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Promoting Readiness of Minors in Supplemental Security Income (PROMISE): Technical Appendix to the Five-Year Evaluation Report

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Acronyms

ABLE	Achieving a Better Life Experience
ACA	Affordable Care Act
ASPIRE	Achieving Success by Promoting Readiness for Education and Employment
BLS	U.S. Bureau of Labor Statistics
CaPROMISE	California PROMISE
CHIP	Children's Health Insurance Program
CMS	Centers for Medicare & Medicaid Services
CPI-W	Consumer Price Index for Urban Wage Earners and Clerical Workers
DI	Social Security Disability Insurance
DOL	U.S. Department of Labor
ED	U.S. Department of Education
GED	General Educational Development
IPE	Individual plan for employment
IRS	Internal Revenue Service
MD	Maryland
MDI	Minimum detectable impact
MEF	Master Earnings File
N	Sample size
n.a.	Not applicable
NYS	New York State
OASDI	Old-Age, Survivors, and Disability Insurance
PASS	Plan to Achieve Self-Support
PROMISE	Promoting Readiness of Minors in Supplemental Security Income
RA	Random assignment
RSA	Rehabilitation Services Administration
SAQ	Self-administered questionnaire
SIPP	Survey of Income and Program Participation
SMS	Survey management system

SNAP	Supplemental Nutrition Assistance Program
SSA	Social Security Administration
SE	Standard error
SSI	Supplemental Security Income
SSN	Social Security number
SSR	Supplemental Security Record
TANF	Temporary Assistance for Needy Families
VR	Vocational rehabilitation
WI	Wisconsin

Introduction

PROMISE—Promoting Readiness of Minors in Supplemental Security Income (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 support youth with disabilities by funding and evaluating programs designed to promote positive change in the lives of youth who were receiving SSI and their families. Under cooperative agreements with ED, six entities across 11 states implemented demonstration programs for youth SSI recipients who were age 14 to 16. The programs were intended to (1) provide educational, vocational, and other services to the 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; the programs began enrolling youth between April 2014 and October 2014. Enrollment continued through April 2016.

Under contract to SSA, Mathematica conducted the national evaluation of (1) how the programs were implemented and operated, (2) their impacts on SSI payments and the education and employment outcomes for the youth and their families, and (3) their costs and benefits. The evaluation used a random assignment (RA) study design: eligible youth who applied to the programs were randomly assigned to either a treatment group with an opportunity to receive PROMISE services or to a control group with access to the usual services available in the community other than those provided by the program.

The five-year evaluation report presents the estimated impacts and net benefits of each of the six PROMISE programs approximately five years after youth enrolled in the evaluation (Patnaik et al. 2022). It presents results from impact analyses that assessed whether the PROMISE programs were successful in improving youth and parent or guardian outcomes related to education, training, employment, youth's self-determination and expectations, health insurance coverage, SSA payments, knowledge of work incentives, and well-being.[1] It also presents results from benefit-cost analyses that assessed the extent to which the benefits of the programs exceeded their costs.

In this appendix volume, we provide additional details about the data and methods used to conduct the five-year impact and benefit-cost analyses, as well as supplementary analyses conducted to address specific topics. The first nine appendices provide technical details and findings to support the five-year impact and benefit-cost findings:

- Appendix A presents information about the data sources, sample sizes, and outcome measures used in the impact and benefit-cost analyses.
- Appendix B describes the methods used in the impact and benefit-cost analyses
- Appendices C–I present the estimated impacts, benefits, and costs of each program separately and all programs pooled together. They also include the findings of analyses we conducted to test the sensitivity of the main results to modeling choices, analytic methods, and underlying assumptions.

The final three appendices present the findings of topical analyses:

- Appendix J explores whether the average control group outcomes and program impacts differed depending on a youth's race and ethnicity.

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

- Appendix K presents analyses of selected survey implementation practices used in the PROMISE evaluation.
- Appendix L examines the extent to which PROMISE enrollees are representative of all PROMISE-eligible youth.

Appendix A. Data, Samples, and Outcomes

This appendix provides information about the sources of data, samples, and outcome measures used in the five-year impact and benefit-cost analyses. Section A describes each data source, including the time periods covered by the data. Section B provides the sample sizes by data source and explains why the samples from some sources are smaller than the full research sample. Section C describes the sources of missing data and the approaches we used to address missing data in the analyses. Section D describes how we constructed each outcome measure used in the five-year impact analysis.

