from that analysis.

High take-up of career exploration and work-based learning experiences by youth. During the first three years of operation, most treatment group youth (92 percent) had engaged with the program. Of those, almost half had worked at paid jobs and more than half had participated in unpaid work experiences. These findings fell slightly short of the program's benchmark for the end of the third year that 60 percent of treatment group youth would have had an unpaid work experience and 50 percent a paid work experience.

Low use of other services. Other than youth's engagement in career exploration and work-based learning experiences, youth's and parents' use of services was low. MD PROMISE connected 35 percent of treatment group youth with entities providing services such as vocational support, economic assistance, and health services. However, because such connections could entail discussion about the availability of services or support and completing applications for enrollment, it was unclear whether the connections would result in actual receipt of services from these entities. During the first three years of the program, it

connected 30 percent of participating youth with at least one entity providing employment services to adults with disabilities and 33 percent to postsecondary services or opportunities. The program also connected at least half of participating youth to benefits counseling.

Lack of service provision for parents. Despite MD PROMISE's goal of providing services to youth and their families, very few parents received any services during the first three years of the program. By February 2017, members of the majority of treatment families had experienced only one interaction with a benefits counselor. By that time, the program had provided job search services to and conducted employer outreach on behalf of parents for about 5 percent and 3 percent of youth, respectively.

Limited availability of transition services in the community outside of MD PROMISE. There were some opportunities for youth with disabilities in Maryland to receive transition services in the community outside of those provided by MD PROMISE. Control group youth and their families could, in principle, access benefits counseling and employment services similar to those offered by the program. However, other programs in the state rarely served youth as young as those enrolled in MD PROMISE or provided case management with the same level of intensity. Services available outside of the program were likely less intense and had lower take-up rates because there was no single entity facilitating access to these services, coordinating the efforts of multiple providers, or networking with providers and employers on behalf of youth and their families.

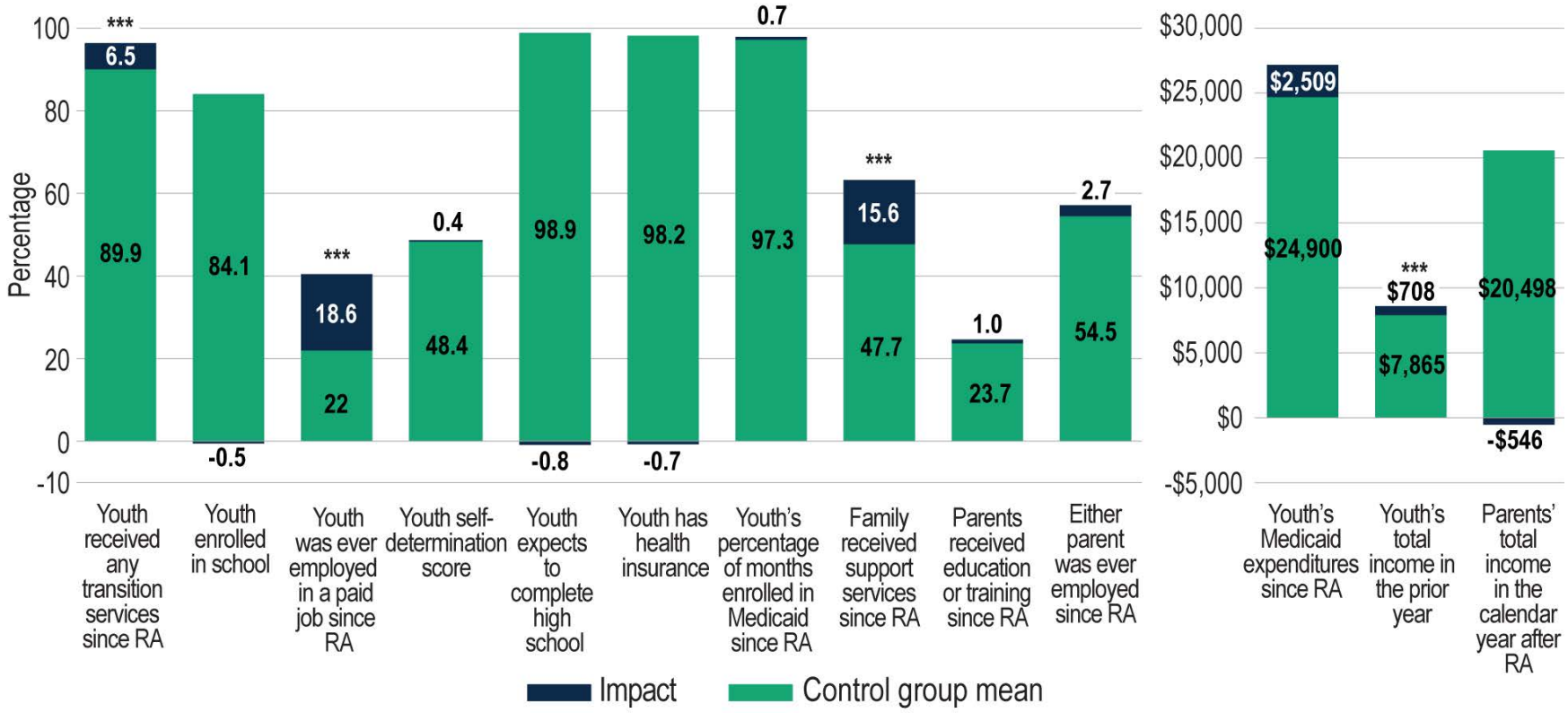
Potential for program impacts on key outcomes. The process analysis suggested that the conditions were favorable for finding impacts of the program on youth outcomes. Evidence in two areas implied a marked contrast in the service experiences of treatment and control group youth. First, a large share (92 percent) of treatment group youth 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 process analysis findings suggest less favorable conditions for finding positive impacts on parents. Moreover, other initiatives in Maryland during the years the program operated might have benefited all youth with disabilities and their families, thus reducing the chances of finding impacts of MD PROMISE.

3. Summary of findings from the 18-month impact analysis

During the first 18 months after RA, MD PROMISE had positive impacts on several youth outcomes related to service use (Figure VI.1). The program increased the share of youth who received transition services by 7 percentage points even though 90 percent of control group youth had received these services. Consistent with its model, the program increased the use of case management and several other services, such as employment-promoting services, benefits counseling, and financial education.

MD PROMISE also increased youth's likelihood of paid employment, their annual earnings, and their income from earnings and SSA payments. The program increased the share of youth who held a paid job during the 18 months after RA by 19 percentage points and increased youth's earnings from all jobs during the year before the 18-month survey by $531 (a 64 percent relative increase).

Figure VI.1. MD PROMISE impacts on youth and parent primary outcomes in the 18 months after RA



Source: Mamun et al. 2019a.

Note: All outcomes are measured at the time of the 18-months surveys unless otherwise specified.

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

RA = random assignment.

The program had no impact on youth's school enrollment and expectations about completing high school. The majority of youth were enrolled in school, and this high prevalence might explain why MD PROMISE had no impact on these outcomes.[30] It also had no impact on youth's self-determination, likelihood of having health insurance, or Medicaid participation at 18 months after enrollment. The majority of youth participated in Medicaid during the first 18 months after RA; similar to school enrollment, this high prevalence might explain the absence of impacts on these outcomes. Moreover, the program did not provide services that directly addressed these outcomes.

As with the youth, MD PROMISE increased parents' and family members' use of support services. However, the program did not affect parents' education or job skills training, likelihood of having a paid job, earnings, or income from earnings and SSA payments.

B. Baseline characteristics of the five-year follow-up sample

The main analytic sample for the five-year impact analysis of MD PROMISE consisted of 1,486 randomly assigned youth who completed the five-year follow-up survey (Appendix Table F.1). In this section, we describe the baseline characteristics of this sample and comment on any differences between the treatment and control group youth within the sample. Except for data on youth's and parents' race and ethnicity, all baseline characteristics are based on data from SSA administrative records.

Demographic characteristics. Slightly more than one-third of the youth were female. At RA, about one-quarter of the youth were age 14, one-quarter were 15, and one-half were 16. Nearly all youth (97 percent) preferred English as their written and spoken language. Most youth (87 percent) lived with their parents at the time they applied for SSI; of the remaining youth, most lived in their own households or alone. Half of the youth were non-Hispanic Black. The next largest racial and ethnic group was non-Hispanic White (15 percent), followed by Hispanic (7 percent). Notably, data on race and ethnicity were missing for 20 percent of the sample. The racial and ethnic composition of parents was similar to that of the youth, with a somewhat larger share who were non-Hispanic White (20 percent) and a smaller share with missing data (16 percent).

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

SSA program participation. Nearly all youth (95 percent) received SSI payments during the month of RA. On average, youth had qualified for SSI at age 8. A minority of youth (11 percent) received OASDI payments during the month of RA. Across all youth, average annual SSI payments during the year before the RA month were $7,234, and average SSA payments were $7,572. About 18 percent of youth lived in a household with multiple SSI-eligible children, and one-quarter had a parent receiving SSA payments at the time of RA.

[30] Maryland increased the compulsory school age from 16 to 17 years starting with the 2015–2016 school year, and to 18 in the 2017–2018 school year. These requirements for youth to remain in school until an older age affected youth in both the control and treatment groups. It is possible that such requirements muted any effect MD PROMISE might have had on school enrollment in the absence of the law change, especially at the 18-month impact analysis, when youth were younger.

Earnings. Very few youth (about 4 percent) had any earnings in the calendar year before RA, which is not surprising, given their young ages. On average, youth had earned $38 during that year. Just over two-thirds (68 percent) had at least one parent with earnings in the calendar year before RA. Across all youth, parent earnings averaged $16,241 in that year.

Differences between the treatment and control groups. On average, youth in the treatment and control groups had similar characteristics, as would be expected, given the RA study design. We compared the two groups across 25 characteristics at the time of RA and found few statistically significant differences. On average, treatment group youth received more SSI payments and SSA payments in the year before RA and were more likely to have two parents in the SSA administrative data. We expect to be able to identify unbiased estimates of program impacts by comparing the treatment and control groups while accounting for these differences in baseline characteristics through regression adjustment.

C. Five-year impacts on youth

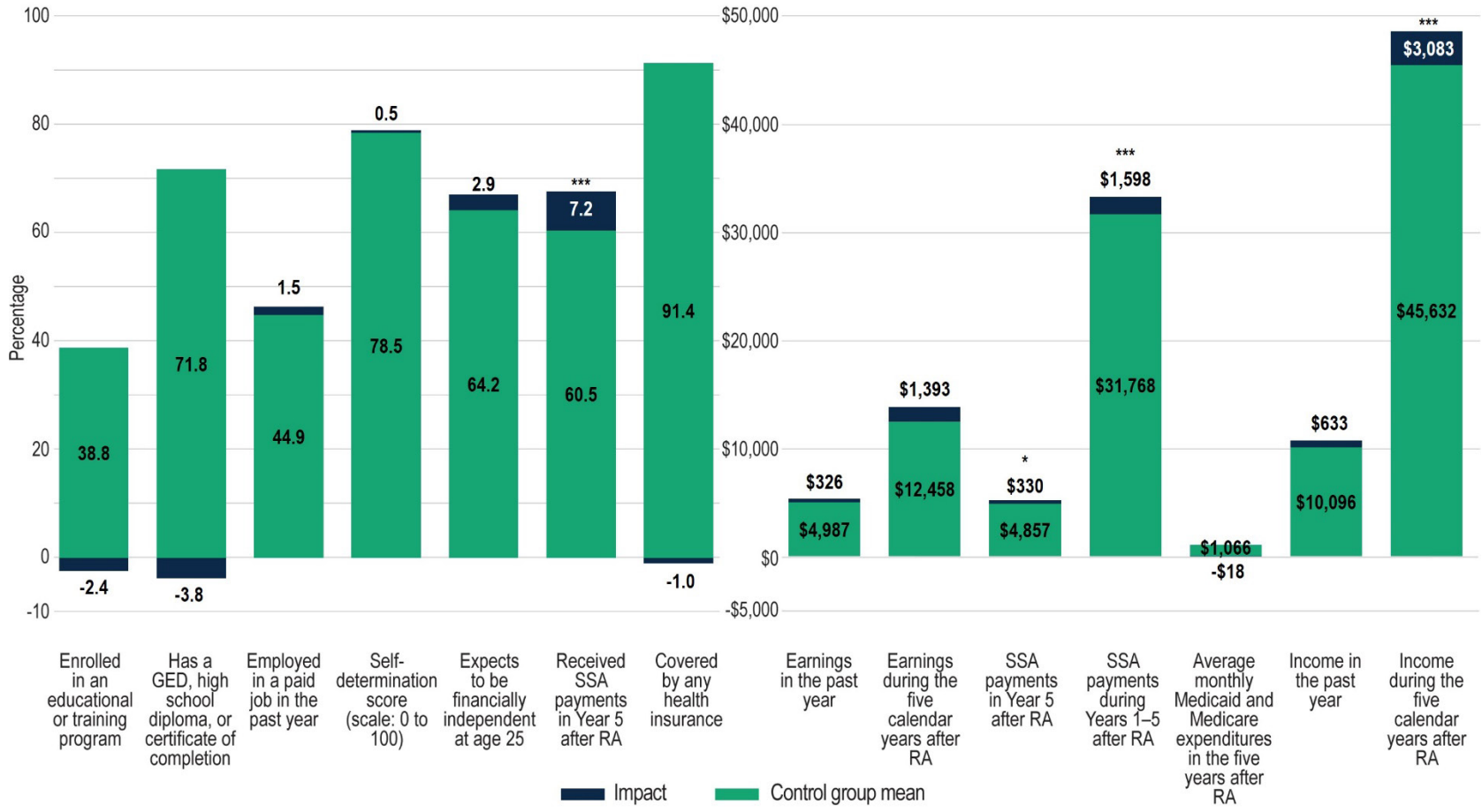
This section documents the evidence on whether the services MD PROMISE provided led to impacts on youth outcomes in several domains during the first five years after RA. The impact estimates show that the program increased youth's combined income from earnings and SSA payments during the five calendar years after RA and receipt of SSA payments in those years and in the fifth year after RA (Figure VI.2). It had no impact on youth's education or training; employment and earnings; self-determination; expectations of financial independence at age 25; health insurance coverage; or Medicaid and Medicare expenditures. Overall, we found little evidence that the program's impacts on youth outcomes differed based on youth's age, sex, impairment, or parents' receipt of SSA benefits at the time of enrollment; we describe the exceptions to this pattern when discussing the findings below.

1. MD PROMISE had no impact on youth's education or training

MD PROMISE had no impact on youth's enrollment in an educational or training program or the share of youth who had a high school diploma or equivalent credential at the time of the five-year survey (Figure VI.2 and Appendix Table F.8). About 39 percent of control group youth were enrolled in an educational or training program at the time of the five-year survey; the program did not affect this share among treatment group youth. On average, 72 percent of control group youth had a high school diploma or equivalent credential; although there is some evidence suggesting the program decreased this share, the impact estimate of 4 percentage points was marginally not significant (p-value = 0.11). Additional subgroup analyses suggest the program had no impact on this outcome for youth with intellectual or developmental disabilities or mental impairments but decreased the share among youth with other impairments (Appendix Table F.23).

MD PROMISE aimed to increase the educational attainment of transition-age youth. The intervention team provided education services in support of this goal, including communication with school personnel and postsecondary education linkages. Despite these efforts, the program did not improve the primary educational outcomes. However, it increased the share of youth attending postsecondary vocational, trade, or technical school by 1 percentage point over the control group mean of 2 percent. These results might reflect that the career exploration and work-based learning experiences of some youth led them to prioritize education closely connected to work experiences and the labor market over more traditional schooling. The program did not affect any other type of school attended by treatment group youth (Appendix Table F.8).

Figure VI.2. MD PROMISE impacts on youth primary outcomes in the five years after RA



Source: Youth five-year survey; SSA data.

Note: All outcomes are measured at the time of the five-year youth survey unless otherwise specified. Monetary values are in 2020 dollars. See Appendix Tables F.8–F.17 for more details.

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

GED = General Educational Development; RA = random assignment; SSA = Social Security Administration.

The impact of MD PROMISE on youth's enrollment in an educational or training program differed for youth surveyed before versus after the onset of the COVID-19 public health emergency (Appendix Table F.25). Among youth interviewed before the onset of the pandemic, the program decreased the share of treatment group youth enrolled in an educational or training program by 10 percentage points from the control group mean of 35 percent. In contrast, the program had no impact on this outcome among youth interviewed after the onset of the pandemic. One possible explanation is that the program's focus on employment nudged more treatment group youth to prioritize labor force participation (as we note in the next section, it increased youth's labor force participation) at the cost of formal education, but then this effect was muted during the COVID-19 pandemic. However, it is important to note the potentially confounding effect of the changes in compulsory school age in Maryland, which would affect youth who enrolled earlier (and were therefore surveyed earlier) differently than youth who enrolled later (and were therefore surveyed later).

Additional analyses show that MD PROMISE did not affect youth's highest grade completed, receipt of a training credential, school suspensions or expulsions, or use of postsecondary education supports or services (Appendix Table F.8).

2. MD PROMISE had no impact on youth's employment and earnings

MD PROMISE did not affect the likelihood that youth were employed in a paid job in the year before the survey or total earnings in that year (Figure VI.2 and Appendix Table F.9). In the year before the survey, about 45 percent of youth were employed, and youth's total earnings averaged $4,987. These values were similar for the control and treatment groups. Although the treatment group's average earnings during the five years after RA were $1,393 (11 percent) higher than the control group average ($12,458), the difference was marginally not significant (p-value = 0.14). Additional analyses suggest the impacts of MD PROMISE on youth's employment differed by impairment. Among youth with intellectual or developmental disabilities, the program increased this likelihood by 9 percentage points over the control group mean of 33 percent, but it had no impact among youth with other types of impairments (Appendix Table F.23).

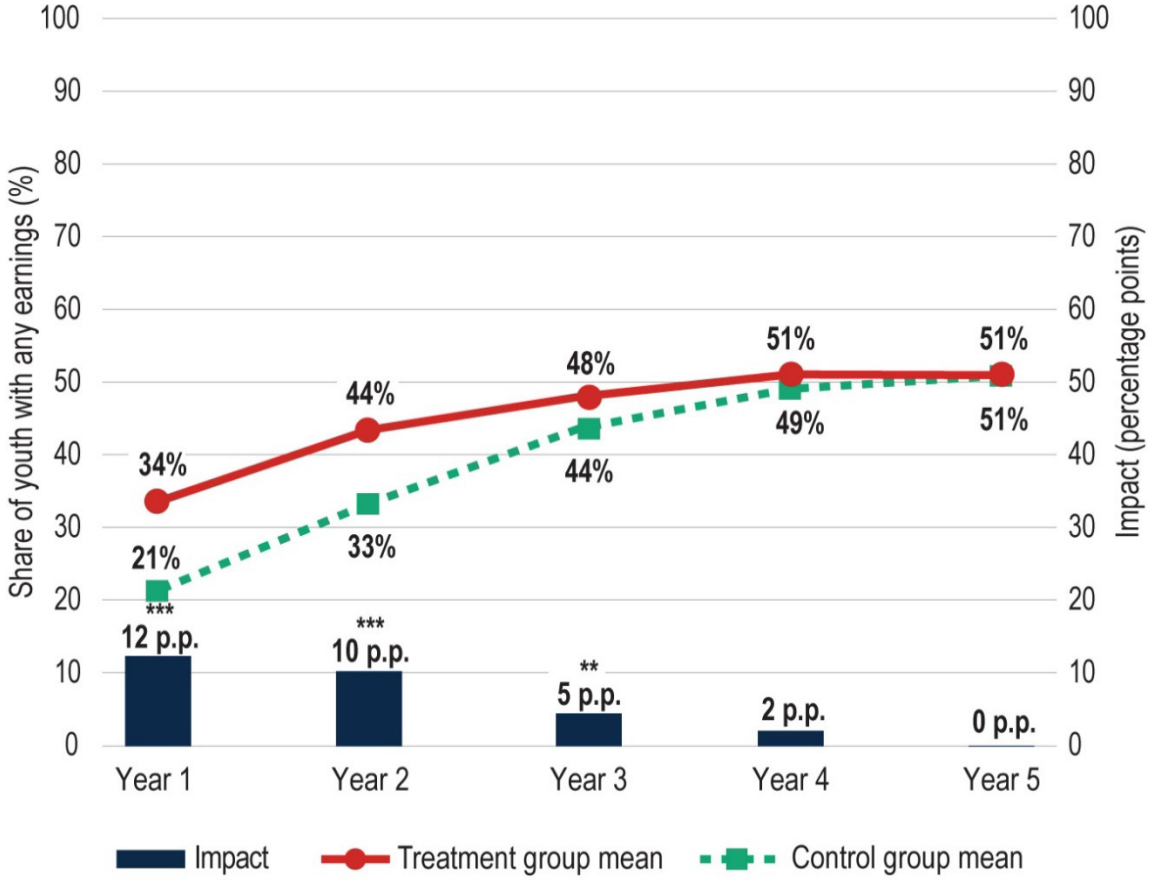
The program increased the likelihood of employment during the first three years after RA but had no impact thereafter (Figure VI.3). The employment impact was large and statistically significant in the first year after RA—an increase of 12 percentage points above the control group mean of 21 percent. Over the years, the size of the impact decreased while the control group mean increased; for example, in the third year after RA, there was an increase of 5 percentage points above the control group mean of 44 percent. In the fourth and fifth calendar years after RA, the employment rates of treatment and control group youth did not significantly differ. We found a similar but less pronounced pattern of impacts on earnings (Figure VI.4). MD PROMISE increased earnings in the first calendar year after RA by $238, or 55 percent over the control group mean of $426. In subsequent years, the program did not significantly increase earnings. Earnings increased over time for youth in the control group, which would be expected, given the ages of the youth; treatment group youth experienced a similar increase over time.

These estimates suggest that MD PROMISE had a large impact on employment in the first years of the program, but the impacts did not persist. Because youth were still actively engaged in the program in the first few years after RA, the impact on employment in these years might be viewed as program outputs resulting from its efforts to connect youth to paid work experiences. By the fifth year after RA, youth in the control group had caught up with treatment group youth, and both had similar employment rates.

In other analyses, we found the following:

- MD PROMISE increased labor force participation at the time of the five-year survey by 6 percentage points, about a 10 percent increase over the control group mean of 53 percent. This suggests the potential for future impacts on youth's employment.
- The program increased the share of youth employed in a job with coaching in the year before the survey by 2 percentage points over the control group mean of 6 percent. At the conclusion of the program, it focused on connecting treatment group youth to other providers (Kauff et al. 2018). Although we found no impact on VR applications or use of VR services (a key source of job coach services), such increased connections might have contributed to this outcome.
- The program had no impact on other employment-related outcomes, such as weekly hours worked, average weekly earnings, or employment setting.

Figure VI.3. Employment rates, by calendar year after RA



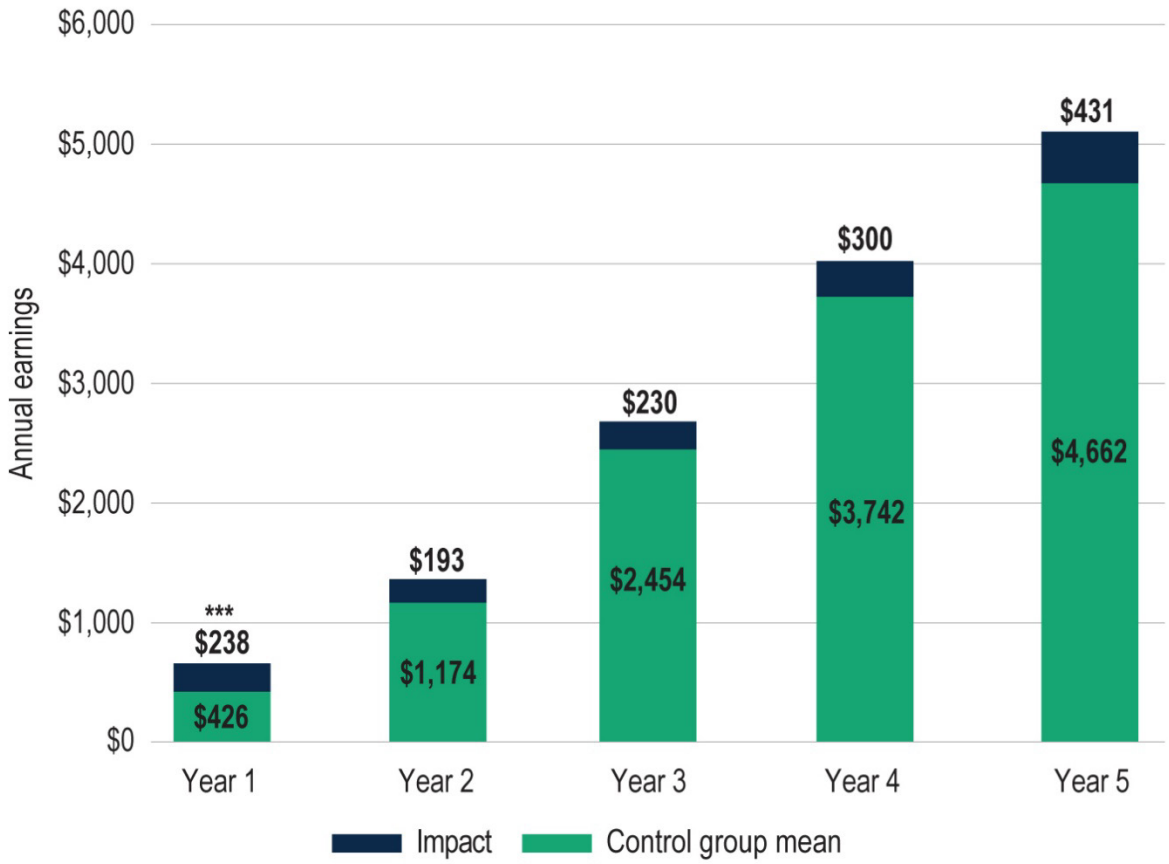
Source: SSA data.

Note: See Appendix Table F.9 for more details. Due to rounding, the sum of control group mean and impact may not equal the treatment group mean.

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

p.p. = percentage point; RA = random assignment.

Figure VI.4. Youth's earnings in each calendar year after RA



Source: SSA data.

Note: See Appendix Table F.9 for more details. Earnings are measured in 2020 dollars.

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

RA = random assignment.

3. MD PROMISE had no impact on youth's self-determination or expectations of financial independence

MD PROMISE had no impact on the two primary outcomes in the self-determination and expectations domain: youth's self-determination score and their expectations of financial independence at age 25 (Figure VI.2 and Appendix Table F.10). Both treatment and control group youth had average self-determination scores of about 79. Additional analyses suggest that the program's impact on this score differed by whether a parent in the household received SSA payments at enrollment (Appendix Table F.22). Among youth with a parent receiving SSA payments at RA, the program reduced youth's self-determination score by 3 points over the control group mean of 80 but had no impact among other youth. We can offer no explanation for the negative impact finding. Analyses of the subdomains of self-determination show that the program did not affect any of the subdomains of self-determination (autonomy, psychological empowerment, self-realization, and agentic action).

Although MD PROMISE did not affect youth's expectation of financial independence at age 25, it increased their expectation of being employed in a paid job at that age (Appendix Table F.10). On average, 89 percent of control group youth expected to be employed in a paid job at age 25; the program increased this share by 3 percentage points. The greater exposure of treatment group youth to the labor market at an early age, as evidenced by the early impacts on employment and the shares of treatment group youth who participated in paid and unpaid work experiences, might have contributed to this impact. The program did not affect the share of youth who expected to live independently at age 25 or receive postsecondary education, nor did it affect parents' expectations about the youth's employment, financial independence, independent living, or postsecondary education, or their belief in the importance that the youth be employed eventually. The program's initial design did not include specific trainings or activities to address parents' expectations for their youth, but rather relied on case managers to provide information and support to parents during individual meetings. Although program goals included providing more formalized parent training, the absence of such activities, at least in the first three years of program operations, might have contributed to the absence of impact on parental expectations.