A. Data sources

The five-year impact analysis relied on data from several sources of survey and administrative data, which we describe in the subsections that follow.

1. Youth and parent five-year surveys

Mathematica conducted separate follow-up surveys of the youth and their parents five years after they enrolled in PROMISE. Although the target respondents for the youth survey were the youth themselves, they were sometimes helped by their parents, or proxies supplied their responses. The target respondent for the parent survey was the parent or guardian who completed the PROMISE enrollment forms and provided consent to participate in the evaluation. We call this person the "enrolling parent." In a small number of cases, proxies supplied responses for the enrolling parent. In five of the PROMISE programs, all randomly assigned youth were eligible for the youth five-year survey unless they had died or withdrawn within five years of enrollment. Likewise, all randomly assigned enrolling parents were eligible for the parent five-year survey unless they had died or withdrawn within five years of enrollment, were the parent of a youth who had died within five years of enrollment, or were a legal guardian employed by an agency. For California PROMISE (CaPROMISE), we sampled 2,000 of the 3,097 randomly assigned enrollees. All sampled enrollees were eligible for the five-year surveys unless they met one of the conditions described above. In all programs, youth and enrolling parents were eligible for the five-year surveys regardless of whether they had completed earlier follow-up surveys conducted 18 months after enrollment.

Enrollment in the evaluation occurred over 25 months, beginning in April 2014 and ending in April 2016. The five-year surveys were fielded from May 2019 through August 2021. To simplify the survey management process, we aggregated the youth and parents into 25 cohorts that corresponded to their month of enrollment. In each month from May 2019 to March 2021, we released a cohort to be surveyed.[2] Among the completed surveys, we completed 97 percent of parent interviews and 96 percent of youth interviews within 24 weeks (five and a half months) from the cohort release date. We completed the remaining interviews slightly later to give more parents and youth the chance to respond. Appendix Table A.1 shows the survey fielding start and end dates for each cohort and the PROMISE programs represented in each cohort.

[2] Because few families enrolled in PROMISE during the first two months of the enrollment period, we launched two cohorts in May 2019, corresponding to families that enrolled in PROMISE in April and May 2014. To complete data collection more quickly, we launched two cohorts in March 2021, corresponding to families that enrolled in the last two months of the enrollment period (March and April 2016).