4. MD PROMISE increased youth's receipt and amount of SSA payments

MD PROMISE increased youth's likelihood of receiving SSA payments in the fifth year after RA, the amount of SSA payments in that year, and the total amount of SSA payments received during the five years after RA (Figure VI.2 and Appendix Table F.11). During the fifth year after RA, 61 percent of control group youth received any SSA payments; the program increased this share by 7 percentage points. It increased the SSA payments received in that year by $330 above the control group average of $4,857. Looking at SSA payments across the first five years after RA, the program increased the total amount by $1,598 over the control group average of $31,768.

The pattern of impacts on SSA payments over time suggests that the impacts on the primary outcomes were driven by increases in SSI payments rather than OASDI benefits, particularly in the fourth and fifth years after RA (Appendix Table F.11). Generally, the program had no impact on the likelihood of receiving OASDI benefits or the OASDI benefit amounts that youth received in the five years after RA. However, MD PROMISE increased youth's likelihood of receiving SSI payments in the third through fifth years after RA and the amount of SSI payments received in those years, resulting in an increase in total SSI payments over the five years. MD PROMISE had no impact on youth's age-18 redetermination outcomes.

The reasons behind the positive impacts on SSI payments in the later years are unclear. They might be related to the program's benefit counseling services becoming more robust in the later years of the program. Benefits counseling would have given youth critical information on SSA work incentives and how benefits might coexist with earnings under certain rules. The program increased youth's awareness of the student earned income exclusion, SSI earned income exclusion, and PASS plans, along with increasing their knowledge of ABLE accounts (Appendix Table F.11), though the share of youth who were aware of these incentives was small. Nonetheless, it either reduced or had no impact on awareness of the following SSA policies: that SSI recipients can work and receive payments, the requirement for recipients to report earnings to SSA, and that children receiving SSI are not automatically eligible for SSI as adults.

5. MD PROMISE had no impact on youth's health insurance coverage or Medicaid and Medicare expenditures

The program did not affect the likelihood that youth were covered by health insurance at the time of the five-year survey or their average monthly Medicare and Medicare expenditures during the five years after RA (Figure VI.2 and Appendix Table F.12). About 91 percent of control group youth had health insurance; this percentage did not differ for the treatment group. About 10 percent of youth in both the control and treatment groups had private health insurance. Most youth in both the treatment and control groups had public health insurance, which is expected because Medicaid is available in Maryland to SSI recipients (which about 60 percent of youth enrolled in MD PROMISE were in Year 5 after RA) and almost all adults with incomes at or below 138 percent of the Federal Poverty Level.

Among control group youth, average monthly Medicare and Medicare expenditures during the five years after RA were $1,066, and the program did not affect these expenditures. It did not impact the share of youth participating in either Medicaid or Medicare in any of the first five years after RA. Interestingly, even though the program increased the share of youth who received SSI in the third through fifth years after RA, it did not affect the share that participated in Medicaid during those years.

6. MD PROMISE increased youth's income from earnings and SSA payments over the five years after RA

MD PROMISE increased youth's total income during the five calendar years after RA by $3,083, or 7 percent over the control group mean of $45,632, but had no impact on their income in the year before the survey (Figure VI.2 and Appendix Table F.13). Additional analyses show that the program increased income in each of the five calendar years after RA. The findings we described in previous sections suggest that the increase in income was driven by increases in earnings in the early years and SSI payments in the later years. There is some evidence suggesting that the program might have increased earnings in the year before the survey, but the impact estimate of $633 was not statistically significant (*p*-value = 0.19).

Other analyses suggest that the impacts of MD PROMISE on youth's income differed by youth's age at enrollment (Appendix Table F.20). The program increased income during the year before the survey and during the five years after RA among youth who were age 16 at enrollment by $1,579 and $4,826, respectively, which represent relative increases of 15 and 10 percent over the control group mean, respectively. It did not affect the income of youth who were younger at enrollment.

In additional analyses (Appendix Table F.13), we found that MD PROMISE did the following:

- Increased the likelihood that youth reported their health status as poor
- Did not affect the shares of youth engaged in productive activities (including schooling, training, and looking for or engaging in employment), living independently, married or in a marriage-like relationship, or responsible for a child
- Did not affect youth's engagement with the criminal justice system
- Did not affect the other economic outcomes of youth's household (household income in the past year; likelihood that household received TANF, SNAP, or housing assistance; amount of public assistance in TANF and SNAP benefits, and housing assistance received in the month before the survey)

D. Five-year impacts on parents

The findings in this section document whether the services MD PROMISE provided led to impacts on parent outcomes during the first five years after enrolling in the program. The estimates revealed that the program had no impacts on parents' employment, earnings, health insurance coverage, Medicaid and Medicare expenditures, or SSA payments five years after enrollment in MD PROMISE (Figure VI.5). Generally, we found little evidence that the program's impacts on parent outcomes differed based on their youth's age, sex, or impairment, or on their own receipt of SSA benefits at the time of enrollment; we describe the exceptions when discussing the findings below.

1. MD PROMISE had no impact on parents' employment or earnings

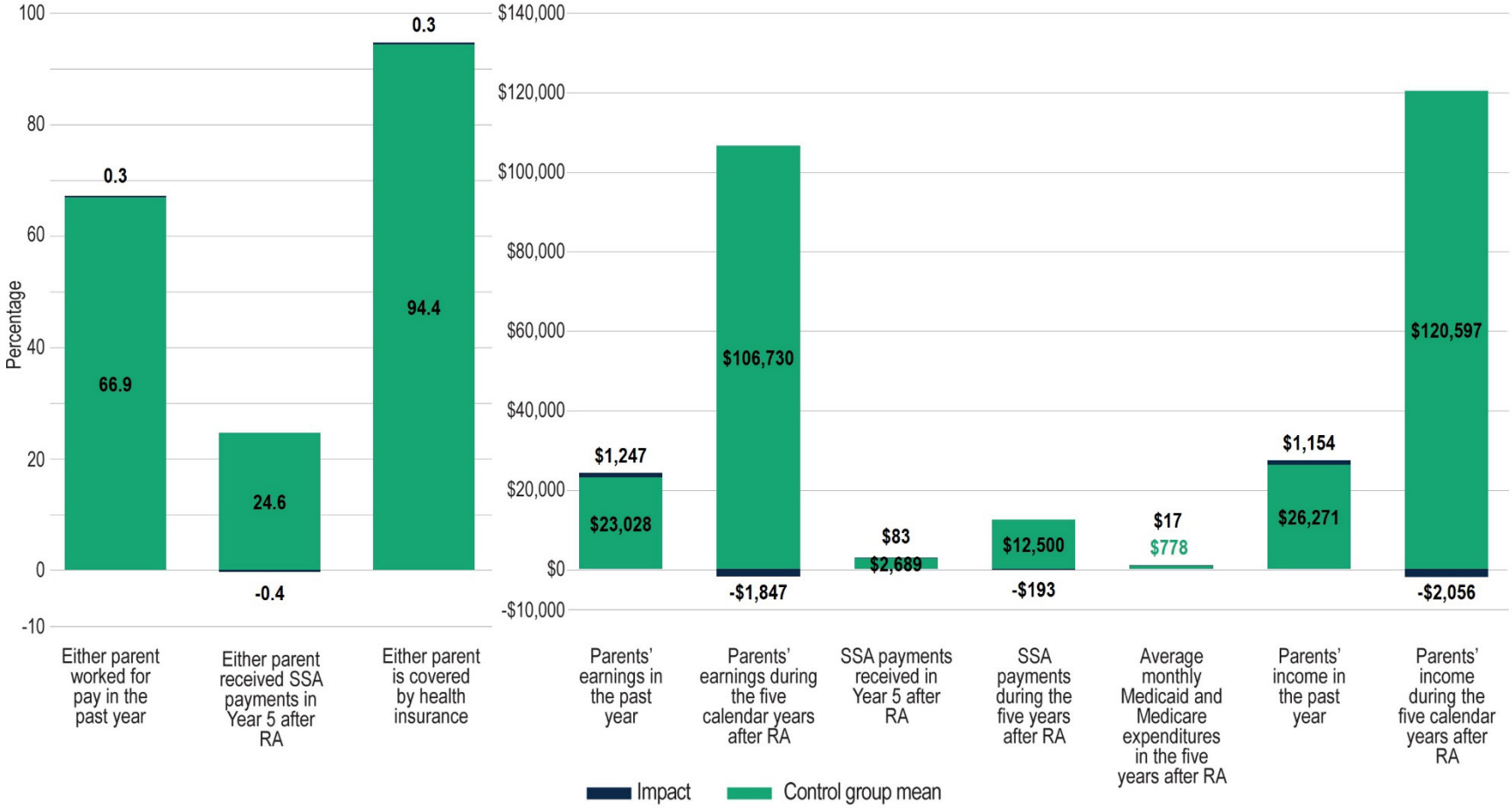
The program did not affect parents' likelihood of working for pay in the year before the survey, parents' earnings in that year, or their earnings during the five calendar years after RA (Figure VI.5 and Appendix Table F.14). In the year before the survey, approximately two-thirds of control group families had a parent working for pay, with average parents' earnings of $23,028. Total parents' earnings during the five calendar years after RA averaged $106,730 in the control group and did not differ significantly for the treatment group after RA.

During the five years after RA, parents' earnings increased slightly in both control and treatment groups (Appendix Table F.14). The employment rates remained relatively stable for parents in both groups. MD PROMISE had no impact on parent's annual employment rates except for an increase of 5 percentage points (a 7 percent relative increase) in the second calendar year after RA.

Although MD PROMISE had no impact on the primary parent employment and earnings outcomes, it increased parent's labor force participation at the time of the five-year survey (Appendix Table F.14). Sixty-six percent of control group families had at least one parent in the labor force; the program increased this share by 4 percentage points. It did not affect other parental employment-related outcomes, such as the number of weeks worked, weekly hours worked, availability of fringe benefits through a job, the likelihood that either parent was working for pay at the time of the five-year survey, or parents' highest level of education.

Additional analyses suggest the impacts of MD PROMISE on parents' employment and earnings differed by whether a parent received SSA payments at enrollment and the youth's impairment. In households where at least one parent received SSA payments, the program increased the employment rate in the year before the survey by 11 percentage points; it had no impact on parents' employment in families where no parent received SSA payments (Appendix Table F.22). In households where a parent received SSA payments, the average employment rate of control group parents was 26 percent, whereas in households where no parent received SSA, it was 78 percent. Because a larger share of parents in households where a parent received SSA was not employed, the program might have had more opportunities to improve these rates. Moreover, the benefits counseling that families received might have influenced the employment of parents receiving SSA benefits. Among youth with impairments other than intellectual, developmental, or mental, MD PROMISE decreased parents' earnings in the year before the survey by $7,189 (relative to the control group mean of $31,653) and during the five years after RA by 17,536 (relative to the control group mean of $133,793). Among parents of youth with other impairments, it either increased or did not affect earnings (Appendix Table F.23).

Figure VI.5. MD PROMISE impacts on parents' primary outcomes in the five years after RA



Source: Parent five-year survey; SSA data.

Note: All outcomes are measured at the time of the five-year parent survey unless otherwise specified. Monetary values are in 2020 dollars. See Appendix Tables F.8–F.17 for more details.

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

RA = random assignment; Social Security Administration.

2. MD PROMISE had no impact on parents' SSA payments

MD PROMISE did not affect the likelihood that at least one parent received SSA payments in the fifth year after RA, the amount of SSA payments that parents received that year, or the total amount of SSA payments they received during the five years after RA (Figure VI.5 and Appendix Table F.15). In the fifth year after RA, one-quarter of control group families had a parent receiving SSA payments; SSA payments to parents averaged $2,689. During the five years after RA, control group households received $12,500 in SSA payments on average. The program did not affect these outcomes.

In other analyses, we found that the program's effect on parents' SSA payments differed depending on the youth's impairment. Among youth with impairments other than intellectual, developmental, or mental, MD PROMISE increased the likelihood of parents' receiving SSA payments in the fifth year after RA by 8 percentage points (over the control group mean of 12 percent), and the SSA payments received in that year by $1,304 (over the control group mean of $1,418). It had no impact on these outcomes among the parents of youth with other disabilities (Appendix Table F.23). This pattern is consistent with the subgroup findings for earnings, suggesting that the program nudged parents of youth with impairments other than intellectual, developmental, or mental impairments away from employment and towards increased use of SSA programs.

Additional analyses show that, although MD PROMISE did not affect parents' SSA payments or OASDI benefits, it decreased parents' likelihood of receiving SSI in the first four years after RA by about 2 percentage points each year. The amount of SSI payments parents received decreased only in the first year after RA (Appendix Table F.15).

3. MD PROMISE had no impact on parents' health insurance coverage or Medicaid and Medicare expenditures

In about 94 percent of control group families, at least one parent was covered by health insurance at the time of the five-year survey; MD PROMISE did not affect this outcome (Figure VI.5 and Appendix Table F.16). However, the program's impacts on health insurance differed depending on whether a parent received SSA payments at RA. It decreased the likelihood that either parent was covered by health insurance in families with a parent receiving SSA payments at RA but had no impact among other families (Appendix Table F.22).

During the five years after RA, among control group families, parents' average monthly Medicaid and Medicare expenditures were $778, and the program did not affect these expenditures. The program increased the likelihood that a parent was enrolled in Medicaid during the first two years after RA but had no impact on this outcome in later years. The program also had no impact on parents' type of insurance. Among both the treatment and control groups, 25 percent of families had a parent with private health insurance. Public health insurance coverage ranged from 80 percent in the first year after RA to 84 percent in the fifth year after RA for both groups.

4. MD PROMISE had no impact on parents' income

MD PROMISE did not affect parents' income from earnings and SSA payments in the year before the survey or during the five calendar years after RA (Figure VI.5 and Appendix Table F.17). On average, control group parents' income was $26,271 in the year before the survey and $120,597 during the five years after RA; the program did not affect these outcomes.

Additional analysis shows that the program decreased parents' income in the first calendar year after RA by $1,013 but had no effect on their income in other calendar years. The program also did not affect other measures of parents' economic well-being, such as income in each calendar year after RA, parents' household income in the year before the survey, or the household's likelihood of participating in non-SSA public assistance programs (Appendix Table F.17).

E. Benefits and costs

In conducting the MD PROMISE benefit-cost analysis, we focused on estimating the net benefits (or costs) for each key stakeholder group, as well as across all stakeholders, during the five years after RA. The net benefit (cost) is based on (1) the estimated impacts of MD PROMISE on all youth and families who were offered the opportunity to participate in the program, regardless of their statistical significance; and (2) the calculated cost of delivering the program per treatment group enrollee.

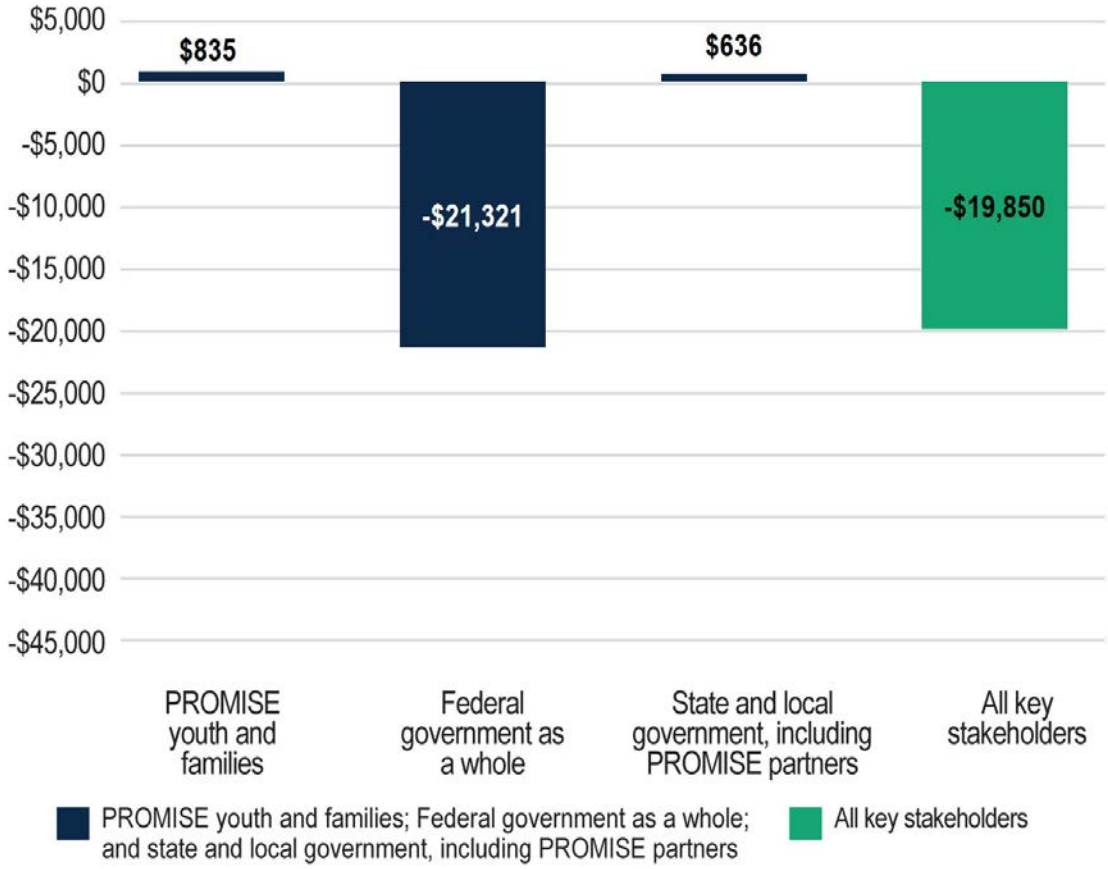
1. The costs of MD PROMISE outweighed its benefits across key stakeholders, but youth and families benefited from their participation

Across all key stakeholders, we estimate that MD PROMISE resulted in a net cost of about $19,850 per treatment group family over the five years after RA (Figure VI.6). The cost of delivering the program ($19,300 per treatment group family) was the primary driver of this finding, which was ultimately larger than the $835 net benefit the program generated through its impacts on youth and family outcomes during the five years after RA.

Here we summarize the high-level benefit-cost findings for each stakeholder group. Appendix Table F.27 provides detailed estimates.

- **Youth and their families.** On average, youth and families benefited from MD PROMISE. Each family experienced about $835 in net benefits during the five-year follow-up period. Increased earnings for youth were the largest driver of these benefits, followed by increased SSI benefits for youth and increased Medicaid and Medicare expenditures for parents. These benefits were partially offset by decreased earnings for parents and decreased Medicaid and Medicare expenditures for youth.
- **The federal government.** MD PROMISE produced a large net cost of $21,321 to the federal government. ED assumed most of the costs associated with program delivery ($19,302 per treatment group family). SSA experienced a net cost of $1,576, stemming mainly from increased SSA payments.
- **State and local MD PROMISE partners.** The program produced a net benefit of $636 to state and local MD PROMISE partners due to reduced youth Medicaid and public support expenditures and decreased incarceration.

Figure VI.6. MD PROMISE benefits and costs to key stakeholders over the five years after RA



Source: Youth five-year survey; SSA data; external data.

Note: Monetary values are in 2020 dollars. See Appendix Table F.27 for more details.

RA = random assignment.

2. The impacts on youth earnings would need to be sizeable for MD PROMISE to be cost neutral after 20 years

We considered the program's benefits and costs beyond the five-year evaluation period. First, we calculated the average impact on youth earnings needed for the program to be cost neutral across all key stakeholders. For MD PROMISE's benefits to equal costs 20 years after RA, it would need to generate an average annual impact on youth earnings of $1,466 per year (Appendix Figure F.1). This impact is $1,034 larger than the size of the point estimate of the program's impact on youth earnings for the fifth year after RA ($431); although impacts were increasing over time, it is unclear if they would increase enough by 20 years after RA to achieve cost neutrality. Second, because the five-year evaluation period might underestimate earnings if youth are building their human capital, we considered how net benefits would likely accrue 20 years after RA. Although MD PROMISE increased youth's enrollment in vocational school, it did not increase their educational attainment overall, so the net benefits did not increase under scenarios that assumed positive returns to education. If we assume a 10 percent return per year of education persists over time, the net benefits across all key stakeholders would be -$17,495 over 20 years

(Appendix Table F.30). Under a high future earnings scenario wherein we forecasted earnings using the upper bound of the 95 percent confidence interval of the estimated impact on earnings (in place of the Year 5 earnings impact estimate), the net benefit across all key stakeholders over 20 years would be $1,827.

F. Summary and discussion

1. Summary of key findings

Table VI.1 summarizes the MD PROMISE impacts on the primary youth and parent outcomes. Overall, MD PROMISE had few impacts on youth and parents' primary outcomes, though it increased youth's SSA payments and income. Across all key stakeholders, MD PROMISE resulted in a net cost of $19,850 per treatment group family over five years. For treatment group youth and families, it delivered an average net benefit of $835 over five years.

Table VI.1. MD PROMISE: Summary of five-year impacts on primary outcomes, by domain

Domain	Primary outcome	Impact summary
Youth		
Education and training	Enrolled in an educational or training program	0
	Has a GED, high school diploma, or certificate of completion	0
Employment and earnings	Employed in a paid job in the past year	0
	Total earnings in the past year	0
	Earnings during the five calendar years after RA	0
Self-determination and expectations	Self-determination score	0
	Youth expects to be financially independent at age 25	0
Health insurance	Covered by any health insurance	0
	Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA	0
SSA payments and knowledge of work supports	Received SSA payments in Year 5 after RA	+++
	SSA payments in Year 5 after RA	+
	SSA payments during Years 1–5 after RA	+++
Economic and social well-being	Income from earnings and SSA payments in the past year	0
	Income during the five calendar years after RA	++
Parents		
Parents' employment and earnings	Either parent worked for pay in the past year	0
	Parents' earnings in the past year	0
	Parents' earnings during the five calendar years after RA	0
Parents' SSA payments	Either parent received SSA payments in Year 5	0
	SSA payments received in Year 5 after RA	0
	SSA payments during the five years after RA	0
Parents' economic well-being	Parents' income from earnings and SSA payments in the past year	0
	Parents' income during the five calendar years after RA	0

Table VI.1 (*continued*)

Domain	Primary outcome	Impact summary
Parents' health insurance	Either parent is covered by health insurance	0
	Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA	0

Note: All outcomes are measured at the time of the five-year youth survey unless otherwise specified. See Appendix Tables F.8–F.17 for more details.

+/++/+++ 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.

GED = General Educational Development; RA = random assignment; SSA = Social Security Administration.

2. Discussion

Although MD PROMISE aimed to increase the educational attainment of transition-age youth, as shown in its logic model, the findings suggest it might not have succeeded. The program reduced the share of youth who had a GED, high school diploma, or certificate of completion at the time of the five-year survey and did not affect the likelihood that youth were enrolled in an educational or training program at that time. Nonetheless, it increased the share of youth attending postsecondary vocational, trade, or technical school at the time of the five-year survey. It also increased youth's labor force participation at the time of the five-year survey. Thus, part of the decline in the share of youth with a high school credential might be attributable to the exposure to career exploration and work-based learning experiences offered by the program, leading some youth to seek employment and education closely connected to the labor market instead of traditional educational pursuits.

MD PROMISE increased the share of youth with paid employment in the early years after the start of the program, but the effect was not long lasting. Although the program did not affect the primary employment and earning outcomes, it increased the likelihood of youth being employed in the first three calendar years after RA. This finding might reflect the employment opportunities youth had while participating in the program; in later years, the control group's employment rate caught up with that of the treatment group. The pattern suggests that the program's approach to assertive case management and employment services was successful in connecting youth to paid work experiences earlier but appears not to have increased their long-term trajectory of paid employment. However, one finding suggests that the program might affect youth's employment in the future. At the time of the five-year survey, it increased youth's labor force participation by about 10 percent.

For 72 percent of youth, the fifth calendar year after RA occurred during the COVID-19 pandemic. The pandemic contributed to a doubling of the annual youth unemployment rate in Maryland, from 8 percent in 2019 to 17 percent in 2020 (Inanc et al. 2022). Baltimore, where about one-quarter of enrollees lived, was particularly hard hit; the youth unemployment rate surged from 5 percent in the second half of 2019 to 25 percent in the first half of 2020 (Inanc 2022). However, we found little evidence to suggest that MD PROMISE had significantly larger impacts on employment among youth surveyed before the onset of the pandemic relative to those surveyed after (Appendix Table F.25). It is possible that the control group's employment would have caught up with that of treatment group in the absence of the pandemic.

The absence of impacts on employment, along with the positive impact on labor force participation, suggests that the program prompted youth to seek employment, although many did not do so successfully.

The nontrivial impact on labor force participation at the time of the five-year survey provides some evidence of the potential for future impacts on youth's employment, despite the program's lack of impacts on employment and earnings during the fourth and fifth calendar years after RA.

MD PROMISE consistently increased youth's income across the five years after RA, but the findings appear to be driven more by increased SSA payments than earnings. There is some evidence that MD PROMISE might have increased youth earnings, but the evidence is very clear that it increased youth's likelihood of receiving SSA payments and the amount received, with the biggest impacts appearing several years after RA. Although we cannot know for certain, it is possible that the impacts on SSA payments are related to the program's benefit counseling, which half the treatment group youth received, and the program's impacts on youth's knowledge of work supports. These findings imply that the program boosted youth's economic well-being overall, but not in a way likely to improve youth's future financial independence.

We found no evidence of impacts on other primary youth outcomes, including self-determination, health insurance coverage, and Medicaid and Medicare expenditures. The absence of impacts on youth self-determination might reflect the program's lack of explicit focus on it. For example, the program provided self-determination services within the context of case management rather than as a distinct program component and did not have any program targets with regard to self-determination (Kauff et al. 2018).

Overall, we found no evidence that the program improved parents' outcomes. It had no impact on parents' employment, earnings, SSA payments, or income as of five years after enrollment. This pattern is consistent with the earlier evaluation findings showing an absence of impacts on these outcomes 18 months after enrollment. Although the MD PROMISE model emphasized engagement of the whole family in case management, services, and trainings, the five-year findings indicate that the program was unable to affect parents' outcomes. The process study suggests that it had no clear expectation on the share of parents who would need or receive employment services and found that it provided job search services to only about 5 percent of treatment group parents and employer outreach to only 3 percent. Nonetheless, the program had a large impact on the employment of parents who received SSA payments at RA, increasing their employment rate by more than 40 percent over the control group at the time of the five-year survey. The employment rate of these control group parents was low compared with their counterparts who were not receiving SSA payments (26 percent versus 78 percent). Thus, the program may have successfully targeted those parents in greatest need of employment services despite representing a relatively small share of all parents. The large impact on the employment rate of parents receiving SSA payments at RA might also reflect effects of the benefits counseling services provided to families.

During the five years after enrollment, the costs of MD PROMISE outweighed its benefits when viewed across all key stakeholders. The program resulted in a net cost of about $19,850 per treatment group family. Youth and families experienced $835 in benefits on average during the five-year follow-up period. The highest cost was related to program components, averaging $19,300 per treatment group family. At the same time, we did not measure or monetize all outcomes that could capture the benefits of the program. Also, though the five-year impact findings largely suggest that it is unlikely the program will generate net benefits in the future, a few findings provide grounds for optimism. The program increased youth's expectations about their employment prospects—a promising outcome for the future because youth expectations about their future employment predict their likelihood of obtaining and maintaining a job (Holwerda et al. 2013). The program also increased youth's labor force participation and the share of youth attending postsecondary vocational, trade, or technical school at the time of the

five-year survey. If these impacts lead to increased employment and earnings in future years, the net benefits of MD PROMISE might become larger over time.

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VII. NYS PROMISE

Summary of five-year impacts and net benefits of NYS PROMISE

- NYS PROMISE increased youth's employment rates and expectations of financial independence, while it decreased youth's enrollment in education or training and monthly Medicaid and Medicare expenditures.
- The program had no impact on youth's receipt of a GED, high school diploma, or certificate of completion; earnings; receipt of SSA payments; income from earnings and SSA payments; self-determination; or overall health insurance coverage. It increased income among older youth (age 16 at RA).
- NYS PROMISE had no impact on parents' employment, earnings, income, health insurance coverage, or Medicaid and Medicare expenditures.
- Across all key stakeholders, NYS PROMISE resulted in a net cost of $26,666 per family over five years, including a net cost of $1,047 to treatment group youth and families over that period. ◢

A. Program overview and a review of prior findings

To provide a context for the five-year impacts of NYS PROMISE presented in subsequent sections, we first summarize key features of the program, the findings from the process study of the first three years of program operations (McCutcheon et al. 2018), and the findings of the 18-month impact study (Mamun et al. 2019a).

1. Program overview

The New York State Office of Mental Health was the lead agency for NYS PROMISE. It contracted with the Research Foundation for Mental Hygiene (RFMH), a quasi-governmental nonprofit that supports research activities, to lead the program's implementation. RFMH shared 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 program 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—which were largely LEAs—delivered case management to the youth; (2) New York State Special Education Parent Centers, funded by the New York State Department of Education,[31] delivered family coaching and training to the parents; and (3) local service providers delivered employment and education services to the youth and 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, the program chose the RDSs, parent centers, and service providers from among organizations 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 move was not part of the original model. The program also contracted with the

[31] The parent centers in Western New York and New York City also received funding from ED to serve as Parent Training and Information Centers and Community Parent Resource Centers.

Marriott Foundation's Bridges from School to Work initiative to train and support the community employment specialists.

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 refer them to NYS PROMISE service providers and other community resources. In addition to the employment and education services, benefits counseling, and financial education that local service providers offered to the treatment group, family coaches provided information and four core trainings to treatment group parents on (1) transition planning, (2) effective advocacy, (3) self-determination (that is, identifying their family's needs and goals) and developing an action plan to connect their family with community-based resources, and (4) understanding special education services and SSI policies and work supports.

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 a status quo responsibility of the LEAs. Instead, the program supported education through coaches who assisted youth and families 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, and financial planning (information on loans and scholarships); and goal setting.

2. Summary of findings from the process analysis

An in-depth process study of NYS PROMISE during the first three years of operations documented the program's structure and service model and described its implementation during the period from October 2014 through October 2017 (McCutcheon et al. 2018). Here we summarize the key findings from that analysis.

The findings of the process analysis suggest that the contrast between the program and control group youth enrolled in NYS PROMISE may have been muted by the low take-up rate of most PROMISE services, the challenges the program faced in delivering intensive services, and the opportunities for control group youth to participate in similar transition services.

Low take-up of most services. 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 and family coaches held meetings with program participants occasionally—less than once per quarter, on average—and referred them to core PROMISE services infrequently. Although they 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 completed those services. Case managers and family coaches referred relatively few youth to unpaid or paid work experiences (between 7 percent and 15 percent), and relatively few families to benefits counseling (19 percent) and financial education (12 percent). About 30 percent of the youth had parents who received at least one core training from a family coach. Although participation in formal parent trainings was low, nearly all participating youth and families (95 percent) received general supports and information on a variety of topics.

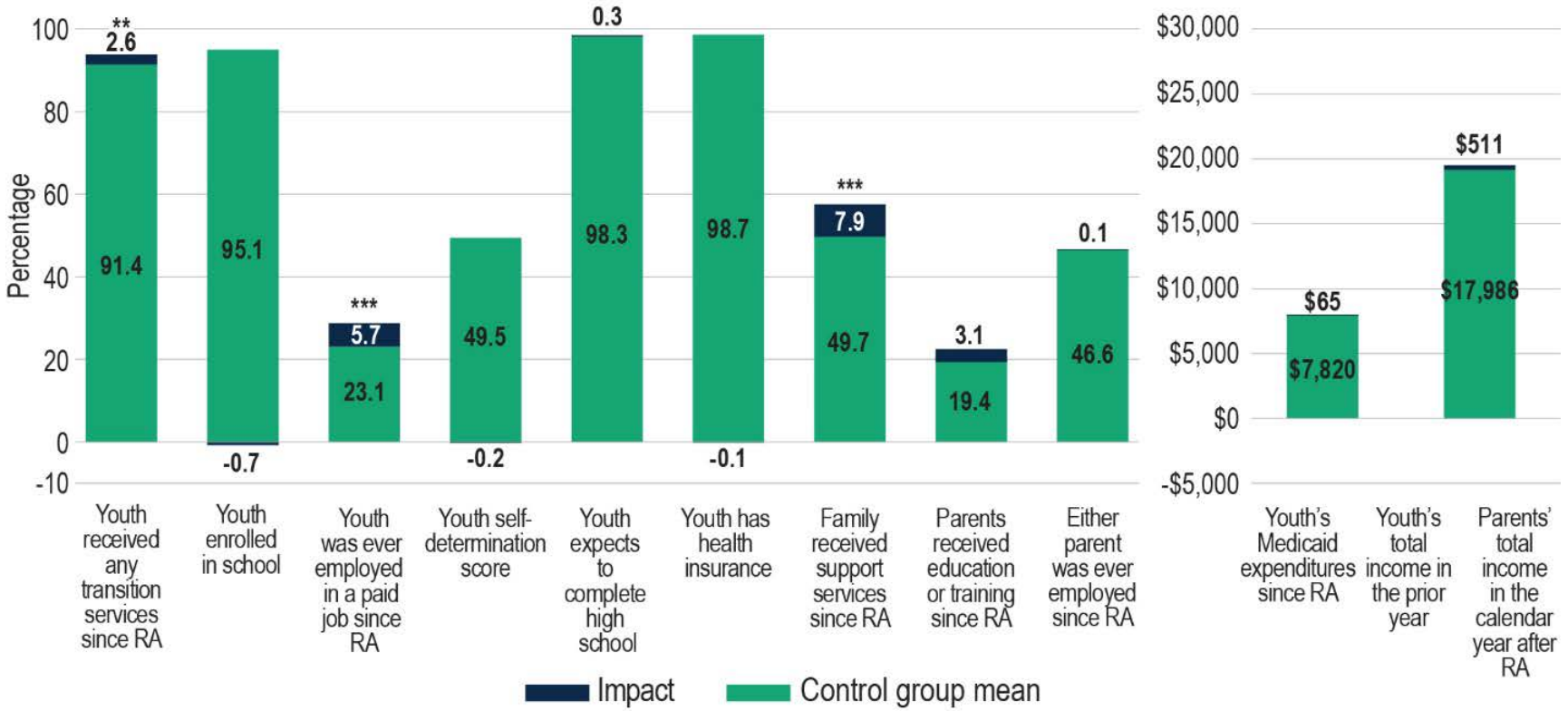
Challenges in delivering intensive services. Six factors, including a few procedural issues that might have restricted service delivery, help explain the low service take-up rates reflected in the program data. First, program managers and staff experienced challenges with data entry, which likely resulted in the underreporting of referrals and completion of NYS PROMISE services. Second, case managers and family coaches were responsible for recruiting youth into the evaluation and providing case management to those who enrolled. Meeting the enrollment target was the program's top priority but was challenging, so staff dedicated most of their time during the 19-month enrollment period to recruitment and little time to engaging treatment group enrollees 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. Finally, staff in all regions cited families' complex needs and unstable living situations as a major barrier to their ongoing engagement with the program.

Availability of transition services in the community outside of NYS PROMISE. In addition to low service take-up, two other issues could have muted the distinction between the experiences of treatment and control group youth enrolled in the evaluation. First, through the active outreach and meetings with their NYS PROMISE case managers and family coaches embedded in the program model, 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 that were not part of the program model, such as attendance at IEP meetings. Second, there were delays in case managers making referrals to and service providers initiating 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. Although the availability of program employment services to youth as young as age 14 was supposed to distinguish those services from status quo employment services (because VR and local employment service providers typically began serving youth at age 18 or 19), the delays in making referrals and delivering services muted this distinction. The process analysis concluded that together these issues likely reduced the potential for the program to affect the outcomes of treatment group youth relative to the control group youth.

3. Summary of 18-month impact analysis findings

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 RA (Figure VII.1). 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, expectations, health insurance coverage, or income. It also had no impact on the parents' employment or income in the calendar year after random assignment.

Figure VII.1. NYS PROMISE impacts on youth and parent primary outcomes in the 18 months after RA



Source: Mamun et al. 2019a.

Note: All outcomes are measured at the time of the 18-month surveys unless otherwise specified.

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

RA = 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. The program improved several short-term outcomes that could be considered either program services or outputs, including use of transition and family support services and youth employment. These positive impacts were indicative of the program achieving its intended outputs in these critical areas.

There were few impacts on other youth or parent outcomes that might have been affected by these program services and outputs. These findings might reflect the reported low take-up of some services, such as benefits counseling and financial education and the lack of completed services received by the families, as reported in the program MIS data (McCutcheon et al. 2018). Youth not using these services very much could explain the absence of impacts on short-term outcomes, such as hours of key transition services received. Similarly, the program had no impact on the hours of key services received by parents and other family members, despite its helping more families receive those services. The findings suggest 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 the control group.

B. Baseline characteristics of the five-year follow-up sample

The main analytic sample for the five-year impact analysis of NYS PROMISE consisted of 1,662 randomly assigned youth who completed the five-year follow-up survey (Appendix Table G.1). In this section, we describe the baseline characteristics of this sample and comment on any differences between the program and control group youth within the sample. Except for data on youth's and parents' race and ethnicity, all baseline characteristics are based on data from SSA administrative records.

Demographic characteristics. About one-third of the youth were female. At RA, 38 percent of the youth were age 14, 32 percent of the youth were 15, and 30 percent of the youth were 16. About 85 percent of youth reported English as their preferred written and spoken language. Nearly 9 in 10 youth lived with their parents at the time they applied for SSI; of the remaining youth, most lived in their own households or alone. The largest racial and ethnic groups were non-Hispanic Black (36 percent) and Hispanic (34 percent). The racial and ethnic composition of parents was similar to that of the youth.

Impairment. We grouped the youth's primary impairments, as recorded in baseline SSA administrative data, into five categories. The largest category was intellectual or developmental disability (58 percent), likely because NYS PROMISE recruited heavily from District 75 of the New York City Department of Education, which serves youth throughout the city who have autism spectrum disorders, significant cognitive delays, emotional disturbances, sensory impairments, or multiple disabilities (McCutcheon et al. 2018). The next largest group was other mental impairments (25 percent), followed by physical disabilities (12 percent); other or unknown disabilities (4 percent); and speech, hearing, or visual impairments (1 percent).

SSA program participation. Nearly all youth (96 percent) received SSI payments during the month of RA. On average, youth had qualified for SSI at age 6. A small share of youth (10 percent) received OASDI payments during the month of RA. Across all youth, average annual SSI payments during the year before the RA month were $7,568; average SSA payments were $7,840. Almost one fifth of youth lived in a household with multiple SSI-eligible children. About 31 percent had a parent receiving SSA payments at the time of RA.

Earnings. Very few youth (7 percent) had any earnings in the calendar year before RA, as would be expected, given their young ages. On average, youth had earned $56 in that period. Most (63 percent) had

at least one parent with earnings in the calendar year before RA. Across all youth, parent earnings averaged $14,422 that year.

Differences between the treatment and control groups. On average, youth in the treatment and control groups had similar characteristics, which is consistent with the RA study design. We compared the two groups across 25 characteristics at the time of RA and found 6 statistically significant differences. Youth in the treatment group were more likely than those in the control group to live in their parents' household and less likely to live in their own household or alone. Youth in the treatment group youth were six months younger at their most recent SSI application, on average, which is likely why they also had a six-month longer average gap between their earliest SSI eligibility and RA. Treatment group youth also received lower OASDI payments in the year before RA. Parents in the treatment group were more likely to be included in administrative analyses and less likely to receive SSI or OASDI payments in the year before RA. We identified unbiased estimates of program impacts by comparing the treatment and control groups while accounting for the differences in baseline characteristics through regression adjustment.

C. Five-year impacts on youth

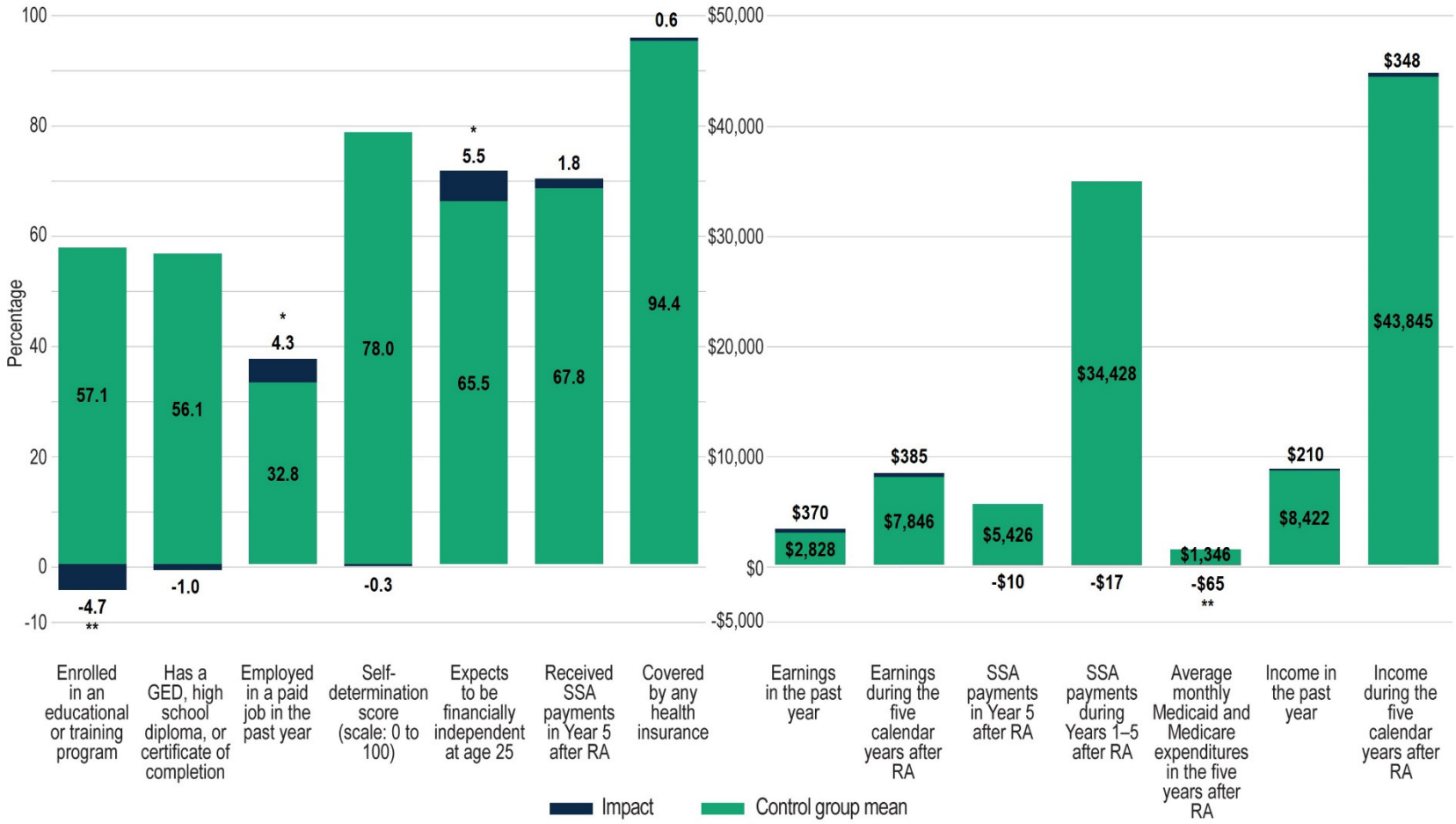
The findings in this section document whether the services provided by NYS PROMISE led to impacts on youth outcomes in several domains during the first five years after RA. The impact estimates show that the program increased the share of youth employed in paid jobs and youth's expectations of financial independence at age 25 (Figure VII.2). It decreased youth's enrollment in education or training and Medicaid and Medicare expenditures. The program had no impact on receipt of a GED, high school diploma, or certificate of completion; self-determination; health insurance coverage; receipt of SSA payments; or income from earnings and SSA payments. Overall, we found little evidence that the program's impacts on youth outcomes differed based on youth's age, sex, or impairment or parents' receipt of SSA benefits at the time of enrollment; we describe the exceptions to this pattern when discussing the findings below.

1. NYS PROMISE decreased youth's enrollment in education and training programs and had no impact on their receipt of a high school diploma or equivalent credential

NYS PROMISE had a negative impact on youth's enrollment in education and training programs and no impact on their receipt of a high school diploma or equivalent credential (Figure VII.2 and Appendix Table G.8). About 57 percent of control group youth were enrolled in an educational or training program at the time of the five-year survey. The program decreased the share of treatment group youth enrolled in such a program by 5 percentage points. One possible explanation for the decreased enrollment is the substitution of employment for continued schooling; the program increased treatment group youth's employment (discussed in the next section). Youth who gained employment experience might have decided to focus on work after obtaining a high school diploma or equivalent credential rather than pursue additional education or training.

As expected, the share of youth who had a GED, certificate of completion, or high school diploma grew considerably over time. Slightly over half (56 percent) of youth in both the treatment and control groups had a GED, certificate of completion, or high school diploma at the time of the five-year survey, whereas only 4 percent had such a credential at the time of the 18-month survey (Mamun et al. 2019a). NYS PROMISE did not affect the share of youth who had received a high school completion credential five years after RA.

Figure VII.2. NYS PROMISE impacts on youth primary outcomes in the five years after RA



Source: Youth five-year survey; SSA data.

Note: All outcomes are measured at the time of the five-year youth survey unless otherwise specified. Monetary values are in 2020 dollars. See Appendix Tables G.8–G.17 for more details.

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

GED = General Educational Development; RA = random assignment.

Increasing graduation from secondary education and enrollment in postsecondary education and training were outcomes targeted by NYS PROMISE (McCutcheon et al. 2018). However, the program's design did not include specific services related to secondary education because program leadership viewed such services as the responsibility of the LEAs. The program offered services related to postsecondary education, but take-up was low.

In additional analyses, we found that NYS PROMISE increased the share of treatment group youth not attending school by 4 percentage points but had no effect on enrollment in a training program. These findings suggest that the decline in school attendance drove the decrease in educational or training program enrollment noted above. The program had no effect on enrollment in postsecondary education, the highest grade of school completed, or the likelihood of being suspended or expelled from school in the past year. It also did not affect receipt of a training credential in the past year.

2. NYS PROMISE increased youth's employment rates but had no impact on earnings

NYS PROMISE increased youth's employment rates (Figure VII.2 and Appendix Table G.9). One-third of control group youth had been employed in a paid job in the year before the five-year survey; the program increased this share by 4 percentage points. Analyses of other employment measures show that the program also increased employment rates over time. It increased the share of youth ever employed in the first four of the five calendar years following RA.

Although treatment and control group youth's employment followed a similar trend over time, NYS PROMISE increased employment rates by about 4 percentage points in each of the first three calendar years after RA and by 7 percentage points in the fourth calendar year (Figure VII.3). The program had no impact on the youth employment rate in the fifth calendar year after RA, the share employed in any job (paid or unpaid) in the year before the five-year survey, or the share employed at the time of the five-year survey. Nonetheless, it increased labor force participation by 5 percentage points at the time of the five-year survey. Overall, the findings suggest that the program consistently prompted more youth to engage in and seek employment during the five years after RA.

Despite the impacts on employment, NYS PROMISE had no impact on earnings (Figure VII.2). Control group youth earned an average of $2,828 and $7,846 in the year before the five-year survey and during the five calendar years after RA, respectively, and NYS PROMISE did not impact these outcomes. There were also no impacts on average weekly earnings at the time of the five-year survey or earnings in any of the five calendar years after RA (Figure VII.4 and Appendix Table G.9).

Youth's earnings over time followed a pattern similar to the one for employment, except they continued to increase in the fifth calendar year after RA (Figure VII.4). An escalation of employment and earnings would be expected, given the maturation of the youth, which makes the observed decline in employment in the fifth calendar year after RA surprising. Nearly all youth (99 percent) who enrolled in NYS PROMISE did so in 2015 or 2016. For these youth, the fifth calendar year after RA coincided with the COVID-19 pandemic. Thus, the pandemic likely contributed to the decline in employment in the fifth calendar year after RA. Because the pandemic reduced employment options for those interested in working, it could explain the pattern of NYS PROMISE increasing labor force participation but not employment in the fifth year after RA. The higher average earnings in that year suggest that youth who were able to find employment during the pandemic commanded higher wages or worked more hours.

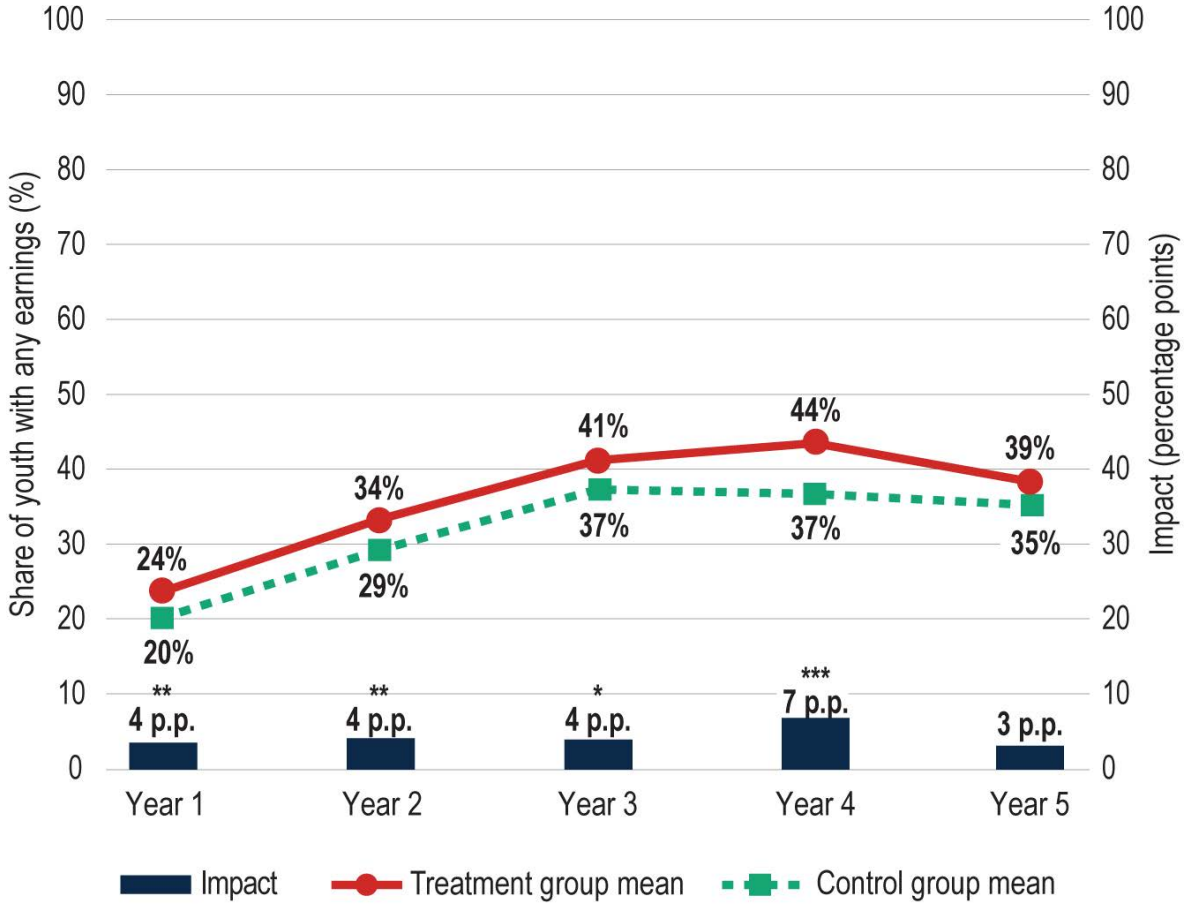
We found evidence to suggest that the program's impacts on youth earnings during the five years after RA might have differed by youth's impairment (Appendix Table G.23). NYS PROMISE increased the

earnings of youth with intellectual or developmental disabilities by $1,474 but had no impact for youth with other types of impairments.

In additional analyses, we found that NYS PROMISE had positive impacts on the following employment-related outcomes (Appendix Table G.9):

- **Youth employment in integrated settings.** In the year before the five-year survey, about a quarter (23 percent) of control group youth were employed in a job where most other workers did not have disabilities; the program increased this share by 6 percentage points. The program also increased the share of youth employed outside of school-sponsored work activities and the share who received supports or services in getting or keeping a job in the year before the survey. The integrated employment finding is notable, given that a majority of youth enrolled in the program had an intellectual or developmental disability. New York State's participation in the Partnerships for Employment Systems Change project may have contributed to the positive impacts for youth with intellectual or developmental disabilities. Occurring during roughly the same period as NYS PROMISE (2011 to 2016), the project aimed to increase competitive integrated employment among youth with intellectual or developmental disabilities by fostering cross-agency and cross-system collaboration (Christensen et al. 2017; Tucker et al. 2017). The project informed the design of NYS PROMISE, especially its emphasis on competitive integrated employment (McCutcheon et al. 2018). Although all youth in the state could potentially benefit from systems change, NYS PROMISE might have better positioned treatment group youth to engage with and benefit from the systems.
- **VR applications.** About 18 percent of control group youth applied for VR services in the five years after RA; NYS PROMISE increased this share by 4 percentage points. Despite the increase, the program had no impact on use of VR services. At 18 months after RA, we found no impact on VR applications (Mamun et al. 2019a). The emergence of an impact by five years after RA suggests that case managers followed through on their plans to refer treatment group youth to VR when the youth had only two years of high school left or when NYS PROMISE ended (McCutcheon et al. 2018).