Appendix Table A.1. Schedule for the five-year survey

Cohort	Enrollment month	Fielding start month	Fielding end month	Number of youth and parents included in cohort					
				Arkansas PROMISE	ASPIRE	CaPROMISE	MD PROMISE	NYS PROMISE	WI PROMISE
1	4/14	5/19	12/19	Y: 0; P: 0	Y: 0; P: 0	Y: 0; P: 0	Y: 17; P: 17	Y: 0; P: 0	Y: 12; P: 11
2	5/14	5/19	12/19	Y: 0; P: 0	Y: 0; P: 0	Y: 0; P: 0	Y: 53; P: 53	Y: 0; P: 0	Y: 76; P: 76
3	6/14	6/19	1/20	Y: 0; P: 0	Y: 0; P: 0	Y: 0; P: 0	Y: 61; P: 62	Y: 0; P: 0	Y: 74; P: 71
4	7/14	7/19	1/20	Y: 0; P: 0	Y: 0; P: 0	Y: 0; P: 0	Y: 66; P: 65	Y: 0; P: 0	Y: 65; P: 60
5	8/14	8/19	2/20	Y: 0; P: 0	Y: 0; P: 0	Y: 14; P: 14	Y: 52; P: 51	Y: 0; P: 0	Y: 78; P: 77
6	9/14	9/19	2/20	Y: 35; P: 34	Y: 0; P: 0	Y: 129; P: 127	Y: 63; P: 58	Y: 0; P: 0	Y: 42; P: 42
7	10/14	10/19	4/20	Y: 56; P: 55	Y: 17; P: 16	Y: 122; P: 121	Y: 69; P: 67	Y: 4; P: 4	Y: 45; P: 45
8	11/14	11/19	4/20	Y: 138; P: 132	Y: 27; P: 26	Y: 108; P: 107	Y: 57; P: 56	Y: 15; P: 15	Y: 41; P: 40
9	12/14	12/19	6/20	Y: 239; P: 230	Y: 88; P: 88	Y: 68; P: 68	Y: 72; P: 69	Y: 5; P: 4	Y: 14; P: 14
10	1/15	1/20	8/20	Y: 85; P: 84	Y: 97; P: 92	Y: 85; P: 84	Y: 93; P: 92	Y: 30; P: 30	Y: 51; P: 51
11	2/15	2/20	8/20	Y: 81; P: 78	Y: 97; P: 97	Y: 66; P: 65	Y: 80; P: 79	Y: 27; P: 27	Y: 74; P: 74
12	3/15	3/20	10/20	Y: 122; P: 118	Y: 121; P: 117	Y: 68; P: 65	Y: 80; P: 77	Y: 34; P: 34	Y: 70; P: 68
13	4/15	4/20	9/20	Y: 124; P: 122	Y: 89; P: 89	Y: 92; P: 90	Y: 77; P: 76	Y: 47; P: 44	Y: 64; P: 63
14	5/15	5/20	10/20	Y: 140; P: 137	Y: 115; P: 110	Y: 74; P: 72	Y: 74; P: 72	Y: 56; P: 55	Y: 48; P: 45
15	6/15	6/20	11/20	Y: 113; P: 110	Y: 133; P: 128	Y: 128; P: 128	Y: 97; P: 93	Y: 78; P: 76	Y: 67; P: 63
16	7/15	7/20	12/20	Y: 38; P: 38	Y: 118; P: 112	Y: 148; P: 146	Y: 110; P: 102	Y: 133; P: 131	Y: 101; P: 100
17	8/15	8/20	1/21	Y: 44; P: 42	Y: 100; P: 98	Y: 140; P: 137	Y: 117; P: 115	Y: 145; P: 144	Y: 110; P: 108
18	9/15	9/20	2/21	Y: 54; P: 51	Y: 95; P: 95	Y: 153; P: 150	Y: 104; P: 103	Y: 174; P: 171	Y: 77; P: 75
19	10/15	10/20	3/21	Y: 81; P: 75	Y: 61; P: 61	Y: 119; P: 119	Y: 107; P: 105	Y: 213; P: 208	Y: 87; P: 85
20	11/15	11/20	4/21	Y: 98; P: 95	Y: 75; P: 73	Y: 125; P: 123	Y: 122; P: 119	Y: 207; P: 204	Y: 111; P: 109
21	12/15	12/20	5/21	Y: 84; P: 84	Y: 88; P: 86	Y: 82; P: 80	Y: 99; P: 97	Y: 232; P: 229	Y: 79; P: 75
22	1/16	1/21	7/21	Y: 71; P: 68	Y: 63; P: 63	Y: 82; P: 82	Y: 92; P: 89	Y: 194; P: 188	Y: 58; P: 57
23	2/16	2/21	7/21	Y: 84; P: 81	Y: 116; P: 113	Y: 96; P: 94	Y: 72; P: 70	Y: 205; P: 202	Y: 104; P: 103
24	3/16	3/21	8/21	Y: 86; P: 83	Y: 192; P: 185	Y: 40; P: 40	Y: 0; P: 0	Y: 131; P: 127	Y: 114; P: 114
25	4/16	3/21	8/21	Y: 14; P: 14	Y: 210; P: 201	Y: 42; P: 41	Y: 0; P: 0	Y: 32; P: 31	Y: 217; P: 213

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

We administered the surveys in English and Spanish in three modes: on the telephone by an interviewer, in person by an interviewer, and on paper via self-administration. The interviewer-administered interviews used the same instruments and were deployed via computer-assisted interviewing technology. The self-administered paper questionnaires used abbreviated versions of the instruments. We halted in-person interviewing from March 2020 to June 2021 because of the COVID-19 pandemic, conducting all interviews during this period by telephone and paper only. Among parent survey respondents, 93 percent completed the survey by telephone, 4 percent completed it in person, and 4 percent completed it on paper. The analogous figures for youth respondents are 91 percent, 4 percent, and 5 percent, respectively. The median length of the interview was 19 minutes for the parent survey and 27 minutes for the youth survey.