Figure VII.3. NYS PROMISE youth employment rates, by calendar year after RA



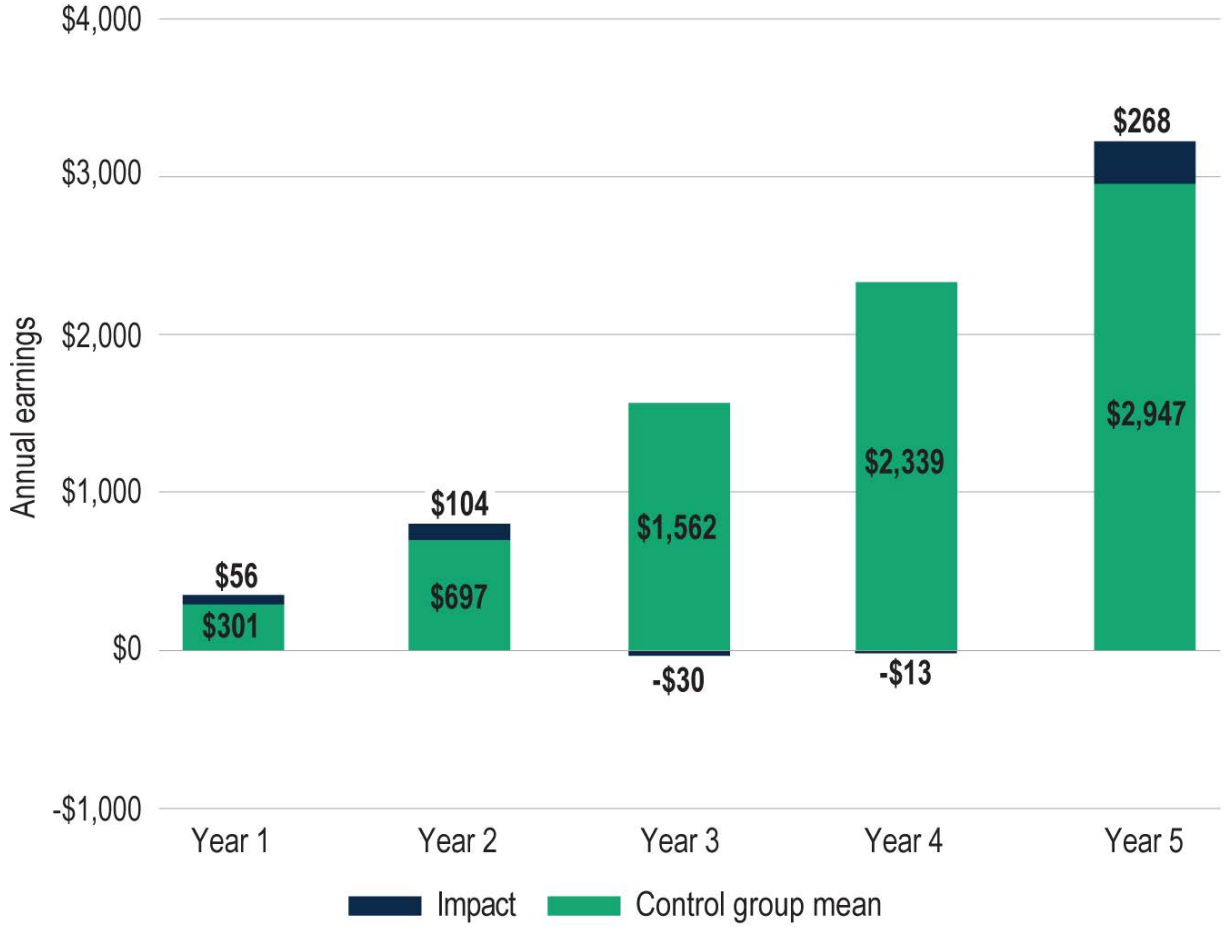
Source: SSA data.

Note: See Appendix Table G.9 for more details. Due to rounding, the sum of control group mean and impact may not equal the treatment group mean.

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

p.p. = percentage point. RA = random assignment.

Figure VII.4. NYS PROMISE youth earnings in each calendar year after RA



Source: SSA data.

Note: See Appendix Table G.9 for more details. Earnings are measured in 2020 dollars.

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

RA = random assignment.

3. NYS PROMISE increased youth's expectations of financial independence but had no impact on their self-determination

NYS PROMISE positively affected youth's expectations of financial independence (Figure VII.2 and Appendix Table G.10). About two-thirds (66 percent) of control group youth expected they would be financially independent at age 25; the program increased this share by 6 percentage points. It also increased the share of parents who believed it was important that the youth be employed eventually from 88 percent to 92 percent and the share of youth who expected to be employed in a paid job at age 25 from 90 percent to 93 percent, although the latter impact fell just short of statistical significance (*p*-value = 0.10). It had no impact on youth or parent expectations for youth's postsecondary education or independent living. The findings on employment and education expectations are consistent with the positive impact observed on youth employment and the lack of an impact observed on youth's receipt of a high school diploma or equivalent credential.

NYS PROMISE had no impact on youth's self-determination or any subdomains of self-determination. The program did not target self-determination directly, offering no training on the topic to youth (McCutcheon et al. 2018).

4. NYS PROMISE had no impact on youth's SSA payments

NYS PROMISE did not affect youth's likelihood of receiving SSA payments in the fifth year after RA, the amount of SSA payments received in that year, or the total amount of SSA payments received during the five years after RA (Figure VII.2 and Appendix Table G.11). Among control group youth, more than two-thirds received SSA payments in the fifth year after RA, average SSA payments were $5,426 that year and $34,428 during the five years after RA.

The likelihood of receiving SSA payments and the amount of SSA payments received declined over time. In the first year after RA, virtually all control group youth (98 percent) received SSA payments, and the average payment was $8,310. In the fifth year of RA, the equivalent figures were 68 percent and $5,426. The decline in payments is not surprising, given that as youth turn 18, SSA conducts an age-18 redetermination to assess their eligibility for continued SSI payments based on the disability rules for adults. Indeed, SSA had reached a final decision to cease payments for one-quarter (22 percent) of control group youth by five years after RA. NYS PROMISE had no impact on any annual payment outcomes or age-18 redetermination status. The pattern of no impacts held when examining SSI payments and OASDI benefits separately.

NYS PROMISE's impacts on youth's SSA payments differed based on a youth's impairment (Appendix Table G.23). The program did not affect SSA payments in the fifth year after RA for youth with intellectual or developmental disabilities or other mental impairments, but it increased payments by $797 (14 percent) over the control group mean of $5,867 for treatment group youth with other impairments. It also increased the likelihood that these youth received SSA payments in the fifth year after RA by 10 percentage points over the control group mean of 71 percent.

In additional analyses, we found that NYS PROMISE increased youth's knowledge of the SSI student earned income exclusion (Appendix Table G.11). About 7 percent of control group youth were aware of this provision; the program increased this share by 4 percentage points. The program had no impacts on youth's knowledge of the other work support and SSA provisions queried, including ABLE accounts, the SSI earned income exclusion, PASS plans, or other SSA policies.

5. NYS PROMISE did not affect the share of youth covered by health insurance, but it reduced youth's monthly Medicaid and Medicare expenditures

NYS PROMISE had no impact on the share of youth who had any health insurance, but it reduced average monthly Medicaid and Medicare expenditures by $65 relative to the control group average of $1,346 (Figure VII.2 and Appendix Table G.12). A large majority of youth in the control group (94 percent) had health insurance at the time of the five-year survey, virtually the same rate as those in the treatment group. Because nearly all youth had health insurance, there was little room for improvement on this outcome. However, we found evidence to suggest that NYS PROMISE changed youth's type of health insurance. There is suggestive evidence that the program increased the share of youth with private health insurance—but the point estimate of 2 percentage points is marginally not significant (*p*-value=0.11). This increase may be associated with the program's positive impact on youth employment, with youth potentially obtaining private health insurance from their employer. The increase in private health insurance coverage likely explains the reduction in average monthly Medicaid and Medicare

expenditures. Further, the impacts on Medicaid and Medicare expenditures appears to have grown over time. In the first year after RA, the program reduced these expenditures by $32, but in the fifth year after RA, the program reduced these expenditures by $120, while the control group average each year remained stable at about $1,300.

6. NYS PROMISE had no impact on youth's income from earnings and SSA payments

NYS PROMISE did not affect youth's income from earnings and SSA payments in the year before the five-year survey or during the five calendar years after RA (Figure VII.2 and Appendix Table G.13). Control group youth had an average income of $8,422 in the year before the survey and $43,845 during the five calendar years after RA. The figures for treatment group youth were similar.

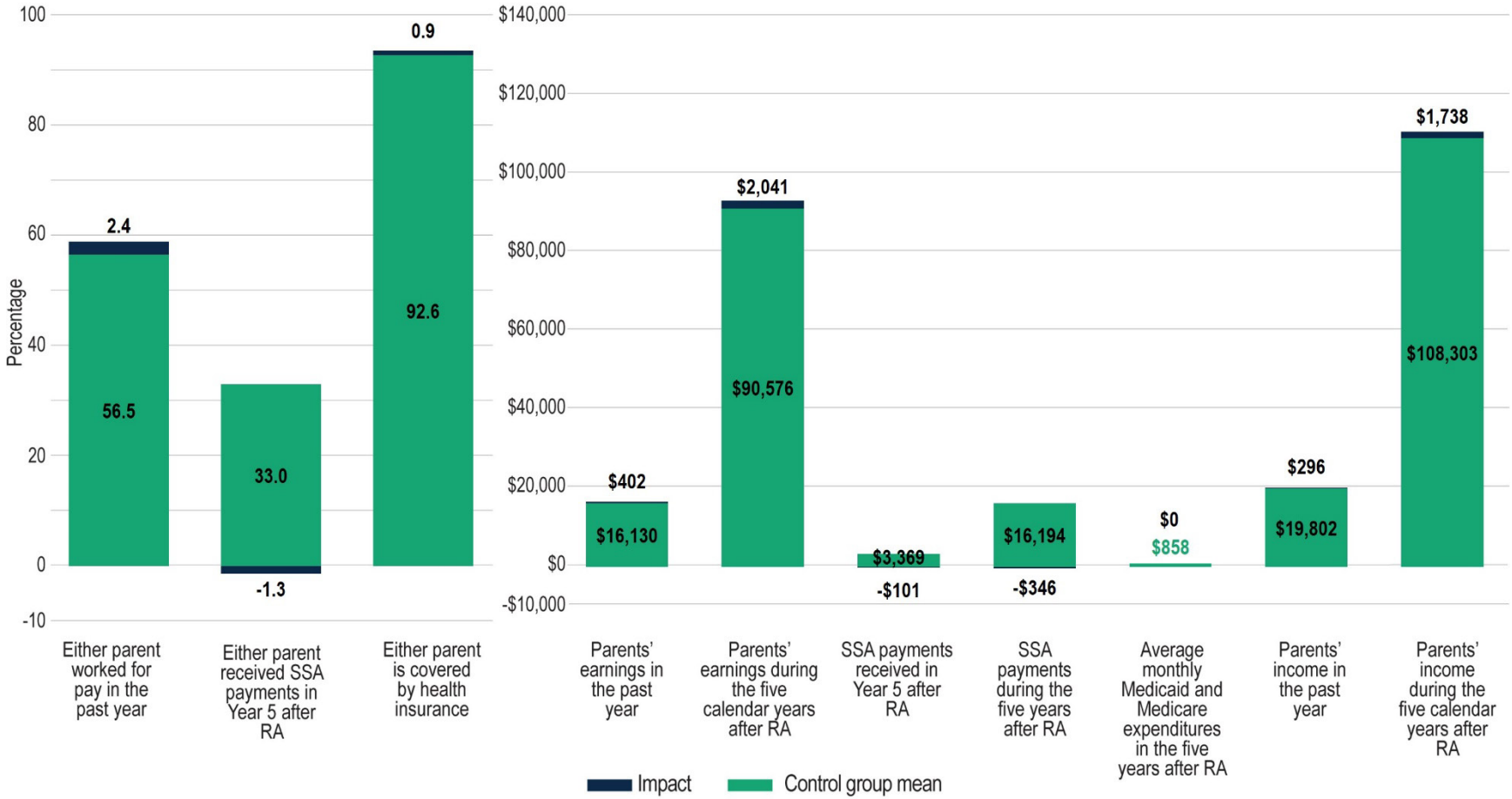
The program's impacts on youth income in the year before the survey differed by youth's age at enrollment. The program increased income for youth who enrolled in NYS PROMISE at age 16 by $1,183—a 14 percent increase over the control group mean of $8,526. It had no impact on the income of youth who enrolled at age 14 or 15 (Appendix Table G.20).

In additional analyses, we found that similar shares of youth in the control and treatment groups were engaged in productive activities (including schooling, training, and looking for or engaging in employment), living independently, married or in a marriage-like relationship, and responsible for at least one child. NYS PROMISE also did not affect the economic outcomes of youth's households (Appendix Table G.13). The program increased the share of youth ever arrested by 3 percentage points, but it did not affect other criminal justice system outcomes (the number of arrests, the likelihood of being arrested in the past year, the likelihood of ever being incarcerated, and the length of incarceration). The program also increased the share of youth who rated their health as fair. Nothing in the process analysis explains the impact on arrests or health. The explanation could lie in the program's impacts of increasing youth's employment while reducing enrollment in education and training programs. A significant body of research has shown a positive association between youth employment and delinquent behavior (Staff et al. 2010), particularly among youth who work long hours, and a negative association between education and criminality (Machin et al. 2011; Hjalmarsson et al. 2014; Anderson 2014; Bell et al. 2022).

D. Five-year impacts on parents

The findings in this section document whether the services provided by NYS PROMISE led to impacts on parent outcomes during the first five years after enrolling in the program. The impact estimates revealed that the program had no impacts on parents' employment or earnings, likelihood of health insurance coverage, Medicaid and Medicare expenditures, or SSA payments five years after enrollment in NYS PROMISE (Figure VII.5). Generally, we found little evidence that the program's impacts on parent outcomes differed based on their youth's age, sex, or impairment or their own receipt of SSA benefits at the time of enrollment; we describe the exceptions when discussing the findings below.

Figure VII.5. NYS PROMISE impacts on parent primary outcomes in the five years after RA



Source: Youth five-year surveys; SSA data.

Note: All outcomes are measured at the time of the five-year parent survey unless otherwise specified. Monetary values are in 2020 dollars. See Appendix Tables G.8–G.17 for more details.

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

RA = random assignment; SSA = Social Security Administration.

1. NYS PROMISE had no impact on parents' employment or earnings

NYS PROMISE did not affect the likelihood that either parent worked for pay in the year before the five-year survey, parents' earnings in that year, or their earnings during the five calendar years after RA (Figure VII.5 and Appendix Table G.14). In slightly over half (57 percent) of control group families, at least one parent worked for pay in the year before the five-year survey. On average, control group parents earned $16,130 in the year before the survey and $90,576 over the five calendar years after RA. The program did not affect any of these earnings-related outcomes. NYS PROMISE had no impact on parents' employment or earnings in any calendar year after RA. Treatment and control group parents' employment and earnings followed a similar trend over time. They tended to increase in each of the first three calendar years after RA and then declined, particularly in the fifth calendar year after RA. As with youth, the more substantial decline in the fifth calendar year after RA might be due to the COVID-19 pandemic.

Additional analyses suggest NYS PROMISE also had no impacts on related outcomes, such as parents' educational attainment, employment, or labor force participation at the time of the five-year survey, and the weeks or hours worked in the year before the survey. Although some treatment group parents may have sought employment or education support from their family coach, NYS PROMISE did not offer specific services in these areas to parents (McCutcheon et al. 2018). Benefits counseling and financial education covered some employment-related topics, such as work incentives, but few parents participated in those services. Given the absence of services dedicated to employment and education, low take-up of related services, and parents' generally high employment rate at enrollment, this absence of impacts is not surprising.

2. NYS PROMISE had no impact on parents' SSA payments

NYS PROMISE did not affect the likelihood that at least one parent received SSA payments in the fifth year after RA, the amount of SSA payments parents received that year, or the total amount of SSA payments parents received during the five years after RA (Figure VII.5 and Appendix Table G.15). In the fifth year after RA, one-third of control group families had at least one parent who received SSA payments; overall, the annual SSA payments to parents averaged $3,369. During the five years after RA, parents in control group families received a total of $16,194 in SSA payments. The program did not affect these outcomes, nor did it affect outcomes when looking at SSI payments and OASDI benefits separately. These findings are not surprising, given the absence of impacts on earnings.

3. NYS PROMISE had no impact on parents' health insurance coverage and expenditures

NYS PROMISE had no impact on parents' health insurance coverage or Medicaid and Medicare expenditures (Figure VII.5 and Appendix Table G.16). Among the control group, 93 percent of families had at least one parent who had health insurance at the time of the five-year survey. The rate was the same for the treatment group. As with youth, there was little room for improvement on this outcome because nearly all families already had at least one parent with health insurance. During the five years after RA, the average monthly Medicaid and Medicare expenditures for parents in control group families were $858; the program did not affect this outcome. The program also had no impact on parents' type of insurance. Among both the treatment and control groups, 20 percent of families had a parent with private health insurance. Public health insurance coverage ranged from 89 percent in the first year after RA to 82 percent in the fifth year after RA for both groups.

In additional analyses, we found that NYS PROMISE's impact on parents' health insurance coverage differed based on youth's impairment. For youth with intellectual or developmental disabilities, the

program increased the share of treatment group families in which at least one parent had health insurance by 3 percentage points over the control group mean of 92 percent (Appendix Table G.23); it had no impact on the health insurance status of parents of youth with other types of impairments.

4. NYS PROMISE had no impact on parents' income

NYS PROMISE did not affect parents' income from earnings and SSA payments in the year before the five-year survey or during the five years after RA (Figure VII.5 and Appendix Table G.17). On average, control group parents' income from earnings and SSA payments were $19,802 in the year before the survey and $108,303 during the five years after RA; the program did not affect these outcomes. Similarly, in additional analyses, we found that it did not affect parents' household incomes or the likelihood that any member of the household participated in non-SSA public assistance programs, such as SNAP, TANF, or housing assistance. The absence of impacts on these outcomes is consistent with the absence of program impacts on parents' employment, earnings, and SSA payments.

E. Benefits and costs

In conducting the NYS PROMISE benefit-cost analysis, we focused on estimating the net benefits (or costs) for each key stakeholder group, as well as across all stakeholders, during the five years after RA. The net benefit (cost) is based on (1) the estimated impacts of the program on all youth and families who were offered the opportunity to participate in the program, regardless of their statistical significance; and (2) the calculated cost of delivering NYS PROMISE per treatment group enrollee.

1. The costs of NYS PROMISE outweighed its benefits across key stakeholders, but youth and families benefited from their participation

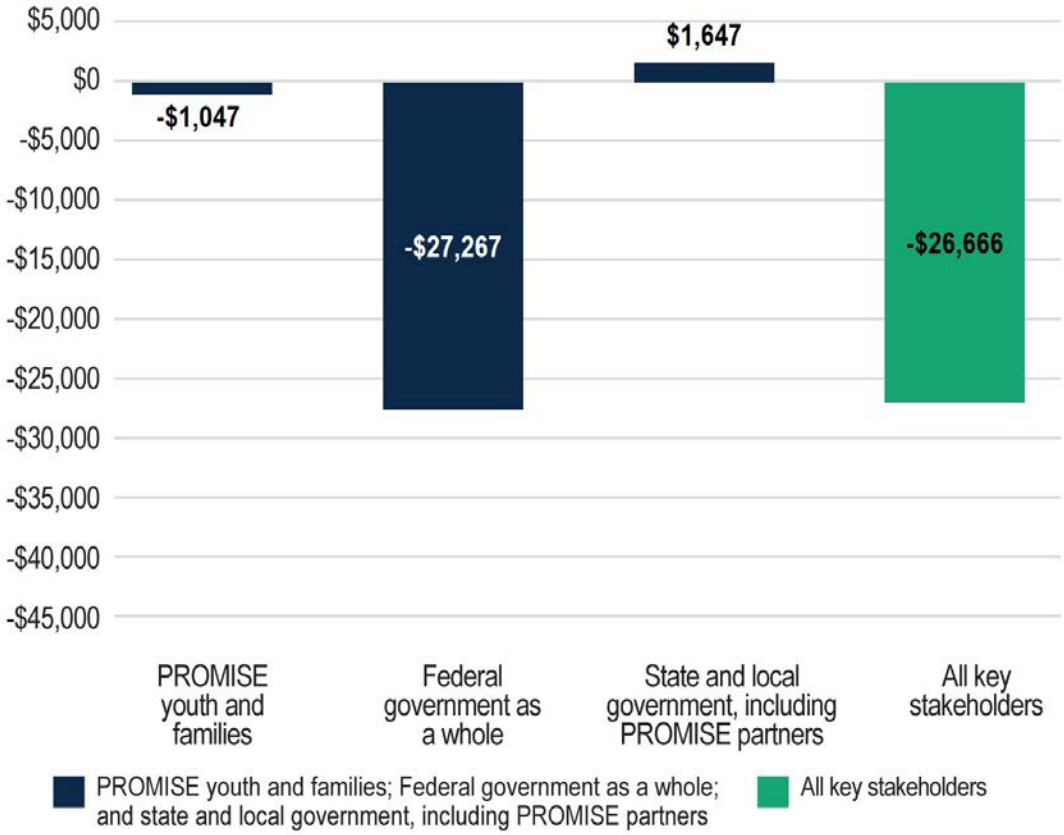
Across all key stakeholders, we estimate that NYS PROMISE resulted in a net cost of $26,666 per treatment group family over the five years after RA (Figure VII.6). The cost of delivering the program ($28,989 per treatment group family) was the primary driver of this finding.

Here we summarize the high-level benefit-cost findings for each stakeholder group. Detailed estimates are shown in Appendix Table G.27.

- **Youth and their families.** Each family experienced about $1,047 in net costs during the five-year follow-up period. Lower youth Medicaid and Medicare expenditures were the primary drivers of this cost and were ultimately not offset by increased parent and youth earnings and fringe benefits. Importantly, the estimates do not include the monetized value of the potential increase in private health insurance coverage (Appendix Table G.12), which might have delivered benefits to youth and their families that are not captured here.
- **The federal government.** NYS PROMISE produced a large net cost of $27,267 per family for the federal government. ED assumed most of the costs associated with program delivery ($28,280 per family). SSA experienced net benefits of $704 per family, driven by increased tax payments and reduced SSA payments to parents and youth. Other government agencies also benefited from increased parent and youth tax payments, but the cost of increased public support to parents from sources other than SSA exceeded those benefits.
- **State and local NYS PROMISE partners.** The program produced a net benefit of $1,647 per family to state and local NYS PROMISE partners, stemming primarily from lower youth and parent Medicaid and Medicare expenditures and to a lesser extent from increased parent and youth tax

payments. These benefits more than offset the costs the state incurred in terms of donated goods and services for program delivery.

Figure VII.6. NYS PROMISE benefits and costs to key stakeholders over the five years after RA



Source: Youth five-year survey; SSA data; Master Earnings File data; external data.

Note: Monetary values are in 2020 dollars. See Appendix Table G.27 for more details.

RA = random assignment.

2. The impacts on youth earnings would need to be sizeable for NYS PROMISE to be cost neutral across all key stakeholders after 20 years

We considered the program's benefits and costs beyond the five-year evaluation period. First, we calculated the average impact on youth earnings needed for the program to be cost neutral across all key stakeholders. NYS PROMISE would need to generate an average annual impact on youth earnings of $1,313 per year for the benefits to equal costs by 20 years after RA (Appendix Figure G.1). This might not be plausible; it is $1,045 larger than the point estimate of the program's impact on youth earnings for the fifth year after RA.

Second, because the five-year evaluation period could underestimate youth earnings if a large share of enrollees were building their human capital, we considered how net benefits would likely accrue 20 years after RA. Because NYS PROMISE did not increase youth's educational attainment, the net benefits do not improve under scenarios that assume positive returns to education. If we assume a 10 percent return

per year of education persists over time, the net benefits across all key stakeholders would be -$17,010 over 20 years (Appendix Table G.30). Under a high future earnings scenario wherein we forecasted earnings using the upper bound of the 95 percent confidence interval of the estimated impact on earnings (in place of the Year 5 earnings impact estimate), the net benefit across all key stakeholders over 20 years would be $344.

F. Summary and discussion

1. Summary of key findings

Table VII.1 summarizes the NYS PROMISE impacts on the primary youth and parent outcomes. Overall, NYS PROMISE had few impacts on youth primary outcomes (it increased youth's employment and expectations of financial independence at age 25) and had no impacts on parents' primary outcomes. It resulted in a net cost of $26,666 per treatment group family over five years across all key stakeholders. For treatment group youth and families, it delivered an average net cost of $1,047 over five years.

Table VII.1. NYS PROMISE: Summary of five-year impacts on primary outcomes, by domain

Domain	Primary outcome	Impact summary
Youth		
Education and training	Enrolled in an educational or training program	-
	Has a GED, high school diploma, or certificate of completion	0
Employment and earnings	Employed in a paid job in the past year	+
	Total earnings in the past year	0
	Earnings during the five calendar years after RA	0
Self-determination and expectations	Self-determination score	0
	Youth expects to be financially independent at age 25	+
Health insurance	Covered by any health insurance	0
	Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA	-
SSA payments and knowledge of SSA work supports	Received SSA payments in Year 5 after RA	0
	SSA payments in Year 5 after RA	0
	SSA payments during Years 1–5 after RA	0
Economic and social well-being	Income from earnings and SSA payments in the past year	0
	Income during the five calendar years after RA	0
Parents		
Parents' employment and earnings	Either parent worked for pay in the past year	0
	Parents' earnings in the past year	0
	Parents' earnings during the five calendar years after RA	0
Parents' SSA payments	Either parent received SSA payments in Year 5 after RA	0
	SSA payments received in Year 5 after RA	0
	SSA payments during the five years after RA	0
Parents' economic well-being	Parents' income from earnings and SSA payments in the past year	0
	Parents' income during the five calendar years after RA	0
	Either parent is covered by health insurance	0

Table VII.1 (*continued*)

Domain	Primary outcome	Impact summary
Parents' health insurance	Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA	0

Note: All outcomes are measured at the time of the five-year youth survey unless otherwise specified. See Appendix Tables G.8–G.17 for more details.

+/++/+++ 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.

GED = General Educational Development; RA = random assignment; SSA = Social Security Administration.

2. Discussion

NYS PROMISE achieved one of its key goals—increasing youth paid employment. As would be expected, given youth maturation, employment rates for both treatment and control group youth rose over the first four calendar years after RA. In each of those years, however, the program increased the employment rate of treatment group youth compared with control group youth. Its impact was greatest in the fourth calendar year after RA, when it increased the likelihood of employment by 7 percentage points. NYS PROMISE also increased youth's expectations that they would be financially independent and employed in a paid job at age 25 and parents' belief in the importance of the youth being employed eventually. Moreover, likely due to the positive impact on youth employment, it decreased youth's average Medicaid and Medicare expenditures and there is suggestive evidence that it increased the share of youth with private health insurance. Despite the clear pattern of impacts on youth employment, the program had no impact on youth earnings. Although treatment group youth's earnings rose over the first five years after RA, so did the earnings of control group youth; there were no significant differences between the two groups in total earnings during the five years after RA.

The COVID-19 pandemic might have dampened the program's employment impacts during the fifth calendar year after RA. The fifth year disrupted two stable trends from the previous four years: (1) the increasing employment rates fell for both the treatment and control groups and (2) the program's positive impact on employment disappeared. The timing and geography of the pandemic suggest that it may have played a role in these disruptions. First, the pandemic corresponded with the fifth year after RA for 99 percent of NYS PROMISE enrollees. Second, the pandemic and its economic effects were particularly devastating in New York State and especially New York City, where two-thirds of enrollees lived. Youth unemployment in New York City reached 30 percent in the second quarter of 2020 and remained elevated at 13 percent (6 percentage points higher than the pre-pandemic level) in the fourth quarter (Inanc 2021). The youth unemployment rates for the state were 26 percent during the second quarter of 2020 and 11 percent during the fourth quarter. The pandemic likely reduced employment for both the treatment and control groups.

NYS PROMISE decreased youth's enrollment in education and training programs. Nothing in the process analysis explains this finding. One possibility, which we noted for the related findings of other PROMISE programs, is that youth might have substituted employment for continuing education. Early employment can increase the opportunity cost of school attendance, which might discourage the pursuit of additional education. Some research suggests that youth who work during high school are less likely to enroll in postsecondary education (Lee and Orazem 2010; Marsh and Kleitman 2005). Having gained employment experience through NYS PROMISE, some treatment group youth may have regarded employment as a

preferable alternative to additional education or training. Treatment group youth who obtained a high school diploma or equivalent credential may have been more likely than their control group counterparts to pursue employment rather than remain in secondary school through age 21, enroll in postsecondary education, or join a training program.

We found no evidence of impacts on the remaining primary youth outcomes: obtaining a GED, high school diploma, or certificate of completion; SSA payments; income from earnings and SSA payments; self-determination; and health insurance coverage. For most of these outcomes, the absence of impacts is consistent with findings from the process and 18-month impact studies. There are a few possible explanations for the absence of impacts on these outcomes, including the following:

- The absence of impacts on youth's receipt of a GED, high school diploma, or certificate of completion is likely because NYS PROMISE did not offer services related to secondary education.
- The characteristics of youth's jobs might explain why NYS PROMISE had no impact on earnings despite increasing paid employment. Youth with disabilities tend to work few hours, for low pay, and for a limited duration, especially while they are still enrolled in high school (Wagner et al. 2003, 2005), as most NYS PROMISE youth were during the five years after RA. Any impacts on earnings from increased employment may have been too small for our analyses to detect and of limited policy relevance. Given the lack of impact on earnings, it is not surprising that the program also had no impact on SSA payments, which are affected by earnings.

NYS PROMISE had no impact on parents' employment, earnings, SSA payments, or income five years after RA. This finding is consistent with the earlier evaluation findings showing no impacts on these outcomes 18 months after RA (Mamun et al. 2019a). The absence of impacts is not surprising, given that the program did not offer any services explicitly aimed at increasing parents' employment and earnings (McCutcheon et al. 2018). Take-up of services that might have addressed employment and earnings indirectly, such as benefits counseling and financial education, was low.

During the five years after RA, the costs of NYS PROMISE outweighed the benefits across all stakeholders. The net cost of the program was $26,666 per treatment group family, which primarily resulted from the $28,989 average cost of delivering the program. Benefits of the program were concentrated among youth and families, who experienced a net cost of $1,047 on average. Five years after RA is early to assess the net cost of NYS PROMISE, given that youth were still in school or in the early stages of employment at that time. If the program's positive effect on youth employment persists, the net cost could decrease in the future.

The potential for NYS PROMISE to realize long-term impacts in the future is mixed. On the one hand, the program decreased youth enrollment in school or training programs. Receipt of training and postsecondary education are associated with increased employment and earnings (Heckman et al. 2016; Henderson et al. 2017). If the control group youth who were enrolled in school or training programs at five years after RA ultimately earn an academic degree or a training credential, they could eventually realize equivalent or higher employment and earnings than the treatment group. On the other hand, the program increased youth employment and youth and parental expectations regarding employment and reduced youth's Medicaid and Medicare expenditures. Employment at an early age is a strong predictor of future employment, as are youth and parental expectations (Carter et al. 2012; Papay and Bambara 2014; Doren et al. 2012; Kirby et al. 2019). If the treatment group's employment replaced years of education that would not have led to an academic degree, a training credential, or improved job skills, the program's positive impacts are more likely to be sustained.

VIII. WI PROMISE

Summary of five-year impacts and net benefits of WI PROMISE

- WI PROMISE increased youth's employment rates and income from earnings and SSA payments.
- WI PROMISE had no impacts on youth's enrollment in education or training, receipt of a GED, high school diploma, or certificate of completion; self-determination; expectations of financial independence at age 25; SSA payments; health insurance coverage; or Medicaid and Medicare expenditures. We found suggestive evidence that WI PROMISE may have increased youth's earnings.
- WI PROMISE increased health insurance coverage among parents but had no impacts on parents' employment, SSA payments, income, or Medicaid and Medicare expenditures.
- Across all key stakeholders the program resulted in a net cost of $16,269 per treatment group family over five years. For treatment group youth and families, it delivered an average net benefit of $6,334 over five years.

A. Program overview and a review of prior findings

To provide context for the five-year impacts of WI PROMISE presented in subsequent sections, we first summarize key features of the program, the findings from the process study of the first three years of program operations (Selekman et al. 2018), and the findings of the 18-month impact study (Mamun et al. 2019a).

1. Program overview

The Wisconsin Department of Workforce Development was the lead agency for WI PROMISE. Most program activities were housed in its Division of Vocational Rehabilitation (DVR). As a result, treatment group youth were closely connected to the state's VR program—much more so than in other PROMISE programs. The Wisconsin Department of Workforce Development partnered with the state's Department of Health Services, Department of Public Instruction, and Department of Children and Families, and contracted with various organizations and consultants to deploy WI PROMISE statewide.

WI PROMISE aimed to provide intensive, family-centered case management and employment services to treatment group youth and their family members. The program model 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 and parents. Trainings for youth focused on soft skills (including communication, enthusiasm and attitude, teamwork, networking, problem solving, and professionalism), self-advocacy, health literacy, and financial literacy; the parent training was designed to increase their expectations for their youth's employment prospects.

Contracted providers delivered most program services. 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. This approach facilitated the treatment group youth's early connections to the state VR program. WI PROMISE aimed to engage all participating youth in at least one paid work experience (that is, a trial work experience or competitive job) within three years of their

enrollment in the evaluation (or by the end of the program, whichever came first). It also aimed for 50 percent of participating youth to have a family member or guardian who received a paid work experience by the end of the program. To facilitate these work experiences, 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. Consistent with the expectation of intensive counseling, WI PROMISE limited the caseloads of counselors to approximately 60 youth and their families—much less than the typical caseload of 100 for traditional DVR counselors but more than the average of the other five PROMISE programs (Anderson et al. 2018; Honeycutt et al. 2018b; Kauff et al. 2018; Matulewicz et al. 2018a; McCutcheon et al. 2018).

Counselors developed employment plans, assembled resource teams, and referred participants to trainings and other services that could address their individual needs. The counselor would collaborate with the youth to develop an individual plan for employment (IPE) to identify the employment services (such as job coaching or job search assistance provided through DVR, as well as paid work experiences) that could help participants meet their employment goals. For all youth, counselors were to assemble resource teams comprising representatives from many of the systems and networks with which youth and families interacted (such as school, church, and case workers from other programs) who would collaborate as needed to identify resources and supports for youth. WI PROMISE counselors would facilitate connections to other PROMISE-specific services, including benefits counseling, financial literacy training, parent training, self-advocacy, and soft skills training.

The program did not offer education-related services beyond what was currently available in the community. However, helping participating youth and their parents reach their education goals was a goal 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. They could work with representatives from the school system who were part of the resource teams and attend IEP meetings to ensure youth had access to the supports they needed to succeed in their postsecondary transition plans.

2. Summary of process analysis findings

An in-depth process study of WI PROMISE during the first three years of program operations documented its structure and service model and described its implementation during the period from April 2014 through April 2017 (Selekman et al. 2018). Here we summarize the key findings from that analysis.

Process analysis findings suggest that the contrast between the program and control group youth enrolled in WI PROMISE may have been muted by the low take-up rate of some PROMISE services, the challenges the program faced in delivering intensive services, and the opportunities for control group youth to participate in similar transition services.

Low take-up rate of some services. Most treatment group youth engaged with the program, but analyses of program data indicated the take-up rates were low for most of the specific services WI PROMISE offered. During the first three years of the program, it engaged 86 percent of treatment group youth as participants in the program by completing at least one face-to-face contact with a counselor or case coordinator. Among program participants, more than 9 in 10 youth engaged in case management and developed IPEs, three-quarters were referred to DVR services, and nearly two-thirds were referred to job development services. Almost all (more than 97 percent) of the IPEs for participating youth specified that the youth needed training and education services, such as job readiness training, apprenticeships, trial work experiences, and student on-the-job training. However, participation in most other WI PROMISE

services was low relative to the rate the program had anticipated. Fifty percent of treatment group youth 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 completed soft skills training, 8 percent completed self-advocacy training, and 5 percent completed health literacy training. These outcomes fell short of the program's goal to have all youth use each of these services by the end of the program. The process study also suggests that parents did not get intensive case management; about 5 percent of participating youth had a parent with an IPE, and 33 percent had a family member with a family service plan (FSP).[32]

Challenges in delivering intensive services. Several factors explain why WI PROMISE did not meet its goal of having all treatment group youth engaged in PROMISE services and trainings. First, referrals to services, such as benefits counseling, financial literacy training, self-advocacy training, and soft skills training, were at the counselors' discretion and not as frequent as the program model originally intended. The pace and volume of such referrals initially were low, though they increased over time. In addition, the needs of families were often complex; counselors prioritized helping families meet basic needs, such as housing and food security, before addressing employment goals or promoting other PROMISE-specific services. Counselors also found it challenging to deliver intensive case counseling and employment services because although their caseloads were relatively small, they were serving the entire family and thus more people per case. Last, program staff reported that some youth and families hesitated to engage in employment-promoting services because of the young age of the youth.

Availability of transition services in the community outside of WI PROMISE. There were opportunities for youth with disabilities in Wisconsin to receive transition services in the community outside of those provided by WI PROMISE. Control group youth and their families could, in principle, access many of the program's services or close approximations of them. For example, benefits counseling was available to all youth in Wisconsin receiving SSI through Wisconsin's WIPA project. However, compared with the WI PROMISE model of intensive, family-centered case counseling and individualized employment services, counterfactual services likely would not have been coordinated and tailored to a family's specific needs. Nonetheless, program counselors found it challenging to meet the ideal of intensive case counseling and employment services because they had limited time to help each family.

The opportunities for control group youth to receive services similar to those of WI PROMISE grew over time during program implementation. The WIOA emphasized services to transition-age youth; in response, in early 2017, DVR began modifying its traditional services to mirror many of those offered by the program. For instance, it began delivering the same soft skills and self-advocacy training, adopting the same approach to benefits counseling (offering shorter, more frequent benefit consultations), and training its own counselors on trauma-informed care in counseling (as it had trained WI PROMISE counselors). Many WI PROMISE counselors became traditional DVR counselors in the final years of the program. Therefore, control group youth who enrolled in the traditional DVR program in those years may have been served by former WI PROMISE counselors whose practices might have been influenced by their experiences in PROMISE.

Potential for program impacts. The process analysis suggested that the conditions were favorable for finding positive impacts of WI PROMISE on the outcomes of youth and families. The program engaged most (more than 86 percent) of treatment group youth, and more than 9 in 10 program participants

[32] If a family member was ineligible for traditional DVR services, the counselors could develop an FSP instead, which served the same purpose.

received case management and developed IPEs. However, the program's capacity to generate strong impacts may have been weakened by low take-up rates for its other services (such as benefits counseling) and a muted contrast between services received by the treatment and control groups.

3. Summary of 18-month impact analysis findings

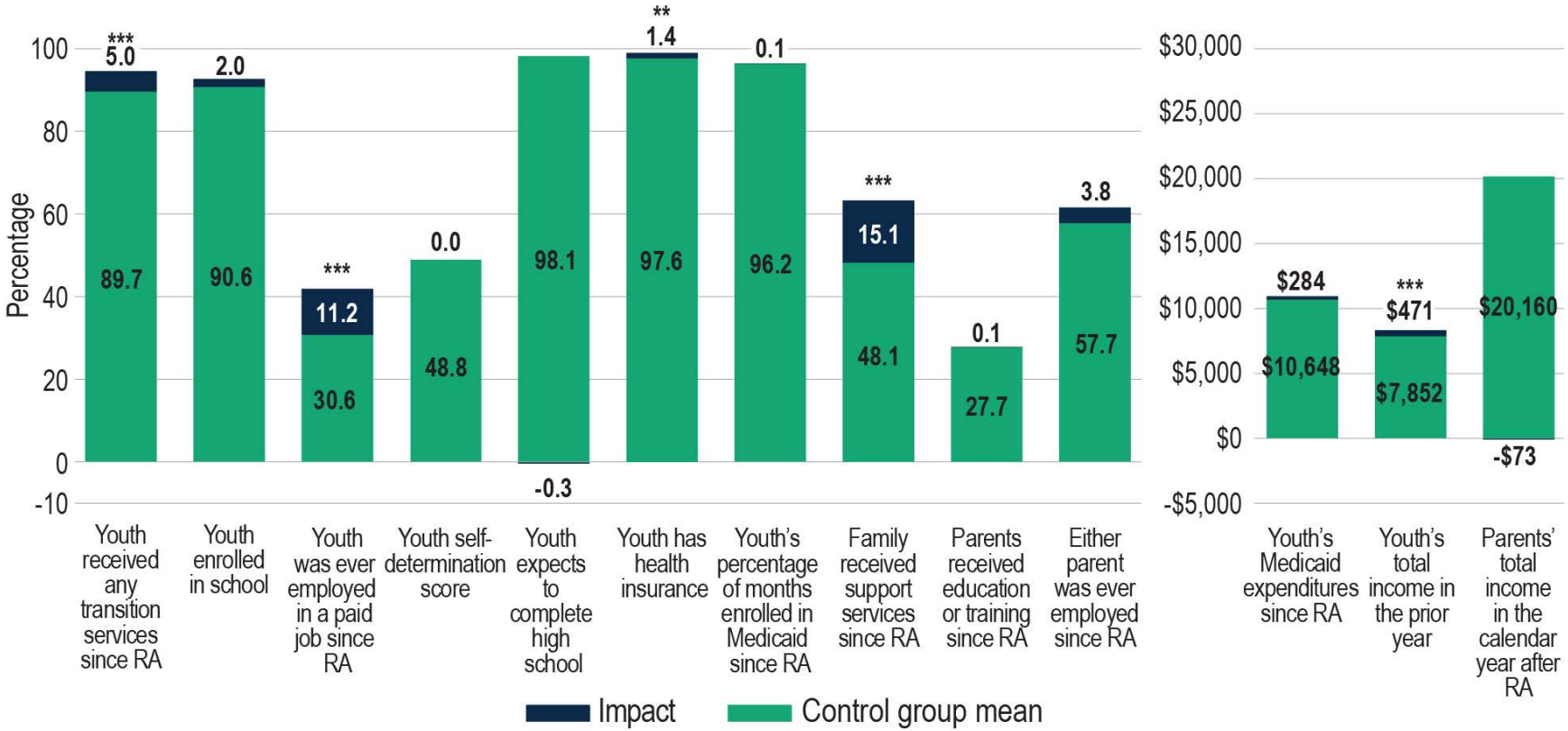
During the first 18 months after RA, WI PROMISE increased several youth outcomes related to service use (Figure VIII.1). Although youth had access to transition services in the community, WI PROMISE increased the share of youth who used at least some transition services and the share who used specific transition services, such as employment-promoting services (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.

WI PROMISE also increased youth's likelihood of paid employment, annual earnings, likelihood of having health insurance, and income from earnings and SSA payments. For example, about 31 percent of youth in the control group reported having a paid job in the 18 months following RA; the program increased this share by 11 percentage points. As another example, youth's annual income (from earnings and SSA payments) during the year before the 18-month survey was an average of $7,852 in the control group; the program increased this amount by $417.

The program had no impact on youth's school enrollment, self-determination, expectations for the future, or Medicaid participation at 18 months after enrollment. The absence of impacts on school enrollment and Medicaid participation was likely due to the high prevalence of these outcomes among youth (meaning there was little room for improvement) and the absence of WI PROMISE services that directly addressed these outcomes.

WI PROMISE improved several family outcomes during the 18 months after RA—again, especially those related to service use. The program increased the use of support services by parents and family members other than the youth receiving SSI, and their use of key support services, such as case management, education or training supports, employment-promoting services, benefits counseling, financial education, and parent training and information on the youth's disability. It also increased the share of families in which a parent was employed in the month before the 18-month survey and parents' earnings but had no impact on parents' education and training or income from earnings and SSA payments.

Figure VIII.1. WI PROMISE impacts on youth and parent primary outcomes in the 18 months after RA



Source: Mamun et al. 2019a.

Note: All outcomes are measured at the time of the 18-month surveys, unless otherwise specified.

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

RA = random assignment.

B. Baseline characteristics of the five-year follow-up sample

The main analytic sample for the five-year impact analysis of WI PROMISE consisted of 1,591 randomly assigned youth who completed the five-year follow-up survey (Appendix Table H.1). In this section, we describe the baseline characteristics of this sample and comment on any differences between the treatment group and control group youth within the sample. Except for data on youth's and parents' race and ethnicity, which come from survey responses, all baseline characteristics are based on data from SSA administrative records.

Demographic characteristics. About one-third of the youth were female. At RA, 40 percent of the youth were age 14, 26 percent were 15, and 34 percent were 16. About 95 percent of youth reported English as their preferred written and spoken language. Nearly 9 in 10 youth lived with their parents at the time they applied for SSI; of the remaining youth, most lived in their own households or alone. The largest racial and ethnic group was non-Hispanic Black (32 percent), followed by non-Hispanic White (25 percent) and Hispanic (11 percent). Data on race and ethnicity were missing for 23 percent of the youth survey respondent sample. The racial and ethnic composition of parents was similar to that of the youth, but a larger share was non-Hispanic White (34 percent) and a smaller share was missing (18 percent).

Impairment. We grouped the youth's primary impairments, as recorded in baseline SSA administrative data, into five categories, the largest of which was other mental impairments (44 percent). The next largest group was intellectual or developmental disabilities (38 percent), followed by physical disabilities (12 percent); other or unknown disabilities (4 percent); and speech, hearing, or visual impairments (1 percent).

SSA program participation. Nearly all youth (more than 95 percent) received SSI payments during the month of RA. On average, youth had qualified for SSI between ages 7 and 8. A smaller share of youth (about 13 percent) received OASDI payments during the month of RA. Across all youth, average annual SSI payments during the year before the RA month were $7,229; average SSA payments were $7,544. About one in five youth lived in a household with multiple SSI-eligible children. About 70 percent had no parents receiving SSA payments at the time of RA.

Earnings. Very few youth (4 percent) had any earnings in the calendar year before RA, which is not surprising given their young ages. On average, youth had earned $42 in that period. Most youth (about 72 percent) had at least one parent with earnings in the calendar year before RA. Across all youth, parent earnings averaged $15,519 that year.

Differences between the treatment and control groups. On average, youth in the treatment and control groups had similar characteristics, which would be expected given the RA study design. We compared the two groups across 25 characteristics at the time of RA and found one statistically significant difference: parents' race and ethnicity. We identify unbiased estimates of program impacts by comparing the treatment and control groups, accounting for this difference through regression adjustment.

C. Five-year impacts on youth

The findings in this section document whether the services provided by WI PROMISE led to impacts on youth outcomes in several domains during the first five years after RA. The impact estimates show that the program increased the share of youth who were employed in paid jobs in the year before the survey as well as their income from earnings and SSA payments in both the year before the survey and during the

five years after RA (Figure VIII.2). The program had no impacts on youth's enrollment in education or training; receipt of a GED, high school diploma, or certificate of completion; self-determination; expectations of financial independence at age 25; SSA payments; health insurance coverage; or Medicaid and Medicare expenditures. Overall, we found little evidence that the program's impacts on youth outcomes differed based on their age, sex, impairment, or parents' receipt of SSA payments at RA; we describe the exceptions to this pattern when discussing the findings below.

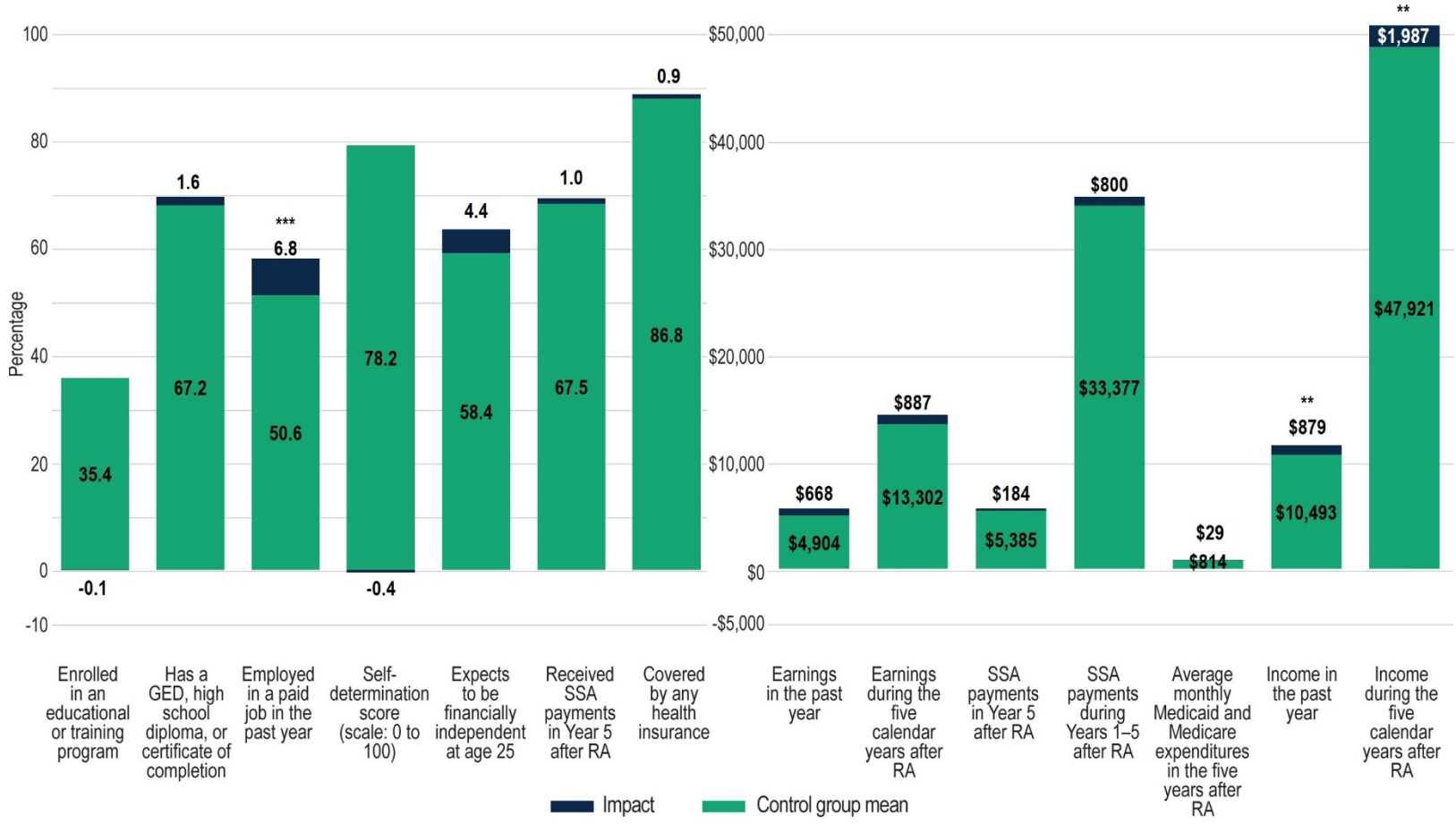
1. WI PROMISE had no impact on youth's enrollment in education and training programs or receipt of a high school completion credential

WI PROMISE had no impacts on the primary outcomes of youth's enrollment in an education or training program and receipt of a high school diploma or equivalent credential (Figure VIII.2 and Appendix Table H.8). At the time of the five-year survey, about 35 percent of the youth were enrolled in an educational or training program; this share was similar for the treatment and control groups. The share of youth who had a GED, certificate of completion, or high school diploma grew considerably over time, which would be expected, given the ages of the participants. About two-thirds of youth in both the control and treatment groups had a GED, certificate of completion, or high school diploma at the time of the five-year survey, whereas only 6 percent had such a credential at the time of the 18-month survey. The program did not affect the share of youth who had received a high school completion credential five years after RA.

Increasing the educational attainment and credentials of transition-age youth and their parents was one of the outcomes targeted by the WI PROMISE logic model (Selekman et al. 2018). However, the program did not affect youth's enrollment in an education or training program or their receipt of a high school diploma or equivalent credential by the five-year mark. The absence of impacts on youth's educational attainment might reflect the fact that some education-related services were offered to all transition-age youth in Wisconsin (for example, services provided by LEAs or DVR training grants). It might also reflect that the program did not offer new or modified education-related services beyond what was currently available in the community; counselors connected treatment group families to regularly available services that control group youth could also access.

Additional analyses suggest that the program increased the likelihood of youth attending a postsecondary college or advanced degree program and of receiving training credentials while reducing the likelihood of school suspensions or expulsions in the year before the survey (Appendix Table H.8). First, WI PROMISE increased the share of youth attending a postsecondary college or advanced degree program at the time of the five-year survey by 2 percentage points relative to a mean of 5 percent in the control group. Second, although WI PROMISE did not affect youth's enrollment in training programs, it increased the share of youth who received a training credential (diploma, certificate, or license) in the year before the survey. The program increased this share to 12 percent—a 5 percentage-point increase over the 7 percent of control group youth who received such a credential. Third, although about 5 percent of youth in the control group reported they had a school expulsion or suspension in the year before the survey, the program reduced this rate by 2 percentage points among treatment group youth. The program did not affect youth's enrollment in postsecondary education, highest grade completed, or receipt of educational or training accommodations or postsecondary education supports.

Figure VIII.2. WI PROMISE impacts on youth primary outcomes in the five years after RA



Source: Youth five-year survey; SSA data.

Note: All outcomes are measured at the time of the five-year youth survey, unless otherwise specified. Monetary values are in 2020 dollars. See Appendix Tables H.8–H.17 for more details.

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

GED = General Educational Development; RA = random assignment.

2. WI PROMISE caused a persistent increase in youth's employment rates and likely increased their earnings

WI PROMISE increased youth employment (Figure VIII.2 and Appendix Table H.9). Half of the control group youth had been employed in a paid job in the year before the five-year survey; the program increased this share by 7 percentage points (a relative increase of 14 percent) for the treatment group. Analyses of other measures of employment consistently showed that the program increased employment rates. It increased the shares of youth employed in any job (paid or unpaid) during the year before the five-year survey and employed in a paid job at the time of the five-year survey. The program also increased the shares of youth employed in the first four calendar years after RA.

The program's impacts on employment were smaller in the long term than in the short term (Figure VIII.3). A larger share of treatment group than control group youth were employed in each of the five calendar years following RA. However, over time, employment among youth in both groups rose, and the size of the program's impacts on employment declined. For example, in the first calendar year after RA, 29 percent of control group youth were employed; WI PROMISE raised this share by 15 percentage points (a relative increase of 52 percent) for the treatment group. In the fifth calendar year after RA, 56 percent of control group youth were employed; the program increased this share by 5 percentage points (a relative increase of 9 percent) for the treatment group. This finding suggests that early impacts on employment were driven in part by the program's goal to ensure youth had paid work experiences while participating in the PROMISE programs, and that the control group youth closed some of the gap in employment rates over time—which would be expected to an extent given the youth's ages. Nonetheless, significant impacts on employment persisted between the third and fifth years after RA, indicating that the program caused a persistent increase in employment beyond the short-term work experiences it provided.