The PROMISE five-year youth and parent survey response rates were high. They averaged at least 80 percent for all programs (Appendix Table A.2).[3] Response rates were similar for the youth and parent surveys. The differences in response rates between treatment and control group sample members were small, never exceeding 3 percentage points in any program.

Appendix Table A.2. PROMISE five-year survey respondent sample sizes and response rates

Sample	Arkansas PROMISE	ASPIRE	CaPROMISE	MD PROMISE	NYS PROMISE	WI PROMISE
Youth survey (Response rate)						
Treatment	733 (82%)	797 (84%)	810 (82%)	738 (81%)	847 (86%)	798 (85%)
Control	708 (79%)	795 (83%)	795 (80%)	748 (81%)	815 (83%)	793 (84%)
Total	1,441 (81%)	1,592 (84%)	1,605 (81%)	1,486 (81%)	1,662 (85%)	1,591 (85%)
Parent survey (Response rate)						
Treatment	702 (82%)	781 (85%)	813 (83%)	730 (82%)	837 (87%)	786 (86%)
Control	691 (79%)	766 (83%)	792 (81%)	722 (81%)	807 (84%)	775 (84%)
Total	1,393 (80%)	1,547 (84%)	1,605 (82%)	1,452 (81%)	1,644 (85%)	1,561 (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 Appendix Table A.5) 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.

[3] We calculated the response rates as a proportion of the cases eligible for the survey.

2. Youth and parent 18-month surveys

We used selected data from the follow-up surveys of youth and their parents that we conducted 18 months after the youth enrolled in PROMISE. These surveys asked respondents about their race and ethnicity. We used these data to measure youth and parent race and ethnicity in the five-year impact analysis for all programs except Achieving Success by Promoting Readiness for Education and Employment (ASPIRE), where we instead used race and ethnicity data from the ASPIRE intake form (see below). We coded race and ethnicity as missing for youth for whom we did not have 18-month survey data (due to sampling or nonresponse). Mamun et al. (2019a) describes the 18-month survey data.

3. ASPIRE intake form and baseline survey

ASPIRE collected data about families at the time of enrollment (October 2014 to April 2016) via an intake form and baseline surveys administered to the youth and the enrolling parent or another parent or legal guardian. 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.[4] We used all of these data to construct covariates for use in regression models that estimated the impacts of ASPIRE. For our analysis, we used data only from baseline interviews that ASPIRE conducted either before or within two weeks of enrollment in the evaluation. We did not use the baseline survey data for 10 cases (1 percent) because ASPIRE staff had conducted those surveys more than two weeks after enrollment.

4. Non-survey data

This section describes the four sources of non-survey data used to conduct the five-year impact analysis: (1) the PROMISE RA system, (2) SSA records, (3) Centers for Medicare & Medicaid Services (CMS) records, and (4) Rehabilitation Services Administration (RSA) records.

a. RA system data

The RA system was a web-based system that Mathematica designed to enroll youth in PROMISE and assign them either to a treatment or control group. Staff at each program entered data about an enrolling youth and parent into the system at the time of enrollment (from April 2014 through April 2016). Data from this system are available for each PROMISE program.

The RA system documented the enrollees' treatment status—a variable we used in the impact analyses. Because treatment services were provided at the family level, we attempted to purposively assign all siblings of PROMISE-enrolled youth to the same research group (treatment or control) as their sibling. In some cases, we were unable to identify that two youth were siblings until after RA. Siblings could be missed if the information the parent provided at the time of RA was inconsistent across siblings; for

[4] The replacement changed the youth's or parent's race and ethnicity information for 742 enrollees (roughly 38 percent of ASPIRE enrollees). This was primarily due to replacing missing race and ethnicity information from the 18-month surveys (for 476 youth and 392 parents) with non-missing information from the ASPIRE intake form. In a small number of cases, the ASPIRE intake data were missing race and ethnicity information while the 18-month survey data were not (for 22 youth and 49 parents); we used the 18-month survey data for these cases.

example, two different parents could have enrolled the two youth, or the parent may have listed a different birth date for him or herself. In these cases, upon learning of the sibling status, we later reclassified youth to ensure only one youth in a family was in the research sample. If siblings were assigned to different groups and services had already begun, we removed the control group youth from the research sample. If the youth were assigned to the same study group or services had not yet begun, the youth who was randomly assigned later was removed from the research sample. Only a few cases were removed from the research sample after having been randomly assigned—six in Arkansas PROMISE, one in ASPIRE, eight in Maryland (MD) PROMISE, six in New York State (NYS) PROMISE, and three in Wisconsin (WI) PROMISE.