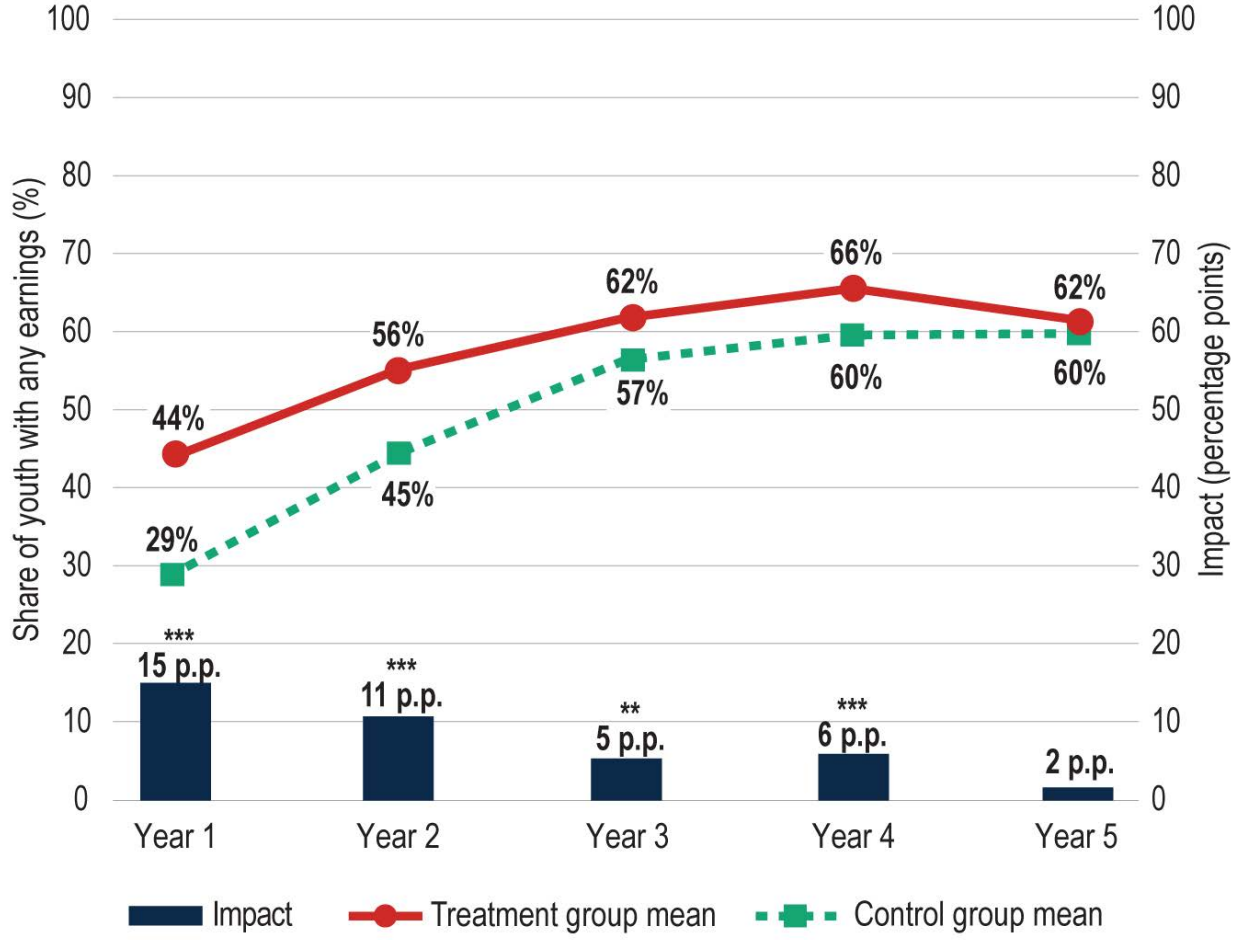
We found some evidence that WI PROMISE might have increased youth's earnings. On average, youth in the control group earned $13,302 during the five years after RA and earned $4,904 from paid jobs in the year before the five-year survey. Although the estimated impact on earnings in the past year is not statistically significant (p-value = 0.15), the point estimate is relatively large (more than 10 percent of the control group mean). Over the five calendar years following RA, youth in both groups experienced earnings growth (Figure VIII.4). The program increased youth earnings in the first calendar year after RA but had no significant impacts on youth earnings in the subsequent four years after RA. For many measures of youth's earnings, the point estimates were positive and sizeable, but so were the standard errors; ultimately, we did not detect impacts statistically significantly different from zero.

In additional analyses, we found that WI PROMISE also increased the following employment-related outcomes (Appendix Table H.9):

- **Employment in integrated and supported settings.** In the year before the survey, about 43 percent of control group youth were employed in a job in which most other workers did not have disabilities; WI PROMISE increased this share by 7 percentage points for the treatment group. The program also increased the share of youth employed outside of school-sponsored work activities and the share employed in a job with a job coach in the year before the survey.
- **Connections to VR.** About 39 percent of control group youth applied for VR services in the five years after RA; the program increased this share by 58 percentage points for the treatment group. Overall, 95 percent of treatment group youth applied for VR services. About 3 in 10 youth in the control group received VR services. The program more than doubled this share; 81 percent of

treatment group youth received VR services. WI PROMISE was housed within the state's DVR, and case counselors were usually VR counselors. Moreover, early engagement of youth with traditional VR services was central to their service model. The large share of treatment group youth who received VR services indicates that the program succeeded in that objective.

Figure VIII.3. WI PROMISE employment rates, by calendar year after RA

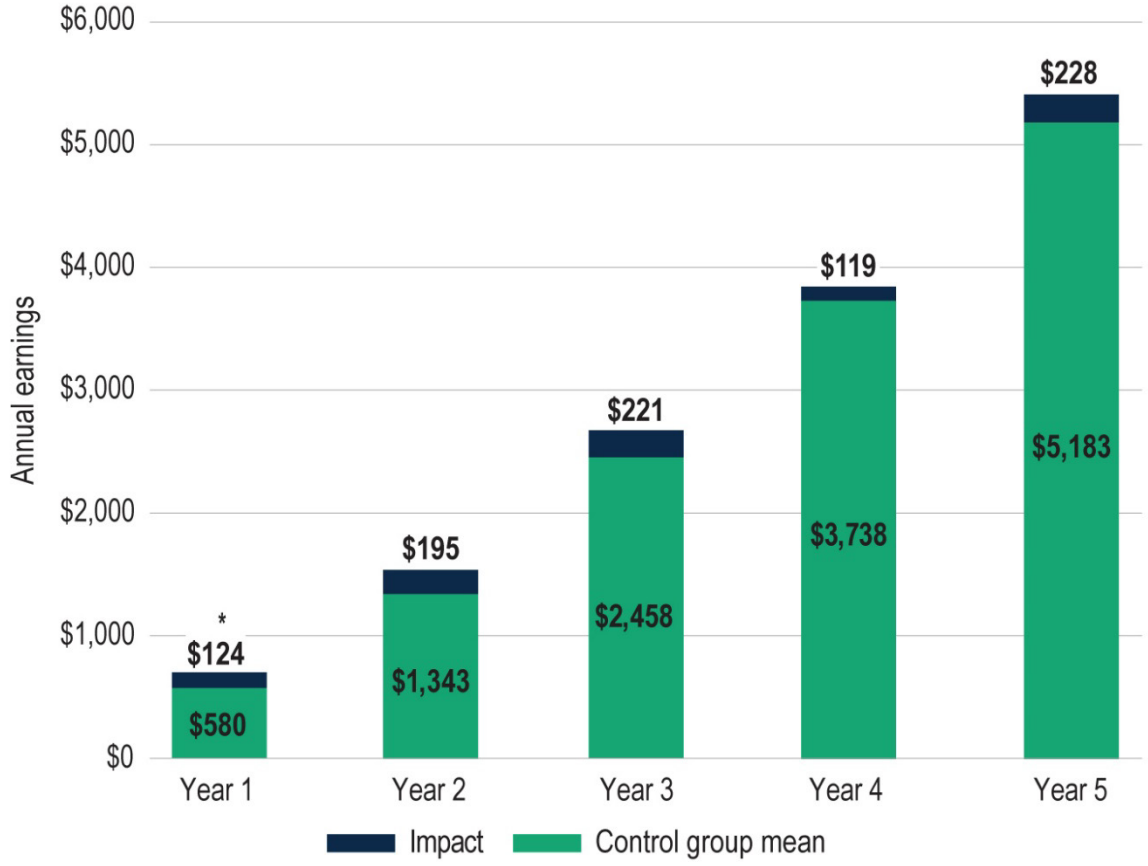


Source: SSA data.

Note: See Appendix Table H.9 for more details. Due to rounding, the sum of control group mean and impact may not equal the treatment group mean.

*/**/***Impact is significantly different from zero at the .10/.05/.01 level using a two-tailed *t*-test.
p.p. = percentage point; RA = random assignment.

Figure VIII.4. WI PROMISE youth earnings in each calendar year after RA



Source: SSA data.

Note: See Appendix Table H.9 for more details. Earnings are measured in 2020 dollars.

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

RA = random assignment.

3. WI PROMISE had no impact on youth's self-determination or their expectations of financial independence

WI PROMISE had no impact on youth's self-determination (Figure VIII.2 and Appendix Table H.10). On a scale from 0 to 100, where a higher number indicates greater self-determination, both the control and treatment groups had an average score of 78. It also did not impact any subdomains of self-determination, such as autonomy, self-realization, psychological empowerment, and agentic action.

The program did not affect the share of youth who expected they would be financially independent at age 25. About 6 in 10 control group youth expected to be financially independent at age 25, and WI PROMISE did not affect this share among treatment group youth. In additional analyses, we found that the program increased the shares of both youth and parents who believed that the youth would be employed in a paid job at age 25. However, there were no impacts on youth's or parents' expectations of youth's postsecondary education or living independently at age 25. Most parents (about 92 percent) believed it was important for youth to be independent eventually; the program did not affect this share.

4. WI PROMISE had no impact on youth's SSA payments

WI PROMISE had no impact on youth's likelihood of receiving SSA payments in Year 5, amount of SSA payments in Year 5, or the total amount of SSA payments received during the five years after RA (Figure VIII.2 and Appendix Table H.11). During Year 5, about two-thirds of control group youth received any SSA payments. Youth's participation in SSA programs decreased over time; in comparison, 97 percent of youth received any SSA payments during the first 18 months after RA. In Year 5, the average SSA payments among control group youth was $5,385; the program did not affect this amount. It also did not affect the total amount of SSA payments that youth received during the five years after RA, which averaged $33,377 in the control group. The pattern of no impacts on the share receiving benefits or the amount of benefits received also held when examining SSI payments and OASDI benefits separately.

In additional analyses, we found that WI PROMISE increased the share of youth who knew about the SSI earned income exclusion (Appendix Table C.6.f). About 8 percent of control group youth were aware of this policy; the program increased this share by 4 percentage points among treatment group youth. It had no impact on youth's knowledge of ABLE accounts, SSI student earned income exclusion and PASS plans, or SSA's policies regarding work and SSI eligibility. The program also did not affect youth's age-18 redetermination status five years after RA.

5. WI PROMISE had no impact on youth's health insurance coverage or Medicaid and Medicare expenditures

Most (87 percent) control group youth had health insurance at the time of the five-year survey; WI PROMISE had no impact on this share (Appendix Table H.12). The health insurance coverage rate among control group youth declined since the 18-month survey: 98 percent of youth had health insurance at the time of the 18-month survey, and the program had increased this share among treatment group youth. As expected, given the SSI eligibility of most youth, a majority (nearly 90 percent) had public health insurance at the time of the five-year survey. The program increased the share of youth with Medicaid by 0.5 percentage points during the first year after RA; this might have been because case management and benefits counseling made families aware of their Medicaid eligibility and supported them in accessing these benefits. We found no impacts on Medicaid enrollment in subsequent years. Average monthly Medicaid and Medicare expenditures during the five years after RA were $814 for the control group, and the program did not affect this outcome.

Additional analyses suggest the impacts of the program on health insurance coverage differed by sex; WI PROMISE increased the share of male youth who had any health insurance but decreased that share among female youth (Appendix Table H.21). Nothing from the process analysis helps to explain this finding.

6. WI PROMISE increased youth's income

WI PROMISE increased youth's income from earnings and SSA payments in the year before the five-year survey and during the five calendar years following RA (Figure VIII.2 and Appendix Table H.13). The program increased youth's income in the year before the survey by $879, or 8 percent over the control group mean of $10,493. During the five calendar years after RA, control group youth had income of $47,921, and the program increased this amount by $1,987. Moreover, additional analyses suggest that the program's impacts on youth's income persisted or even grew over time. For example, the program increased income by $236 in the first year after RA and $489 in the third year after RA. Moreover, there

is some evidence the program might have increased youth income by over $500 in the fifth year after RA, though the point estimate is marginally not significant (*p*-value = 0.13).

In additional analyses, we found that similar shares of youth in the control and treatment groups were engaged in productive activities (including schooling, training, and looking for or engaging in employment), living independently, married or in a marriage-like relationship, and responsible for at least one child. WI PROMISE also did not affect youth's involvement with the criminal justice system or the economic outcomes of their household.

D. Five-year impacts on parents

The findings in this section document whether the services provided by WI PROMISE led to impacts on parent outcomes during the first five years after enrolling in the program. The impact estimates revealed that the program had no impacts on parents' employment or earnings, SSA payments, Medicaid and Medicare expenditures, or income five years after enrollment in WI PROMISE (Figure VIII.5). However, it increased the likelihood that parents had health insurance at the time of the five-year survey. Generally, we found little evidence that the program's impacts on parent outcomes differed based on their youth's age, sex, impairment, race and ethnicity, or their own receipt of SSA benefits at the time of enrollment; we describe the exceptions when discussing the findings below.

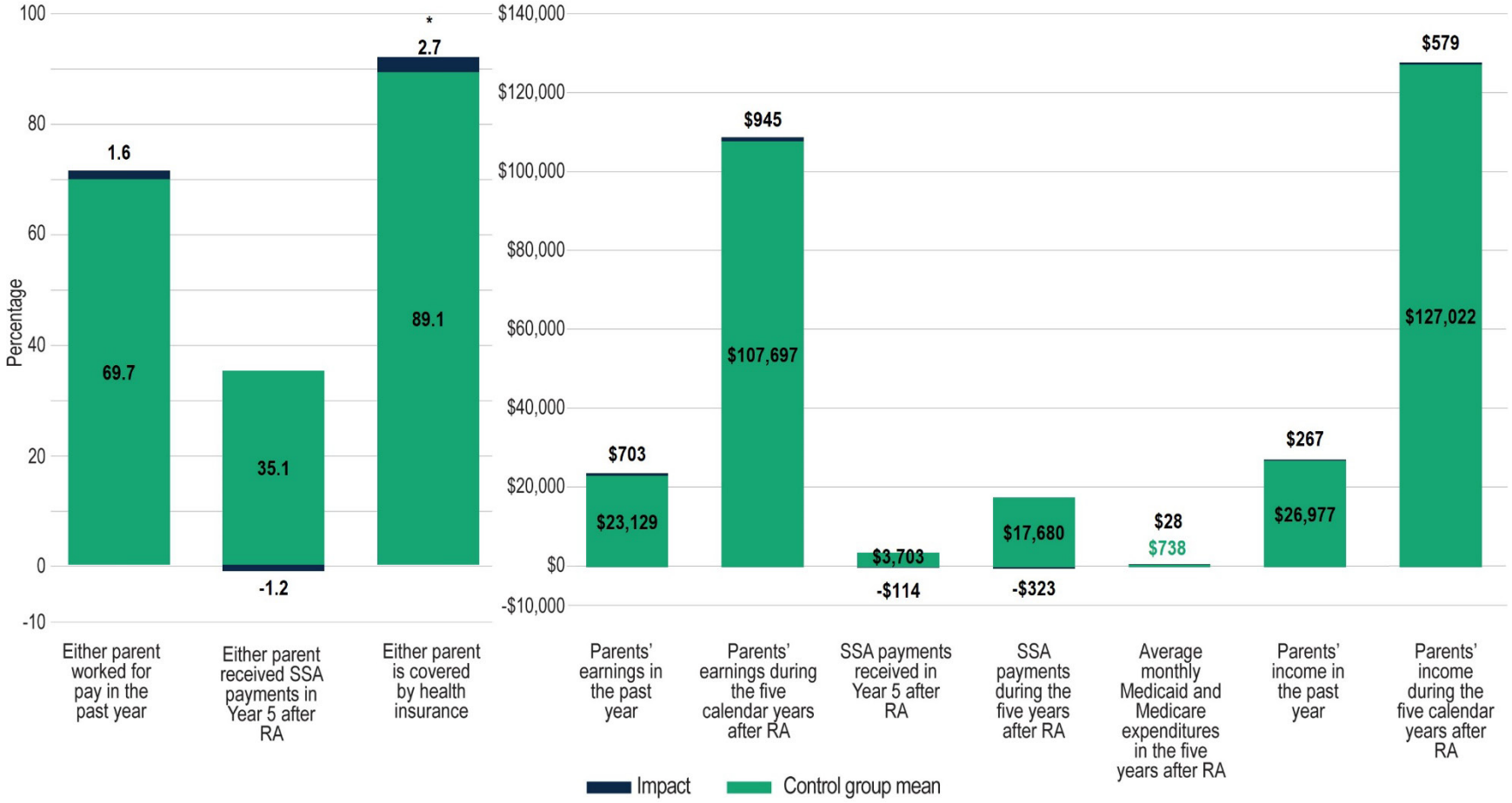
1. WI PROMISE had no impact on parents' employment or earnings

WI PROMISE did not affect the likelihood that either parent worked for pay in the year before the five-year survey, parents' earnings in that year, or their earnings during the five calendar years after RA (Figure VIII.5 and Appendix Table H.14). Employment rates were high: in about 7 in 10 control group families, at least one parent worked for pay in the year before the five-year survey. This share increased over time: it was 58 percent during the 18 months following RA. On average, control group parents earned $23,129 in the year before the survey and $107,697 during the five calendar years after RA. The program did not affect either of these earnings-related outcomes. Additional analyses suggest the program also had no impacts on related outcomes, such as parents' labor force participation, educational attainment, or employment at the time of the five-year survey; weeks worked, usual weekly hours worked, or access to fringe benefits through a job in the year before the survey; or employment rates or earnings in each of the five calendar years after RA.

Analyses of earnings data for the five calendar years after RA suggest no long-term impacts on parents' employment rates or earnings. In the control group, parents' earnings increased over time, even though employment rates in each of the five calendar years after RA remained stable. WI PROMISE did not affect these outcomes; the earnings and employment rates for the treatment group each year did not differ statistically from those of the control group. Thus, the program was not associated with any sustained increase in parents' employment or earnings.

Additional analyses suggest the impacts of WI PROMISE on parents' employment or earnings differed by youth's sex. The program increased the share of male youth's families with at least one parent who worked for pay in the year before the five-year survey but did not affect this share for families of female youth (Appendix Table H.21).

Figure VIII.5. WI PROMISE impacts on parent primary outcomes in the five years after RA



Source: Parent five-year survey; SSA data.

Note: All outcomes are measured at the time of the five-year parent survey, unless otherwise specified. Monetary values are in 2020 dollars. See Appendix Tables H.8–H.17 for more details.

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

RA = random assignment.

2. WI PROMISE had no impact on parents' SSA payments

WI PROMISE did not affect the likelihood that at least one parent received SSA payments in the fifth year after RA, the amount of SSA payments parents received in that year, or the total amount of SSA payments they received during the five years after RA (Figure VIII.5 and Appendix Table H.15). In Year 5, about 35 percent of control group families had at least one parent who received SSA payments; overall, the annual SSA payments to parents averaged $3,703. During the five years after RA, control group families received a total of nearly $17,680 in SSA payments for parents. The program did not affect these outcomes. These patterns of no impacts held when looking at SSI payments and OASDI benefits separately.

3. WI PROMISE increased the likelihood that parents had health insurance but did not affect their Medicaid and Medicare expenditures

WI PROMISE increased the likelihood that parents had health insurance (Figure VIII.5 and Appendix Table H.16). In 89 percent of control group families, at least one parent was covered by health insurance at the time of the five-year survey; WI PROMISE increased this share by 3 percentage points. This might have been partly driven by a 2 percentage-point increase in private health insurance coverage, though this impact is not statistically significant (*p*-value=.49). During the five years after RA, the program did not affect parents' monthly Medicaid and Medicare expenditures, which averaged $738 among control group families. The program also did not affect the share of families in which at least one parent participated in Medicaid or Medicare in any of the five years after RA.

4. WI PROMISE had no impact on parents' income

The program did not affect parents' income from earnings and SSA payments in the year before the survey or during the five years after RA (Figure VIII.5 and Appendix Table H.17). On average, control group parents' income from earnings and SSA payments was $26,977 in the year before the survey and $127,022 during the five years after RA; WI PROMISE did not affect these outcomes. Similarly, in additional analyses, we found that the program did not affect parents' household incomes or the likelihood that any household member received public assistance from SNAP, TANF, or housing assistance programs. The absence of impacts on these outcomes is consistent with the absence of impacts on parents' employment and earnings.

We found suggestive evidence that the program's impact on parents' income differed depending on youth's impairment type (Appendix Table H.23). The program increased parents' income in the year before the survey among families with youth with intellectual or developmental disabilities by more than 20 percent but had no impact among families with youth having other types of impairments. Nothing from the process analysis suggests an explanation for these findings. However, this pattern is consistent with the pattern of impacts on parents' earnings, suggesting that differences in the impacts on parents' earnings based on impairment type drive the pattern of impacts on parents' income.

E. Benefits and costs

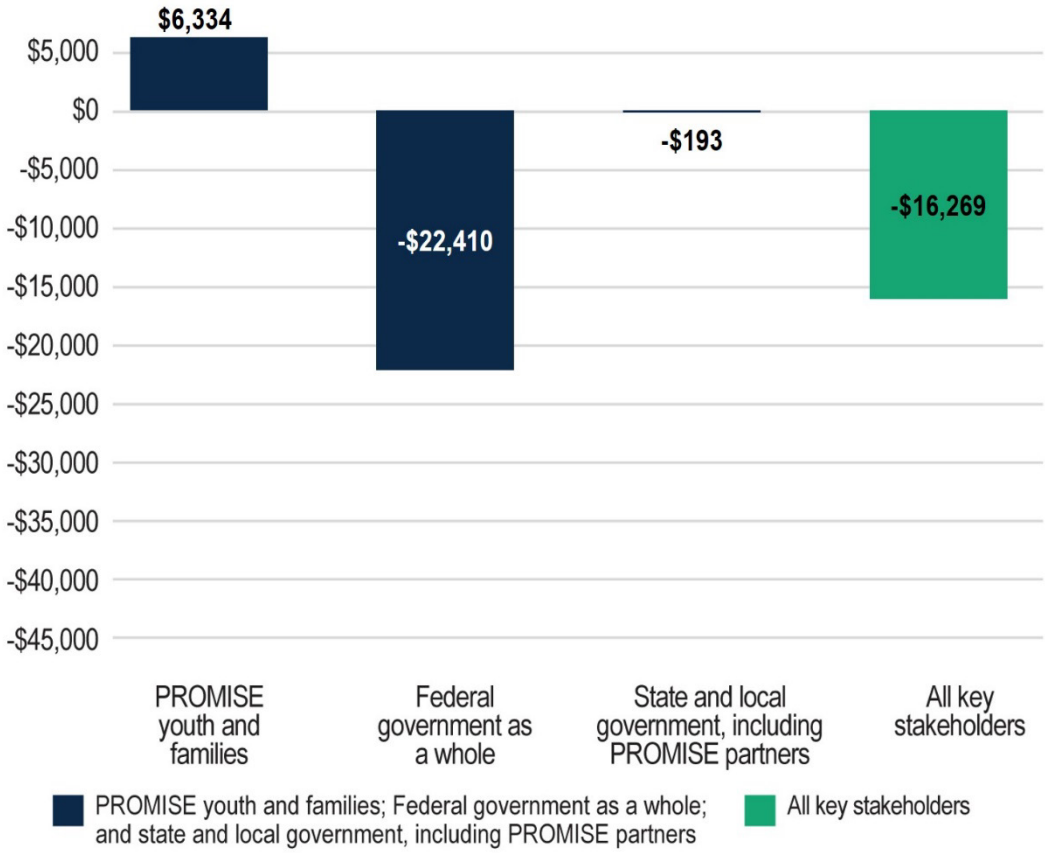
In conducting the WI PROMISE benefit-cost analysis, we focused on estimating the net benefits (or costs) for each key stakeholder group, as well as across all stakeholders, during the five years after RA. The net benefit (cost) is based on (1) the estimated impacts of the program on all youth and families who

were offered the opportunity to participate in it regardless of their statistical significance and (2) the calculated cost of delivering the program per treatment group enrollee.

1. The costs of WI PROMISE outweighed its benefits across key stakeholders, but youth and families benefited from participation

Across all key stakeholders, we estimate that WI PROMISE resulted in a net cost of about $16,269 per treatment group family over the five years after RA (Figure VIII.6). The primary driver of this finding was the cost of delivering the program ($19,369 per treatment group family), which was ultimately larger than the $6,334 net benefit the program generated for youth and families through its impacts on outcomes during the five years after RA. There are also benefits and costs not accounted for because we could not assign a monetary value to them—for example, the decrease in school expulsions and suspensions caused by WI PROMISE.

Figure VIII.6. WI PROMISE benefits and costs to key stakeholders over the five years after RA



Source: Youth five-year survey; SSA data; external data.

Note: Monetary values are in 2020 dollars. See Appendix Table H.27 for more details.

RA = random assignment.

Here we summarize the high-level benefit-cost findings for each stakeholder group. Detailed estimates are shown in Appendix Table H.27.

- **Youth and their families.** On average, youth and families benefited from WI PROMISE. Each family experienced about $6,334 in net benefits during the five-year follow-up period. Increased Medicaid and Medicare expenditures for youth and parents were the largest driver of these benefits, followed by increased earnings for youth and parents and increased SSI benefits for youth. These benefits were partially offset by decreased SSI benefits for parents and increased taxes and work-related costs (both of which accompany increased earnings) for youth and parents.
- **The federal government.** WI PROMISE produced a large net cost of $22,410 to the federal government. ED assumed most of the costs associated with program delivery ($19,029 per treatment group family). SSA experienced a net cost of $309 per treatment group family, stemming from increased SSA payments and administrative costs.
- **State and local government, including WI PROMISE partners.** The program produced a net cost of $193 per treatment group family to state and local WI PROMISE partners, driven primarily by increased Medicare and Medicaid expenditures and VR costs. A decreased incarceration rate provided a large benefit to the state but it was not large enough to offset other costs.

2. WI PROMISE could be cost neutral after 20 years under plausible assumptions for youth earnings

We considered the programs' benefits and costs beyond the five-year evaluation period. First, we considered the average impact needed for program to be cost neutral across all key stakeholders. For benefits to equal costs by 20 years after RA, WI PROMISE would need to generate an average annual impact on youth earnings of $679 per year (Appendix Figure H.1), $451 more than the point estimate of the program's impact on youth earnings in the fifth year after RA (according to administrative data) and similar to the $668 point estimate of the program's impact on earnings in the year before the five-year survey. Second, because the five-year evaluation period might underestimate the earnings growth for youth if many are still building their human capital, we considered how net benefits would likely accrue over 20 years after RA. If we assume a 10 percent return per year of education persists over time, the net benefits across all key stakeholders would be -$8,281 over 20 years (Appendix Table H.30). Under a high future earnings scenario wherein we forecasted earnings using the upper bound of the 95 percent confidence interval of the estimated impact on earnings (in place of the Year 5 earnings impact estimate), the net benefit across all key stakeholders over 20 years would be $9,590.

F. Summary and discussion

1. Summary of key findings

Table VIII.1 summarizes the WI PROMISE impacts on the primary youth and parent outcomes. Overall, WI PROMISE increased youth's employment rates in each of the five years following RA, income in the year before the five-year survey and during the five calendar years following RA but had no impacts on other primary outcomes. It increased the likelihood of health insurance coverage among parents but had no impacts on parents' employment, SSA payments, or income five years after RA. The program resulted in a net cost of $16,269 per treatment group family over five years across all key stakeholders. For treatment group youth and families, it delivered an average net benefit of $6,334 over five years.

Table VIII.1. WI PROMISE: Summary of five-year impacts on primary outcomes, by domain

Domain	Primary outcome	Impact summary
Youth		
Education and training	Enrolled in an educational or training program	0
	Has a GED, high school diploma, or certificate of completion	0
Employment and earnings	Employed in a paid job in the past year	+++
	Total earnings in the past year	0
	Earnings during the five calendar years after RA	0
Self-determination and expectations	Self-determination score	0
	Youth expects to be financially independent at age 25	0
Health insurance	Covered by any health insurance	0
	Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA	0
SSA payments and knowledge of work supports	Received SSA payments in Year 5 after RA	0
	SSA payments in Year 5 after RA	0
	SSA payments during Years 1–5 after RA	0
Economic and social well-being	Income from earnings and SSA payments in the past year	+
	Income during the five calendar years after RA	+++
Parents		
Parents' employment and earnings	Either parent worked for pay in the past year	0
	Parents' earnings in the past year	0
	Parents' earnings during the five calendar years after RA	0
Parents' SSA payments	Either parent received SSA payments in Year 5 after RA	0
	SSA payments received in Year 5 after RA	0
	SSA payments during the five years after RA	0
Parents' economic well-being	Parents' income from earnings and SSA payments in the past year	0
	Parents' income during the five calendar years after RA	0
Parents' health insurance	Either parent is covered by health insurance	+
	Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA	0

Note: All outcomes are measured at the time of the five-year youth survey unless otherwise specified. See Appendix Tables H.8–H.17 for more details.