b. SSA data

We obtained data on the annual earnings of youth and parents, SSA disability benefits, and the status of youth's age-18 redetermination. We used earnings data from SSA's Master Earnings File, which contains annual earnings as reported by employers to the Internal Revenue Service. The annual earnings data covered 2013 through 2021, which encompassed the calendar year before and five calendar years after the year of RA for all enrollees.[5]

We used the disability program benefit data from April 2013 through December 2021, which covered the 12 months before RA through the five calendar years following PROMISE enrollment 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). Data on Old-Age, Survivors, and Disability Insurance (OASDI) program payments came from the Payment History Update System. We also obtained data on several key baseline characteristics from the SSR, including youth's length of SSI payment receipt at RA, age at first SSI application, the primary impairment that was the basis for the youth's SSI eligibility, and the parents' receipt of SSI or OASDI payments at the time of RA.

The data on the youth's age-18 redetermination ranged from April 2014 through April 2021, covering the five years after RA for all enrollees. These data indicated whether the youth had an age-18 benefits redetermination within five years of RA, and if so, whether their benefits were ceased or continued or the final decision was pending.

c. CMS data

We obtained data on the Medicaid and Medicare enrollment and expenditures of youth enrollees and their parents from CMS. We used Medicaid data from April 2013 through December 2020, representing four to five years after RA, depending on the date of enrollment. We used Medicare data from April 2013 through April 2021, which covered the full 60 months after RA for all enrollees.

d. RSA data

We obtained data on youth's participation in state vocational rehabilitation (VR) agency services from SSA through an agreement it has with RSA. We used RSA data from April 2013 through December 2020, representing four to five years after RA, depending on the date of enrollment. We used data on whether the youth applied for and received services during that period.

[5] Mathematica did not have direct access to the earnings data. The evaluation team worked with SSA staff to analyze these data.

5. Cost data

To estimate the economic cost to implement the PROMISE programs, we collected information about each program's costs during a one-year period associated with delivering its services, including the costs it did not incur directly, such as volunteer labor and donated facilities or supplies. We focused on data related to four types of costs: labor costs, other direct costs, indirect costs, and the costs of donated goods and services (Appendix Table A.3).

Appendix Table A.3. Input cost category definitions

Input category	Definition
Labor costs	Salaries and fringe benefits for direct employees of the PROMISE program
Other direct costs	Payments made directly to enrollees and services purchased on behalf of enrollees (including services provided by organizations under contract to or otherwise formally affiliated with the PROMISE program)
Indirect costs	Costs of supports purchased to operate the program (for example, office supplies, staff travel, equipment, rent, utilities, and general administrative costs)
Costs of donated goods and services	Volunteered time, donated goods, and donated meeting spaces

Each PROMISE program submitted its itemized inputs and total costs for a specified 12-month steady-state period during which the programs had completed enrollment but were not yet winding down services (Appendix Table A.4). Data collection procedures involved working with program staff to obtain relevant financial documents and conducting 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. The process also included administering activity logs for two one-week periods, during which staff documented their time spent performing work within each of the program's service and administration components. These periods were just before or during the cost period (Appendix Table A.4).

Appendix Table A.4. Periods of cost data collection and activity logs, by program

Program	12-month steady state period	Activity log	
		Collection dates	Number of program staff
Arkansas PROMISE	October 1, 2016–September 30, 2017	Round 1: August 8, 2016–August 14, 2016	33
		Round 2: October 3, 2016–October 9, 2016	32
ASPIRE	October 1, 2016–September 30, 2017	Round 1: August 8, 2016–August 14, 2016	42
		Round 2: October 24, 2016–October 30, 2016	37
CaPROMISE	July 1, 2016 –June 30, 2017	Round 1: September 12, 2016–September 18, 2016	40
		Round 2: September 19, 2016–September 25, 2016	40
MD PROMISE	July 1, 2016–June 30, 2017	Round 1: August 8, 2016–August 14, 2016	38
		Round 2: October 24, 2016–October 30, 2016	36
NYS PROMISE	October 1, 2016–September 30, 2017	Round 1: July 25, 2016–July 31, 2016	23
		Round 2: October 31, 2016–November 6, 2016	24

Program	12-month steady state period	Activity log	
		Collection dates	Number of program staff
WI PROMISE	October 1, 2016–September 30, 2017	Round 1: August 22, 2016–August 29, 2016	28
		Round 2: November 28, 2016–December 4, 2016	25

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

B. Analysis samples

The full research sample for the evaluation analysis consists of the 12,084 youth who enrolled in the evaluation and were randomly assigned, as well as their families. Because the five-year impact and benefit cost analyses used a variety of data sources, sample sizes varied by source.

1. Sample sizes

The analysis sample sizes were in some cases smaller than the research sample sizes, but the reason for the difference varied by data source (five-year survey, SSA data, CMS data, and RSA data). Appendix Table A.5 shows the sizes of the full research sample and analysis samples by treatment status and program.

Appendix Table A.5. PROMISE sample sizes, by program

Sample	Arkansas PROMISE	ASPIRE	CaPROMISE	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 sample						
Treatment	904	978	1,548	936	986	960
Control	901	975	1,549	930	981	946
Total	1,805	1,953	3,097	1,866	1,967	1,896
Analysis samples (as a percentage of the total research sample)[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.

[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 of the five-year survey data were smaller than the full research sample because of sampling, survey nonresponse, and the deaths of some enrollees. We sampled 2,000 of the 3,097 CaPROMISE research cases as planned in the evaluation design report.

For the SSA, CMS, and RSA data, all PROMISE youth in the research sample were included in the analysis sample, as were most parents. Because PROMISE enrollment required that youth provide a valid Social Security number (SSN), we could obtain SSA, CMS, and RSA data for all youth in the research sample. 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 a mother or father or there were no parents identified on the SSR, the analysis sample included the enrolling parent only if he or she provided an SSN that SSA validated through its Enumeration Verification System.

2. Baseline balance

For each program and across all programs, we compared the baseline characteristics of the treatment and control groups for various samples: all youth survey respondents, all parent survey respondents, all enrollees, and all proxy youth respondents (Appendix Tables C.1–I.1, C.2–I.2, C.3–I.3, and C.4–I.4). On average, most of the baseline characteristics were similar for the treatment and control groups. The similarity of samples across these characteristics suggest that RA created treatment and control groups in each program that were equivalent in their baseline characteristics.

In a few cases, we found statistically significant differences between the treatment and control groups at baseline. Nonetheless, we believe the estimated impacts can still be interpreted as the causal impacts of PROMISE. Because we conducted RA in a way that ensured compliance, including removing any cases that were purposively assigned to one group or the other, we are confident that the treatment and control groups were not systematically different from one another. Though some individual characteristics may have shown statistically significant differences, they were likely to be due to chance. With a significance level of 10 percent, we thus expect to reject the null hypothesis that the groups were equivalent for 1 out of every 10 characteristics by chance alone, even when the two groups in fact had no underlying differences. Therefore, significant differences for a few characteristics out of the 25 we considered are not concerning. Furthermore, as we describe in Appendix B, we included characteristics that were significantly different at baseline as covariates in our regression-adjusted impact analyses, allowing us to control for the observed differences.

3. Minimum detectable impacts based on observed outcomes and sample sizes

Statistical power was a key consideration in developing the PROMISE evaluation design (Fraker et al. 2014a). The evaluation enrolled 2,000 youth in each program except CaPROMISE; it enrolled more than 3,000 youth in that program. At the evaluation design stage, we estimated the minimum detectable impacts (MDIs)—that is, the smallest program impacts we expected to be able to detect with reasonably high probability, given the research sample sizes (Appendix Table A.6). We calculated MDIs using

administrative or survey data on five key outcomes for youth in the first year after RA: (1) employment in paid jobs, (2) annual earnings, (3) school enrollment, (4) SSI benefit receipt, and (5) annual SSI payments (Fraker et al. 2014). For example, the original estimates indicated that, for all programs except CaPROMISE, we could expect to detect program impacts of 5 percentage points or larger on employment in paid jobs and of $357 on youth earnings, using administrative data. Notably, these estimates focused on short-term outcomes and assumed mean values and standard deviations for control group outcomes that were based on findings from the Youth Transition Demonstration 12-month impact analyses, which were the most comparable and recent data on transition-age youth receiving SSI available at the time.