+/++/+++ 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.

GED = General Educational Development; RA = random assignment; SSA = Social Security Administration.

2. Discussion

WI PROMISE helped put youth on a steady path of paid employment. The results presented here suggest that the program boosted employment over the five years following RA, though the impacts were larger in earlier than later years. Over time, employment rates for all youth rose—including those in the control group. Nonetheless, in four to five calendar years after RA, the program increased youth employment rates by about 10 percent. We found suggestive evidence that it increased youth's earnings—a key

measure of successful employment. Although many of the point estimates were positive and sizeable, so too were the standard errors; ultimately, we could not detect impacts on earnings that were significantly different from zero.

The COVID-19 pandemic occurred during the fifth calendar year after RA for 76 percent of youth and might have suppressed impacts on youth employment and earnings in that year. Wisconsin's annual youth unemployment increased to 11 percent in 2020 from 7 percent in 2019 (Inanc et al. 2022). This could explain why employment for both treatment and control group youth declined in the fifth calendar year following RA after increasing in all previous years. We found some evidence that the downturn in employment disproportionately affected treatment group youth. WI PROMISE's impacts on youth employment and earnings were considerably larger for youth who completed the five-year survey before the onset of the pandemic than for those who completed it after, though the difference was not statistically significant (Appendix Table H.25).

WI PROMISE increased youth's income from earnings and SSA payments in the year before the survey. This suggests that the program boosted youth's economic well-being overall. This measure of income is the sum of two other outcomes: youth's self-reported earnings in the year before the survey and recorded SSA payments over the same period. We did not detect statistically significant impacts of the program on either youth earnings or SSA payments, though the point estimates were large. As a result, we cannot say for certain whether the program's impact on youth's income was driven by an increase in earnings or SSA payments—which are intricately connected through the rules governing SSA programs.

The employment impacts align with findings from the process analyses and other research on the services that WI PROMISE emphasized, such as employment-focused, person-centered planning. Nearly all youth (94 percent) had an IEP after they enrolled in the program, and most IPEs included key services such as vocational counseling, training and education, and work incentives benefits counseling. The 18-month impact evaluation found that the program substantially increased the share of youth who received employment-promoting services, benefits counseling, and VR services (Mamun et al. 2019a). It is likely the five-year impacts on employment stem from the program's success in increasing youth's participation in VR services. The program had sizable impacts on the share of youth who applied for and received VR services. These impacts were intended by the program's service model and due in part to the fact that most of its activities were housed in Wisconsin's VR agency. Other research found that youth in both treatment and control groups who received employment services through VR, especially paid work experiences and on-the-job supports, had higher employment rates than control group youth who did not use these services (Hartman et al. 2019). Another study found that treatment group youth who received work incentives benefits counseling from WI PROMISE were more likely to be employed and had worked a greater number of jobs since enrollment than treatment group youth who did not receive such counseling, though it should be noted that youth who are highly motivated to work may be more likely to participate in such counseling (Schlegelmilch et al. 2021).

We found no impacts on several primary youth outcomes: enrollment in schooling or training, receiving a high school credential, self-determination, and health insurance coverage. For most of these outcomes, the absence of impacts is consistent with findings from the process and 18-month impact studies. There are a few possible explanations for the absence of impacts on these outcomes, including the following:

- The absence of impacts on youth's enrollment in schooling or training and receiving a high school credential might reflect the lack of WI PROMISE services designed to directly address these outcomes. Moreover, the high rate of education among the control group youth meant there was not

much room for improvement. For example, more than two-thirds of control group youth had a GED, certificate of completion, or high school diploma at the time of the five-year survey, which is higher than recent national estimates for VR applicants ages 16–24 (Honeycutt et al. 2015). The absence of impacts on educational outcomes might also reflect the fact that the program was able to provide resource teams for only half of the youth. Youth had better employment outcomes when LEA staff were included on the youth's resource team, relative to youth who either did not have a resource team or had no LEA staff on their team (Hartman et al. 2021).

- The absence of impacts on youth self-determination are consistent with the absence of 18-month impacts on this outcome (Mamun et al. 2019a) and may have several possible explanations. It might reflect youth's low take-up of self-advocacy and soft skills trainings (Selekman et al. 2018). Alternatively, it could be the case that these services were ineffective or unnecessary (that is, if youth had high self-determination and did not need extra support) or inappropriately targeted (that is, if they were not selectively offered or tailored to youth who stood to benefit the most).

Despite the absence of impacts on these outcomes, we found evidence of impacts on other employment-related outcomes. For example, the program increased work hours, labor force participation, and the share of youth employed in competitive, integrated jobs in the year before the five-year survey. WI PROMISE increased weekly work hours in the year before the survey by 13 percent relative to the control group mean. It also increased the likelihood that youth were employed in jobs that were integrated, outside of school-sponsored activities, and had supports such as job coaches. This finding suggests that the program not only increased the share of youth who were employed but also their interest in and desire for employment, work intensity, access to work supports, and integration into the broader community in the types of jobs they held. We also found evidence that it increased youth enrollment in postsecondary education, receipt of training credentials, and their own and their parents' expectations about their future employment. These findings are consistent with those from a small-scale qualitative study of four case studies, which found that WI PROMISE participants expressed the desire to work and were optimistic about the future resulting from their experience with the program (Schlegelmilch et al. 2021).

We found no evidence that the program improved parents' outcomes. The program had no impact on parents' employment, earnings, SSA payments, or income five years after enrollment. This finding is consistent with the earlier evaluation findings showing no impacts on these outcomes 18 months after enrollment. Although the WI PROMISE model emphasized engagement of the whole family in case counseling, services, and trainings, the five-year findings indicate that the program was unable to affect parents' outcomes five years after enrollment. Several factors may have contributed to the absence of impacts. First, parents' employment rates were not low to begin with: more than 70 percent of youth had at least one parent who worked in the year before their enrollment in the program. Second, the program fell short of its own expectations regarding service delivery for families: less than half of the participating youth had a parent with an IPE or FSP (Selekman et al. 2018), though they might not have needed services because most families had at least one working parent. Third, the extent to which case counselors engaged in crisis management with families around their basic subsistence needs might have undermined their ability to address other service needs, such as those designed to improve earnings among parents.

During the five years after enrollment, the costs of WI PROMISE outweighed the benefits viewed across all stakeholders. The program resulted in a net cost of about $16,269 per participant. Youth and families, the main beneficiaries of the program, experienced $6,334 in benefits on average during the five-year follow-up period. However, these benefits were small compared to the $19,369 cost per treatment group family in the program.

At the same time, our estimates are likely to underestimate the long-term net benefits of WI PROMISE. We may not have measured or monetized all outcomes that could capture the benefits of the program—for example, we did not assign a monetary value to the reduction in school expulsions and suspensions that the program produced, or the potential for increased employment to result in better mental health (van der Noordt et al. 2014). Further, the program improved some outcomes from which benefits could continue to accrue to key stakeholders over time. It could continue to generate benefits in the future because of the following:

- WI PROMISE increased the share of youth enrolled in postsecondary college or advanced degree programs and the share who received a training credential in the year before the survey. This finding means that, as intended by the program, many treatment group youth are building human capital that offers long-term dividends. Increased education is likely to boost employment and earnings for PROMISE youth in the long term (Heckman et al. 2018; Henderson et al. 2017). It also predicts employment in high-quality jobs—for example, those that provide access to employer-provided health and dental insurance (Schudde and Bernell 2019). Further, higher levels of education are linked to increased tax revenue and decreased reliance on social welfare programs (Trostel 2008; Ma et al. 2016). When we assume a 10 percent return per year of education that persists over time, we forecast a net cost across all stakeholders of $8,281 over 20 years compared with a net cost of $16,269 by the fifth year after RA (Appendix Tables H.27 and H.30).
- The program reduced school expulsions and suspensions, which are associated with negative educational and other outcomes. Past research suggests that suspensions have a negative effect on academic performance (Noltemeyer et al. 2015; Lacoe and Steinberg 2019; Anderson et al. 2019; Swanson et al. 2021). They also increase the number of days that middle and high school students miss during subsequent school years and decrease their likelihood of graduating (LiCalsi et al. 2021). There is also some evidence suggesting that expulsions and suspensions are linked to future involvement in the justice system (Fabelo et al. 2011; Bacher-Hicks et al. 2019).
- WI PROMISE increased youth and parent expectations about the youth's employment prospects and youth's expectations about residential independence. These findings are promising for the future because parent expectations are among the strongest predictors of long-term employment of high school youth with disabilities (Carter et al. 2012; Papay and Bambara 2014; Doren et al. 2012), and youth expectations are significant predictors of independent living outcomes (Kirby et al. 2019).

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IX. Summary and Conclusions

This report presents findings from analyses of the six PROMISE programs' impacts on youth and parent outcomes and their net benefits during the five years after RA. The evaluation used an RA design: youth were randomly assigned to either a treatment group, which meant they and their family members were eligible to receive PROMISE services, or a control group, which meant they were not eligible for PROMISE services. By comparing the outcomes of youth and parents in the two groups, we estimated the programs' impacts and net benefits. In this chapter, we summarize the findings, discuss key patterns of findings, note study limitations, and discuss the implications of the findings for future efforts aimed at improving the transition outcomes of youth receiving SSI.

A. Summary of findings

The findings from the five-year impact and benefit-cost analyses can be summarized as follows:

- PROMISE improved only a few of the primary youth outcomes, and the impacts varied by program (Figures IX.1 and IX.2). Two programs increased youth's employment rate and three programs increased their income. None reduced the amount of SSA payments youth received during the five-year evaluation period.
- With a few exceptions, the six programs did not affect parents' primary outcomes such as their employment rates, earnings, SSA payments, income, or Medicaid and Medicare expenditures (Figures IX.3 and IX.4). Only one program had a favorable impact for parents: WI PROMISE increased the share of families where at least one parent had health insurance.
- We found variation in programs' impacts according to youth or family characteristics. MD PROMISE and NYS PROMISE had an impact on labor market outcomes for youth with intellectual and developmental disabilities but not for youth with other impairments. We also found evidence that some programs improved labor market outcomes in families in which a parent was receiving SSA payments at RA.
- Over the five-year evaluation period, none of the programs generated positive net benefits across all stakeholder groups. The net benefits per treatment group family ranged from -$16,269 in WI PROMISE to -$37,882 in Arkansas PROMISE. For all programs except ASPIRE and NYS PROMISE, youth and their families experienced a net benefit from participation in PROMISE.

Figure IX.1. PROMISE programs' impacts on youth non-monetary outcomes in the five years after RA

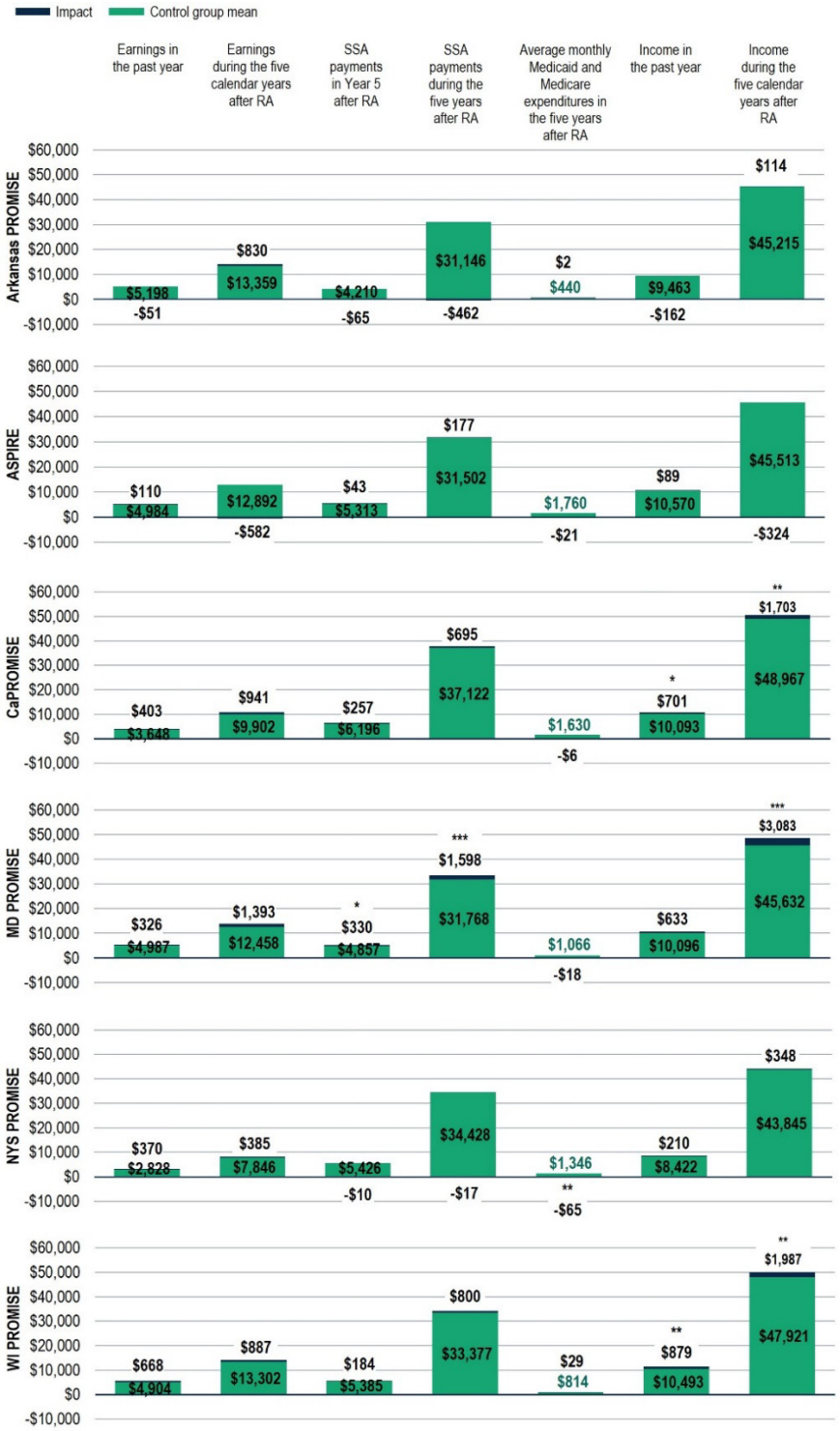
Source: Youth five-year survey; SSA data.

Note: All outcomes were measured at the time of the five-year parent survey unless otherwise specified.

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

GED = General Educational Development; RA = random assignment; SSA = Social Security Administration.

Figure IX.2. PROMISE programs' impacts on youth monetary outcomes in the five years after RA



Source: Youth five-year survey; SSA data.

Note: All outcomes were measured at the time of the five-year parent survey unless otherwise specified.

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

RA = random assignment; SSA = Social Security Administration.

Figure IX.3. PROMISE programs' impacts on parent non-monetary outcomes in the five years after RA

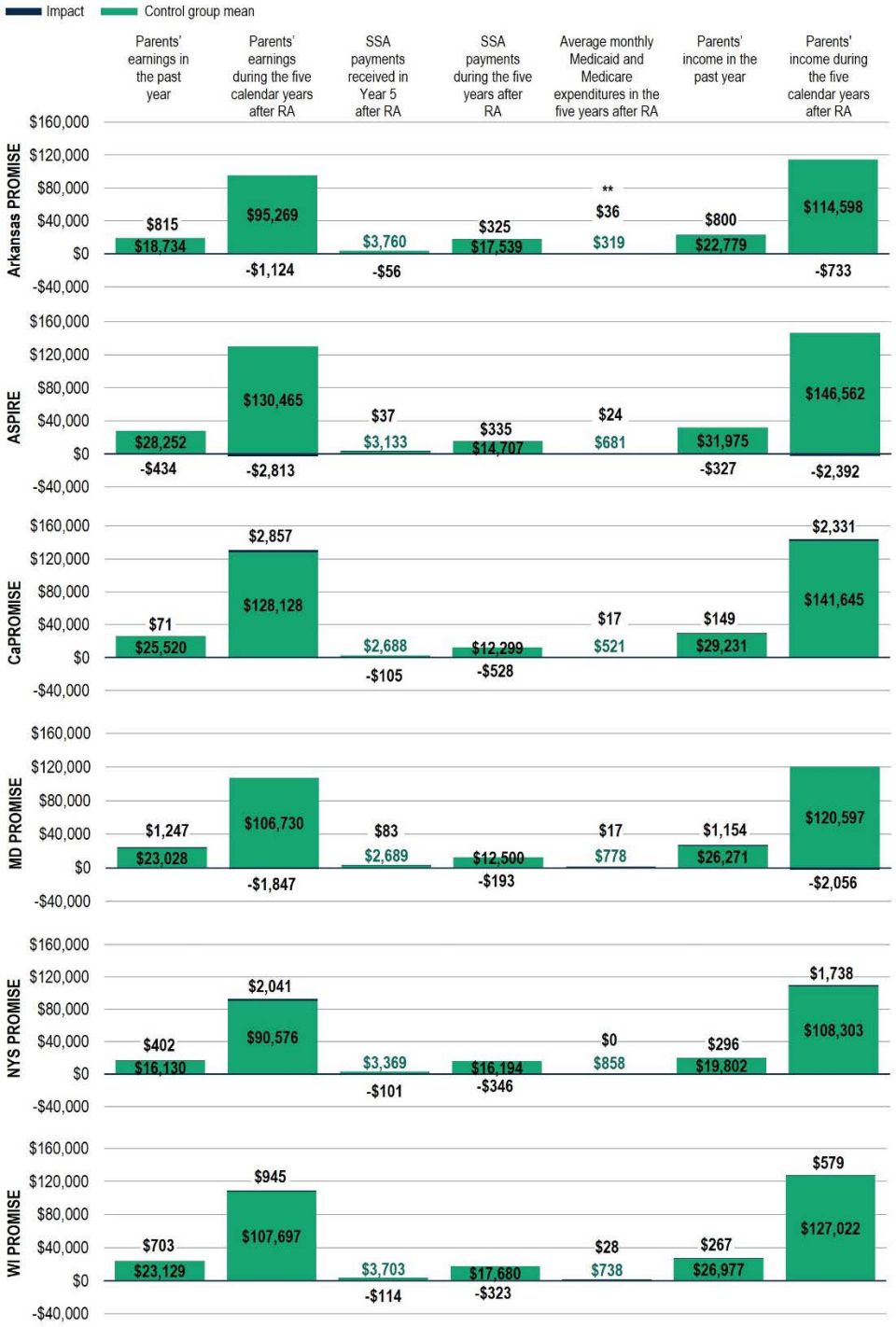
Source: Parent five-year survey; SSA data.

Note: All outcomes were measured at the time of the five-year parent survey unless otherwise specified.

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

RA = random assignment; SSA = Social Security Administration.

Figure IX.4. PROMISE programs' impacts on parent monetary outcomes in the five years after RA



Source: Parent five-year survey; SSA data.

Note: All outcomes were measured at the time of the five-year parent survey unless otherwise specified.

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

RA = random assignment; SSA = Social Security Administration.

B. Discussion of key themes

Below we highlight key patterns in the findings across the six programs and discuss their significance and possible explanations.

1. Two programs had persistent impacts on youth's employment; various reasons might explain the absence of impacts in the others

Each program increased employment and earnings in the first few years after RA, but the longer-term findings are less encouraging. Historically, many youth with disabilities do not obtain career development experiences despite their potential availability through federal and state programs (Carter et al. 2010; Liu et al. 2018). The findings show that all programs addressed this challenge in the short term. But this did not translate into the desired persistent impacts on employment and earnings for all programs.

When we pooled data from the six programs, we found that, on average, they increased youth's employment and earnings; however, these average impacts mask substantial variation in the programs' impacts (Figure IX.5). About 42 percent of control group youth were employed in the year before the survey; the average impact of the programs was to increase this share by 3 percentage points. Similarly, control group youth earned an average of $11,626 during the five years after RA; the average impact of the six programs was to increase this amount by $711 (about 6 percent). However, when we consider each program separately, the findings tell a more nuanced story. No program had a significant impact on youth earnings in the fifth year after RA, and just two of them (NYS PROMISE and WI PROMISE) had impacts on youth employment that persisted beyond the third year after RA. We suggest three possible explanations for these findings.

First, the absence of persistent impacts on employment across all programs suggests that a service model such as PROMISE, which emphasizes connections to or subsidies for short-term work opportunities, does not necessarily translate into long-term employment impacts. The existing evidence that youth work experiences in high school predict long-term employment has generally been short term or correlational (D'Amico 1991; Carter et al. 2012; Hemmeter and Cobb 2018). The PROMISE findings, as well as those from the YTD and other youth demonstrations, suggest that some of the positive benefits of these initial work experiences can dissipate in the longer term once services end and as youth in the control group catch up and gain work experience. This situation is especially likely if youth who are particularly motivated to work are more likely to enroll in evaluations, making them likely to have better labor market outcomes, even in the absence of PROMISE, compared with other youth receiving SSI (see Appendix L).At the same time, this does not mean that paid work experiences are unimportant. In additional analyses, we found strong evidence that youth's early work experiences were a key mechanism for the programs' average five-year impacts (Patnaik et al. 2022). For example, the programs' average impact of increasing youth's employment, earnings and income during the year before the five-year survey partially operated through their positive impacts on the shares of youth who had paid work experiences during the 18-months after RA. Taken together, the findings from this evaluation suggest that early paid work experiences are important, but the extent to which they influence longer-term outcomes might depend on factors such as the characteristics of youth who participate in them and the way in which they are implemented (discussed further below).

Figure IX.5. Average impacts of PROMISE programs on youth outcomes

Source: Five-year survey, SSA data.

Note: This figure shows the average control group means and impacts of PROMISE on selected youth outcomes across the six programs and the control group means and impacts of each program for the same outcomes. To estimate the average impacts, we pooled data from the six programs and weighted each program equally. The control group means and impacts of each program are as presented in previous chapters. See Appendix Tables I.9-I.15 for more details.

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

≠/= Impacts for the six programs are/are not significantly different from each other at the .10 level, adjusted Wald test.

ASPIRE = Achieving Success by Promoting Readiness for Education and Employment; GED = General Educational Development; CaPROMISE = California PROMISE; MD = Maryland; NYS = New York State; RA = random assignment; SSA = Social Security Administration; WI = Wisconsin.

Second, although all programs provided employment services to youth, NYS PROMISE and WI PROMISE appeared to be more effective at increasing youth employment than the others. Both programs increased youth employment in the year before the survey by more than 10 percent compared with the control group; the other programs' impacts were statistically insignificant and smaller relative to the control group mean. A possible explanation is that the type of staff that provided employment services at NYS PROMISE and WI PROMISE made them particularly effective. In the later years of program operations, NYS PROMISE brought in specialists from Bridges from School to Work to train and support the program's employment service providers in New York City, where the majority of enrollees accessed services. This organization had more than three decades of experience in helping young adults with disabilities find jobs during and after high school, and research suggests that Bridges participation might help participants obtain higher earnings in the long-term (Hemmeter et al. 2015). WI PROMISE hired VR counselors to provide employment services to youth; as a result, it had the largest relative impact on youth's use of VR services in the 18 months after RA (Mamun et al. 2019a), which likely contributed to the persistent increase in youth employment rates. We cannot say with certainty that differences in staff experience in providing employment supports to youth accounted for the differences in impacts. This factor and others related to how services were implemented likely played a role.

Third, for many enrollees, the fifth year after RA coincided with the COVID-19 pandemic, which might have influenced youth outcomes and the programs' impacts. The pandemic put young people with disabilities at heightened risk of a delay in career development, absence from schools and the labor market, and experiences of primary and secondary trauma (for example, from the mental health effects of isolation). The pandemic might have affected the potential for the programs to impact some outcomes. During the pandemic, youth might have faced more limited employment and economic opportunities. At the same time, some public policies might have had a protective effect, for example, the Families First Coronavirus Response Act of 2020 required state Medicaid programs to keep beneficiaries continuously enrolled through the end of the public health emergency as a condition of receiving an increase in their federal match rate during the emergency. In additional analyses, we found evidence that treatment group youth experienced a greater deterioration of labor market outcomes during the pandemic than control group youth (Hill et al. 2022). Although the average labor market outcomes were worse for youth surveyed during the pandemic than those surveyed before the pandemic, the difference for many outcomes was larger for treatment group youth than for control group youth. For example, across all programs labor force participation was 52 percent among treatment group youth surveyed during the pandemic versus 61 percent among those surveyed before the pandemic (a 9-percentage point difference); among control group youth, those rates were 50 and 54 percent respectively (a 4-percentage point difference). Although it is impossible to know what the impacts of each program would have been in the absence of the pandemic, there is evidence that five of the six programs had larger impacts on youth labor market outcomes in the fifth year after RA among youth surveyed before the pandemic compared with youth surveyed during the pandemic (Hill et al. 2022).

Despite the findings that the programs' did not consistently increase youth employment and earnings at the five-year follow-up, it is important to place the findings in the broader context of the youth employment outcomes. For some programs that did not affect youth's employment and earnings in the year before the five-year survey, we found impacts on employment-related outcomes, such as labor force participation and employment in a job with coaching (MD PROMISE), employment at the time of the survey (Arkansas PROMISE), and use of supports or services in getting or keeping a job (Arkansas PROMISE and CaPROMISE). Moreover, the substantial list of outcome measures did not capture all dimensions of employment. PROMISE may have helped put youth on more promising career pathways—

for example, in jobs that offered opportunities for skill development or advancement within an organization or industry, which may also have helped youth get different or better-quality jobs. We do not know whether the programs affected other dimensions of job quality, such as job security, job control, work flexibility, or supportive environments. In a forthcoming report, we examine the characteristics of the jobs that PROMISE youth held at the time of the five-year survey (Farid et al. 2022).

In addition, some programs increased the employment and earnings of subgroups of youth. For example, among youth with intellectual and developmental disabilities, MD PROMISE increased employment rates and NYS PROMISE increased youth earnings during the five calendar years after RA, even though the programs had no impact on these outcomes for youth with other impairments. These findings are consistent with those from the STETS and TETD evaluations, which exclusively included people with intellectual disabilities and found positive impacts of the interventions on youth's employment and earnings. The findings suggest that PROMISE-like programs can be effective in increasing labor market outcomes for some subgroups of youth while they are not effective for others. More research is needed to understand why they are effective for some subgroups and what types of interventions would be effective for other youth in need of transition supports.

2. The student earned income exclusion and effects of benefits counseling might have contributed to the lack of reductions in youth SSA payments and the positive impacts on youth income

One objective of PROMISE was to increase youth's self-sufficiency and reduce their reliance on SSA payments during adulthood. None of the programs succeeded in doing so during the five-year follow-up period, at which point the oldest participating youth were age 22. When we pooled data from the six programs, we found that, on average, the programs increased youth's SSA payments (Figure IX.5), although there was substantial variation in the programs' impacts. MD PROMISE increased the share of youth receiving SSA payments in the fifth year after RA and the average amount of SSA payments received that year or during the five years after RA; the other programs had no impacts on these outcomes.

Even programs that boosted youth's employment rates, such as WI PROMISE and NYS PROMISE, did not reduce youth's SSA payments because they did not substantially affect their earnings. These programs nudged more youth to get jobs, but those jobs did not provide large enough earnings to reduce SSI payments. For SSI payments to have been affected, youth's annual earnings generally would have needed to exceed the SSI student earned income exclusion amount ($7,670 in 2020), which might not have been realistic for the large percentage of treatment group youth who were still enrolled in school at the five-year follow-up (ranging from 27 percent to 56 percent across programs). Because the youth were still quite young five years after RA, the potential remains for the programs to increase self-sufficiency in the long term.