After data collection for the five-year evaluation was completed, we estimated post-hoc MDIs, that is, MDIs based on the observed distribution of outcomes and sample sizes in the actual research samples (Appendix Table A.7). The post-hoc MDIs for 18-month outcomes were similar to the estimated MDIs. For example, for Arkansas PROMISE, the post-hoc MDI for employment in the year before the 18-month survey was 5 percentage points, exactly what was estimated during the evaluation design stage, and the post-hoc MDI for earnings was $343, roughly the same as the MDI estimated at the evaluation design stage ($357). The 18-month impact analysis was able to detect statistically significant impacts for many key outcomes in each of the PROMISE programs (Mamun et al. 2019a).

The post-hoc MDIs for the five-year outcomes were substantially larger than those for 18-month outcomes. For example, for Arkansas PROMISE, the post-hoc MDI was $1,294 for earnings in the year before the five-year survey, compared to $343 for earnings in the year before the 18-month survey. Although the sample sizes did not change much between the 18-month and five-year impact analysis, the control group means and standard deviations increased significantly, which resulted in larger MDIs. The increase in means and variances between the 18-month and five-year outcomes (shown in Appendix Table A.7) is likely attributable to youth's increased workforce participation as they aged from 15-17 to 19-21 years old over this period. Further, the COVID-19 pandemic might have introduced additional variance in youth's outcomes.

For some five-year outcomes, the post-hoc MDIs were probably larger than program effects that might be considered policy relevant, meaning that the evaluation might not be able to detect some policy relevant effects. For example, the point estimate for the impact of WI PROMISE on youth earnings in the year before the survey was $668 (Appendix Table H.9). This point estimate is meaningfully large and policy relevant – it represents an increase of 14 percent over the control group mean and is about the size of the annual impact on youth earnings that would be needed in Years 6-10 after RA for the program to be cost neutral by Year 20 (see Appendix Figure H.1). Nonetheless, it is smaller than the post-hoc MDI of $1,202 and not statistically significant. Indeed, using the observed distributions, any estimate smaller than a 25 percent change in earnings relative to the control group would likely not have been found to be statistically significant, and thus, we would not interpret it as a program impact.

Appendix Table A.6. MDIs estimated for the evaluation design

Outcome	Assumed mean value of outcome for control group members	Administrative data		Follow-up survey data
		California (N=3,100)	Other programs (N=2,000)	All programs (N=1,600)
Employed in paid jobs	23%	4%	5%	6%
Annual earnings	$900	$287	$357	$399
Enrolled in school	88%	n.a.	n.a.	4%
SSI receipt	99%	1%	1%	n.a.
Annual SSI payments	$6,500	$220	$274	n.a.

Source: Fraker et al. 2014.

Note: MDI estimates assume (1) an equal number of treatment and control members, (2) a 95 percent confidence level with an 80 percent level of power, (3) a two-tailed test, (4) a reduction in variance of 10 percent owing to the use of regression models, (5) standard deviations of annual earnings and annual SSI payments of $3,000 and $2,300, respectively, (6) administrative data obtained on 100 percent of the sample, and (7) survey response rates of 80 percent. Mean values of outcomes for control group members are based on findings from the Youth Transition Demonstration evaluation's twelve-month impact analysis (Fraker 2013).

MDI = minimum detectable impact; N = sample size; n.a. = not applicable

Appendix Table A.7. Post-hoc MDIs based on observed outcomes and sample sizes (measured in percentage points, unless otherwise specified)