In addition, each program increased youth's awareness of at least one type of work support, which suggests that the benefits counseling all programs provided improved youth's understanding of work supports and incentives. Treatment group youth might have been better equipped or directly assisted by the PROMISE programs to use provisions such as Section 301, which allow SSI recipients to retain eligibility for or greater amounts of payments,[33] possibly enabling youth to pursue employment without

[33]A medical CDR or age-18 redetermination might result in SSI payments ending because a youth has medically improved or does not meet the adult the medical requirements. Section 301 allows youth to continue receiving payments if they are participating in SSA-approved programs that may enable them to become self-supporting, such

losing their SSA payments. However, awareness of work supports was low among youth in both groups. Despite the programs' dedicated supports through services such as benefits counseling, less than one quarter of PROMISE youth were aware of each work support examined.

The PROMISE model aimed to increase youth's overall economic well-being as measured by their income from earnings and SSA payments. Based on data pooled across the six programs, on average, the programs increased youth's income, a result of increased earnings and SSA payments. On average, control group youth had $46,184 in income during the five years after RA; on average, the programs increased this by $1,136. When we examine each program separately, three of the programs (CaPROMISE, MD PROMISE, and WI PROMISE) increased youth income over the five-year period. The programs may have better equipped youth to navigate SSA's programs and use work incentive provisions to increase earnings without losing SSA payments. In doing so, these programs improved the economic well-being of youth with disabilities receiving SSI during their transition to adulthood.

3. By and large, the programs did not substantially improve youth's education, training, self-determination, expectations for the future, likelihood of having health insurance, or Medicaid and Medicare expenditures

No program increased the shares of youth enrolled in school or training (NYS PROMISE decreased this share) or those who had attained a high school completion credential (ASPIRE reduced this share). A few reasons might explain why the programs did not improve youth's educational outcomes. First, the PROMISE model did not emphasize targeted services to promote educational attainment. The programs generally included only one of the many academic practices and predictors related to transition identified by *Guideposts for Success* and the National Technical Assistance Center on Transition matrix: service providers' involvement with individual transition plans in schools (Honeycutt et al. 2018a). The process analyses found that none of the PROMISE programs offered significant services to address education, though all assisted with youth's educational issues. Some programs experienced challenges working with the local school systems—for example, NYS PROMISE had difficulty gaining entry to community schools in New York City and accessing school resources (McCutcheon et al. 2018). Second, control group youth had relatively high educational attainment, leaving limited room for PROMISE to improve this outcome. In all programs, more than half of youth had a GED, certificate of completion, or high school diploma at the time of the five-year survey. By way of comparison, most VR applicants ages 16 to 24 have less than a high school level of education (Honeycutt et al. 2015). Third, the programs may have nudged youth to prioritize labor force participation over more formal education and training. It is unclear whether such a substitution will be beneficial to some youth in the long term. Not all youth are candidates for postsecondary education, and some might not benefit from further secondary education. It is conceivable that earlier labor market entry in lieu of further education could improve the long-term outcomes of some youth.

No program increased youth self-determination as measured using self-reported information related to autonomy, psychological empowerment, self-realization, and agentic action. When we examined youth and parents' expectations for the youth's future, we found few impacts. This finding is somewhat surprising because most programs offered services intended to promote youth self-determination; also, the inherent nature of other PROMISE activities, such as transition planning, goal setting, and obtaining work experience, might have contributed to improved self-determination and higher expectations. The absence

as those providing VR, employment, or other services likely to promote youth's self-sufficiency. PROMISE explicitly counted as such a program.

of impacts on self-determination and expectations is consistent with findings from the process analyses suggesting that take-up of these services was low for some programs. It could also be that most enrollees already had higher-than-average self-determination and expectations for their ages and thus had little need for services that targeted these outcomes and limited room to improve them.[34]

Only NYS PROMISE reduced youth's average monthly Medicaid and Medicare expenditures during the five years after RA. We do not know if this reduction is due to improved health, lower healthcare needs, alternative coverage, or foregone care, all of which have implications for the youth's welfare. Three programs (Arkansas PROMISE, ASPIRE, and WI PROMISE) increased youth enrollment in Medicaid in the first year after RA, likely because case management and benefits counseling services connected families to this program. By the fifth year after RA, there were no differences between the treatment and control groups for any program in the share of youth who were enrolled in Medicaid. The absence of an impact on Medicaid participation might in part be due to the Medicaid continuation policy implemented during the pandemic. It is also consistent with the finding that no program had an impact on the share of youth who received SSI in the fifth year after RA; SSI receipt typically guarantees Medicaid eligibility.

4. Several factors likely contributed to the lack of impacts on parents' outcomes, including the intensity and focus of services and parents' need for the services offered

A key feature of PROMISE was its individual- and family-centered approach to case management and service delivery. Previous SSA demonstrations targeting youth, such as TETD and YTD, did not emphasize services to family members. Despite PROMISE's aim to serve other family members of youth, particularly parents, we found few impacts on parents' outcomes across the six programs, and only one that appeared to be beneficial to families. Only WI PROMISE appeared to benefit parents through its positive impact on the likelihood of having health insurance coverage. In the pooled analyses, we also found no average impacts on any parent outcomes, confirming that the absence of program-specific impacts on their outcomes was not because of limited statistical power.

The absence of program impacts on parents' outcomes is somewhat surprising because the relative size of the 18-month impacts on families' use of support services was much larger than those on youth's use of transition services (Patnaik et al. 2021). At the same time, we examined only parents' outcomes, while the family support services might have been used by other members of the family or household. Additionally, several participants had siblings who received services and their outcomes are not captured in this analysis. We posit five possible explanations for the absence of impacts on parents' five-year outcomes.

First, although the PROMISE model emphasized serving both youth and families, the programs focused more on youth and did not provide parents with intensive services necessarily customized to their own needs. For example, ED expected programs to provide youth with at least one paid work experience in an integrated setting while they were enrolled in high school, but did not specify employment goals, services, or experiences for parents (ED 2013a); it only required parent training and information on how to

[34]PROMISE enrollees might have higher than average self-determination compared with other youth receiving SSI, thus contributing to their selection into PROMISE. In supplementary analyses, we found that control group youth had higher earnings during the calendar year when they turned age 18 compared with PROMISE-eligible youth who did not enroll (Appendix L). This finding suggests that youth who enrolled in PROMISE were more likely to have characteristics associated with better transition outcomes (such as self-determination) relative to other SSI youth. The measure of self-determination used in the evaluation was based on, but not the same as, established measures of self-determination, such as the American Institutes for Research Self-Determination or the Arc's Self-Determination Scale measures. Differences with established measures make it difficult to assess whether enrollees had higher self-determination scores than is typical for this population.

improve their education and employment outcomes and did not require programs to connect unemployed parents to a work experience. Parent-specific services were less intensive and targeted; they included assistance in developing goals and plans for employment and education (as with the programs in Arkansas, New York State, and Wisconsin), connecting parents to resources, and dispensing funds for families to use in emergency situations (as with the programs in Arkansas and Maryland) (Honeycutt et al. 2018a). Only one program's logic model (Arkansas PROMISE) explicitly mentioned increasing parents' employment and earnings as an intended outcome of its services.

Second, although the programs increased the share of families that used support services, the impacts were not concentrated among the types of services most likely to improve parents' own outcomes. Family support services could include those focused on the youth, such as training and information about a youth's disability, as well as family-oriented support services intended to improve the outcomes of other family members, such as education and training supports. PROMISE created a larger difference between treatment and control groups' use of youth-oriented than family-oriented support services (Levere et al. 2020),[35] possibly because the programs did not emphasize family-oriented support services as much as those for youth. Another reason might have been that parents were less interested in family-oriented support services (for reasons we discuss further below).

Third, PROMISE services did not directly address outcomes that offered room for improvement, such as parents' earnings. The programs did not offer services to parents that are associated with increased earnings for individuals with low incomes, such as work experience, subsidized employment, transitional jobs, education, soft skills training, or occupational and sectoral training (Streke and Rotz 2022). The programs primarily referred parents to other existing resources, which may or may not have provided such services. Moreover, the parents' earnings might be low because their caregiving responsibilities require them to spend less time in market work. Other research has found that having a child with special health care needs is associated with less time in market work, especially among mothers (Burton et al. 2017; Eriksen et al. 2021; Wasi et al. 2012). SSI payments help support families and facilitate parental time for caregiving and away from the labor market (Deshpande 2016), so parents might already have been optimizing their involvement in the labor market. In that case, an intervention like PROMISE would not address the underlying issue that parents who must provide caregiving for youth with disabilities face an uphill battle increasing their own earnings.

Fourth, education, training, and employment-promoting services might be more useful to a subset of parents of youth receiving SSI. When we examined variation in impacts by subgroups, we found that among families that had a parent receiving SSA payments at RA (thus, a parent unlikely to be working), Arkansas PROMISE increased parents' employment rates, earnings, and income, and MD PROMISE increased their employment. The programs did not affect these outcomes among families in which no parent received SSA payments at RA.

Finally, although the parents of youth receiving SSI generally have low incomes, the parents might not have needed help obtaining employment. About 7 in 10 control group families had at least one parent who was employed in the year before RA (Appendix Table I.1); this share remained stable over the five years after RA (Appendix Table I.9). This employment rate is on par with national estimates of the employment

[35] The difference between the treatment and control groups in the shares of families using youth-focused services ranged from 9 percentage points (NYS PROMISE) to 28 percentage points (Arkansas PROMISE). For family-focused services, the difference ranged from 2 percentage points (NYS PROMISE) to 18 percentage points (WI PROMISE and Arkansas PROMISE).

rate of working-age adults (U.S. Bureau of Labor Statistics 2022), though notably, the PROMISE estimates pertain to families rather than individuals.[36] The parents' relatively high employment rates might explain why the programs' impacts on service use were modest for education or training supports and employment-promoting services to families (Mamun et al. 2019a). Moreover, the high employment rates among parents left little room for improvement, which might explain the absence of impacts on the share of families in which a parent was employed.

Even though PROMISE did not improve parents' outcomes, family support services may have contributed to youth outcomes. The programs tried to increase family involvement in transition planning and offered family members training and information on issues specific to the youth, such as benefits counseling and information about their disability. These family support services may have helped families navigate service systems and address their youth's disabilities and thus, could have contributed to improved youth outcomes. Consistent with this suggestion, a prior descriptive analysis found that local areas where PROMISE had large impacts on use of family support services also tended to have bigger impacts on youth outcomes 18 months after RA (Levere et al. 2020). However, we could not rigorously test whether family support services improved youth outcomes because we could not isolate the impact of youth transition services from that of family support services.

5. Each program's costs substantially exceeded its benefits over the five-year follow-up period

The net benefits over the five-year period ranged from -$16,269 per treatment group family in Wisconsin to -$37,882 in Arkansas. The negative net benefits were driven mainly by programs' direct costs. For example, the largest negative net benefit of Arkansas PROMISE was driven by the particularly high direct service costs ($40,289).[37]

These estimates might understate the long-term benefits of PROMISE because some impacts accumulate over time. We estimated programs' net benefits over the 20 years after RA (still only a fraction of the youth's potential working lives) and found that the impact on youth's annual earnings in the future would need to be substantially higher than the impacts experienced in the fifth year after RA for PROMISE to generate cumulative net benefits by 20 years after RA. The required impacts on youth's annual earnings ranged from $679 for WI PROMISE ($451 larger than the $258 estimated impact observed for Year 5) to $2,042 for ASPIRE ($2,445 larger than the -$403 estimated impact observed for Year 5), although these estimates do not account for the possibility that impacts on other outcomes, such as Medicaid enrollment, might change after the fifth year after RA. Analyses of administrative data in the future will reveal whether the impacts needed for the programs to be cost neutral eventually materialize.

We did not account for the potential impacts of the programs on family members other than the youth and their parents. Many participants had siblings who might have benefited from PROMISE's emphasis on serving family members; we did not include such potential benefits in the estimated net benefits.

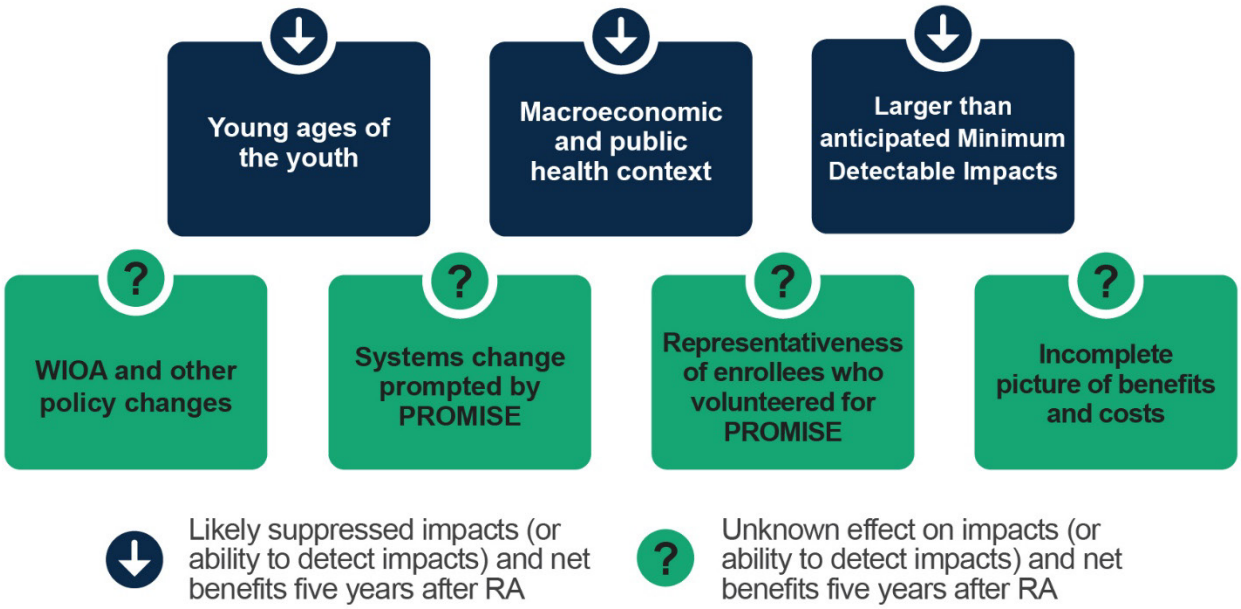
[36] In two-parent households with a child receiving SSI, 66 percent of fathers and 34 percent of mothers worked, whereas the rate for single mothers was 44 percent (Rupp and Ressler 2009).

[37] Note that all programs received similar levels of funding to serve families. The differences in direct service costs are due to differences across the programs in the portion of the funding they used for direct services versus other activities, such as those related to recruitment and enrollment, staff training, and program evaluation.

C. Context for the findings

Readers should keep in mind several contextual factors when interpreting the evaluation findings (Figure IX.6). Below we discuss these factors and their potential influence on the findings and the conclusions we draw from them.

Figure IX.6. Context of the national PROMISE evaluation



Young ages of the youth. The youth were ages 19 to 21 at the end of the five-year follow-up period and thus at the very start of their potential working lives. We might be observing them at the beginning stages of an improved, lifelong trajectory attributable to PROMISE. Youth might still have been deciding on what they wanted to do while working in entry-level jobs and low wage sectors. Some programs affected outcomes that could translate into other impacts when youth are older. For example, WI PROMISE increased the shares of youth enrolled in postsecondary college or advanced degree programs and who received a training credential in the past year, both of which could increase future earnings. Many youth were still enrolled in school or training at the time of the five-year survey, so that point in time might be too early to see the full picture of how PROMISE affected their lifetime outcomes.

Macroeconomic and public health context. The period from April 2014, when the first youth enrolled in PROMISE, through 2019 was a time of economic expansion in the U.S. economy. However, in 2020, the economy suffered due to the COVID-19 pandemic, with unemployment peaking at 15 percent in April 2020 (Smith et al. 2021). Working, studying, or training outside of the home posed a high risk for people with disabilities due to their increased risk of health complications from COVID-19. The pandemic reduced employment opportunities for many at-risk groups, including youth, and affected retail and hospitality industries especially hard— industries in which youth are more likely to work (Inanc 2021). It was also associated with lower enrollment in postsecondary schools, particularly two-year institutions (Causey et al. 2021), which youth with disabilities use disproportionately. Thus, the macroeconomic and public health environment might have influenced the potential for the PROMISE programs to improve enrollee outcomes. On the one hand, the pandemic and the government response to it may have muted the potential for programs to impact some outcomes. For example, the economic downturn in summer 2020

likely limited labor market opportunities for all youth, but there is evidence that treatment group youth experienced a larger decline in labor force participation and employment rates during the pandemic relative to the control group (Hill et al. 2022). As another example, the Families First Coronavirus Recovery Act of 2020 might have muted the ability of the programs to impact Medicaid participation because it required state Medicaid programs to keep beneficiaries enrolled until the end of the public health emergency to be eligible for an increased federal match. On the other hand, the programs may have equipped treatment group youth to better withstand the economic turmoil wrought by the pandemic. As the economy improves and vaccination rates rise, two stories could emerge: either treatment group youth could continue to achieve the employment gains they experienced before the pandemic, or the temporary disruption from the pandemic could permanently alter employment trajectories such that treatment and control group youth remain on an equal footing.

Larger than anticipated minimum detectable impacts (MDIs) over the follow-up period. The MDI for an outcome is the smallest impact that the evaluation design can detect with a high probability. If the MDI for an outcome is large, there is a high probability that the evaluation will fail to detect a true program impact that is smaller than the MDI but large enough to be important to policymakers. In an RA study, MDIs depend on factors such as sample sizes, the share of enrollees assigned to treatment, and the mean and variance of the outcome. Between the 18-month and five-year impact analyses, the control group's average outcomes and standard deviations increased considerably were substantially different from the a priori expectations assumed in the evaluation design report. As a result, the observed, or post-hoc, MDIs were much larger than anticipated (see Appendix A for a discussion of MDIs). This might be because variance in outcomes grew as more youth entered the workforce; the pandemic might also have increased variance.

The post-hoc MDIs for several five-year outcomes substantially exceeded the size of the impacts needed to be considered policy relevant. This might have limited the evaluation's ability to detect some impacts that were of a meaningful magnitude. For example, WI PROMISE's estimated impact on youth earnings in the year before the five-year survey was $665. This represents a 14 percent increase over the control group mean and about the average annual impact needed for the program to be cost-neutral by 20 years after RA (Appendix Table H.9). However, this estimate is smaller than the evaluation's post-hoc MDI of $1,202 and so is not statistically significant (Appendix Table A.7). Similarly, the point estimates of the impacts of CaPROMISE and MD PROMISE also exceeded 10 percent of the control group means but were smaller than the evaluation's post-hoc MDI and so are not statistically significant. Thus, the unforeseeable deviations from the prior assumptions around statistical power limited our ability to detect some programs' impacts on some outcomes at the five-year follow-up.

WIOA and other policy changes. Several policy changes occurred during the evaluation period, the effects of which on programs' impacts are unknown:

- WIOA, passed in 2014, changed the transition service landscape in significant ways, particularly by requiring that VR agencies offer pre-employment transition services to students with disabilities. This development could have muted the contrast between the services available to the treatment and control groups.
- In 2016, SSA began mailing a brochure to all youth ages 14 to 17 who were receiving SSI that provided information about the age-18 redetermination process, SSA work supports, and federal and other programs that might be relevant to youth with disabilities (SSA 2018). These mailings might

have improved the knowledge of both treatment and control group families about the benefits and resources available to youth.

- Because of the pandemic in 2020, SSA suspended continuing disability reviews for a time and field office closures created challenges in applying for SSA programs. These factors might have made the likelihood of receiving benefits more stable than it would have been otherwise.
- In 2020 and 2021, the U.S. Congress authorized several types of COVID-19 emergency assistance, including stimulus checks, expanded unemployment insurance benefits, and eviction moratoriums, which likely affected enrollees' income and incentives for employment.

Systems change prompted by PROMISE. ED required the programs to develop formal partnerships among state agencies responsible for providing services to youth receiving SSI and their families. These partnerships, in conjunction with the introduction of WIOA provisions, might have prompted system-wide changes that affected service delivery to all transition-age youth. Systems change may have created more opportunities for control group youth to receive transition services and thus reduced the service contrast between the two groups. However, PROMISE may have better positioned the treatment group youth to take advantage of systems changes, which would increase the service contrast between the two groups. Thus, the effect of systems changes on our impact estimates is unknown.

Voluntary nature of PROMISE. PROMISE enrollees were volunteers. Those highly motivated to achieve a successful transition to adulthood might have been more likely to enroll than other youth receiving SSI. In supplementary analyses, we found that control group youth had higher employment rates and earnings at age 18 than PROMISE-eligible youth who did not enroll in the evaluation (see Appendix L). As a result, the findings are relevant to voluntary interventions that might be offered to youth in the future.

Incomplete picture of benefits and costs. Although the PROMISE programs generated negative net benefits over the five-year follow-up period, several caveats apply to the findings. First, we chose not to account for the costs of services received from other agencies—that is, the cost of the existing services the programs leveraged, such as VR services. Second, there were outcomes we did not measure or monetize, such as private health insurance coverage and youth's mental health. Third, benefits that might have accrued to family members other than the youth and their parents are not accounted for. Fourth, direct costs were incurred upfront, whereas benefits and indirect costs are likely to accrue beyond the five-year evaluation period. The five-year benefit-cost analysis can only provide an early snapshot of the net benefits, which are expected to change over time. In supplementary analyses, we forecasted costs and benefits over 20 years; however, by necessity these estimates are based on assumptions about how the impacts will evolve in the future, which may or may not hold true.

D. Implications for policy, practice, and research

The findings from the PROMISE evaluation offer some valuable insights for policy, practice, and research. They include suggestion for lessons learned from the evaluation, as well as knowledge gaps the findings highlight that might be explored in future work.

The effectiveness of employment-promoting services likely depends on how programs implement them. Research suggests that connecting youth with early work experiences is associated with better employment outcomes (Carter et al. 2012; Luecking et al. 2018; Sevak et al. 2021). Each PROMISE program increased the share of youth who had a work experience during the 18 months after RA (Mamun et al. 2019a). In a related report, we found that those early impacts were likely a key mechanism for the

programs' average impacts on employment and income five years after RA (Patnaik et al. 2022). However, the significant variation in the six programs' impacts suggests that the way programs provide employment-promoting services matters for the longer-term impacts on youth's labor market outcomes. Arkansas PROMISE had the largest short-term impacts on youth's use of employment-promoting services, employment rates, and earnings during the first 18 months after RA (Mamun et al. 2019a). Nonetheless, it did not have significant impacts on youth employment and earnings five years after RA. This program's model included two paid summer work experiences (including job coaching) of up to 200 hours each and was the program that most extensively subsidized youth wages. In contrast, NYS PROMISE and WI PROMISE had the most persistent impacts on youth's employment and earnings over the five years after RA despite having smaller impacts on youth's use of employment-promoting services at the 18-month mark. The differences in impacts between Arkansas PROMISE and the two programs that generated longer-term employment impacts might be related to differences in the nature of the employment experiences or how programs implemented the core PROMISE services. The summer programs that Arkansas PROMISE offered were orchestrated events specifically created for the youth and so may not have been as representative of what youth would experience in the labor market as the work experiences that NYS PROMISE and WI PROMISE facilitated. The latter two programs also used specialist staff with substantial work experience to provide employment-promoting services: WI PROMISE used VR counselors, and NYS PROMISE used specialists from Bridges from School to Work. What, if anything, should be selectively replicated from the PROMISE programs, especially given that only two programs improved youth employment? The evaluation findings do not provide enough information to determine which factors led to the differences in impacts across programs. We can only speculate that differences in implementation might have contributed to them. Future evaluations might consider factorial designs that would facilitate a rigorous examination of mechanisms. They might also consider requiring demonstration programs to use a uniform system for documenting services that includes common definitions and complete tracking of all services delivered. Uniform data on service delivery would allow evaluators to assess how differences in service dosage or quality affect outcomes.

It is challenging for programs to push youth to prioritize early employment and education at the same time; more information about which youth benefit more from one or the other of these could help programs better target services. None of the programs increased youth's educational attainment. On average, the programs reduced the share of youth who received a high school completion credential—which is somewhat surprising because other studies have found better educational outcomes among young people with disabilities who received transition services (New York State Education Department 1999; Fraker et al. 2012b). One possibility is that the employment focus of the PROMISE programs might have led some youth to prioritize work experience and paid jobs over schooling, thus nudging them to take on employment opportunities earlier than they would have done otherwise in lieu of their educational progress. On the one hand, this could undermine youth's long-term success because education increases earnings on average (Angrist and Krueger 1991; Card 1999; Heckman et al. 2018). On the other hand, the returns to education can vary for subgroups and there is no evidence on the causal effect of formal education for youth receiving SSI. It remains to be seen whether the returns from more early work experiences outweigh the potential returns from greater education. More research is needed to understand the relative benefits of more formal education relative to earlier labor market entry for young people with disabilities and whether the benefits vary across subgroups of youth. This information could help practitioners strategize around the relative importance of nudging youth towards more education or earlier labor market entry as well as how best to target these nudges.

Programs providing employment-focused services to youth do not necessarily reduce SSA payments in the short term. The programs did not reduce youth's receipt of SSA payments, regardless of whether they increased youth employment. This finding highlights the fact that youth employment and SSA payments do not have a simple inverse relationship. Investing in youth's human capital and employment potential will affect reliance on SSA benefits only if the investments significantly alter youth's long-term employment trajectories. The five-year evaluation findings provide only a limited view of this trajectory. Moreover, during this period youth could avail themselves of provisions that would protect their benefits at the levels of earnings they were likely to achieve. Although the programs might reduce SSA payments in the long run, the features that were implemented by the PROMISE programs are unlikely to reduce reliance on SSI payments. The findings also suggest that any fears that youth or their parents have about work leading to loss of SSI payments in the short term are unwarranted.

Youth transition programs might consider the potential benefits of offering different types or dosages of, or a narrower and more targeted set of, family support services. Although PROMISE emphasized serving families alongside youth, we found no impacts on parents' outcomes. Relatedly, for both the control and treatment groups, families' use of family support services was greater for services that focused on the youth directly rather than those that focused on family members (Levere et al. 2020). This finding suggests that parents were less interested in support services that took aim at their own outcomes (such as employment-promoting services), potentially because such services did not target appropriate outcomes or were not needed. Given that family members engaged less in support services targeting their own outcomes and none of the programs improved parents' outcomes, youth transition programs might need to consider different dosages of services or other ways to improve parent outcomes. Future research could test the effectiveness of offering a narrower set of family support services that focus directly on youth. Such program models could be easier and more efficient for programs to implement if targeting parents' outcomes might require different resources and staff skills, and yet would still emphasize family involvement—a key feature of evidence-based transition frameworks for youth with disabilities. Some programs did improve parents' labor market outcomes when a parent received SSA payments at RA (and so likely was not working), suggesting that services aimed at parents' outcomes can be beneficial if they are targeted to a subset of parents who need them.[38] The fact that some programs improved parents' labor market outcomes also suggests that the PROMISE services intended to improve the outcomes of youth receiving SSI were applicable to adults receiving SSA payments.

One caveat is that we did not examine the outcomes of family members other than the enrollee's parents. To minimize burden on survey respondents, we did not collect data on family members other than the enrolled youth and their parents. To facilitate enrollment in the demonstration, we also did not collect the SSNs of family members other than the youth and enrolling parent, and thus, could not identify other family members in administrative data. We only collected data on and examined the outcomes of enrolled youth and their parents, which we considered to be the key indicators of PROMISE's success. However, many youth enrollees had siblings, often receiving SSI, who may have benefited from the family-based approach even if their parents did not. While many of the services offered by the PROMISE programs were based on the literature focused on youth with disabilities, many could be expected to help youth without disabilities as well. The programs' impacts on other family members' outcomes and the

[38] The training and information to help parents navigate services and address their youth's disabilities are likely important and might have contributed to improved youth outcomes. The evaluation could not isolate the effect of providing youth transition services from the effects of family support services on youth outcomes.

implications for the programs' net benefits, are not known. Future evaluations of family-based programs could focus on broader family outcomes than the ones focused on in the PROMISE evaluation.

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