Outcome	Control group mean	Standard deviation	Sample size	MDI
All PROMISE programs (pooled data)				
18-month outcomes				
Enrolled in school	91.0	28.7	9,325	1.6
Employed in a paid job during the past year	17.3	37.8	9,311	2.1
Earnings in the past year ($)	710	2,756	9,311	152
Received SSA payments in 18-month period since RA	96.9	17.4	12,584	0.8
SSA payments in 18-month period since RA ($)	10,772	3,702	12,584	175
Total income in the past year ($)	7,658	3,677	9,330	202
Five-year outcomes				
Enrolled in an educational or training program	42.9	49.5	9,064	2.8
Employed in a paid job in the past year	42.2	49.4	9,377	2.7
Earnings in the past year ($)	4,426	8,631	9,377	474
Received SSA payments in Year 5 after RA	64.0	48.0	12,584	2.3
SSA payments in Year 5 after RA ($)	5,231	4,482	12,584	212
Total income in the past year ($)	9,858	7,902	9,377	434
Arkansas PROMISE				
18-month outcomes				
Enrolled in school	90.8	28.9	1,467	4.0
Employed in a paid job during the past year	16.2	36.8	1,467	5.1
Earnings in the past year ($)	747	2,470	1,467	343
Received SSA payments in 18-month period since RA	97.2	16.4	1,805	2.1
SSA payments in 18-month period since RA ($)	10,930	3,423	1,805	429
Total income in the past year ($)	7,802	3,398	1,469	472

Outcome	Control group mean	Standard deviation	Sample size	MDI
Five-year outcomes				
Enrolled in an educational or training program	29.0	45.4	1,372	6.5
Employed in a paid job in the past year	48.6	50.0	1,441	7.0
Earnings in the past year ($)	5,198	9,237	1,441	1,294
Received SSA payments in Year 5 after RA	56.3	49.6	1,805	6.2
SSA payments in Year 5 after RA ($)	4,210	4,329	1,805	542
Total income in the past year ($)	9,463	8,745	1,441	1,225
ASPIRE				
18-month outcomes				
Enrolled in school	91.9	27.3	1,559	3.7
Employed in a paid job during the past year	17.1	37.7	1,555	5.1
Earnings in the past year ($)	781	3,148	1,555	425
Received SSA payments in 18-month period since RA	95.5	20.8	1,953	2.5
SSA payments in 18-month period since RA ($)	10,132	4,230	1,953	509
Total income in the past year ($)	7,239	4,250	1,560	572
Five-year outcomes				
Enrolled in an educational or training program	38.7	48.7	1,550	6.6
Employed in a paid job in the past year	43.1	49.5	1,592	6.6
Earnings in the past year ($)	4,984	9,105	1,592	1,214
Received SSA payments in Year 5 after RA	66.5	47.2	1,953	5.7
SSA payments in Year 5 after RA ($)	5,313	4,299	1,953	517
Total income in the past year ($)	10,570	7,975	1,592	1,063
CaPROMISE				
18-month outcomes				
Enrolled in school	93.2	25.1	1,633	3.3
Employed in a paid job during the past year	9.5	29.3	1,631	3.9
Earnings in the past year ($)	448	2,656	1,631	350
Received SSA payments in 18-month period since RA	96.8	17.7	3,097	1.7
SSA payments in 18-month period since RA ($)	10,732	3,736	3,097	357
Total income in the past year ($)	7,366	3,600	1,634	474

Outcome	Control group mean	Standard deviation	Sample size	MDI
Five-year outcomes				
Enrolled in an educational or training program	58.1	49.4	1,567	6.6
Employed in a paid job in the past year	33.3	47.1	1,605	6.3
Earnings in the past year ($)	3,648	8,259	1,605	1,096
Received SSA payments in Year 5 after RA	65.2	47.6	3,097	4.6
SSA payments in Year 5 after RA ($)	6,196	5,085	3,097	486
Total income in the past year ($)	10,093	7,546	1,605	1,002
MD PROMISE				
18-month outcomes				
Enrolled in school	84.1	36.6	1,500	5.0
Employed in a paid job during the past year	17.7	38.2	1,496	5.3
Earnings in the past year ($)	831	3,458	1,496	476
Received SSA payments in 18-month period since RA	96.8	17.7	1,866	2.2
SSA payments in 18-month period since RA ($)	10,688	3,723	1,866	458
Total income in the past year ($)	7,865	4,100	1,501	563
Five-year outcomes				
Enrolled in an educational or training program	38.8	48.8	1,431	6.9
Employed in a paid job in the past year	44.9	49.7	1,486	6.9
Earnings in the past year ($)	4,987	9,259	1,486	1,278
Received SSA payments in Year 5 after RA	60.5	48.9	1,866	6.0
SSA payments in Year 5 after RA ($)	4,857	4,419	1,866	544
Total income in the past year ($)	10,096	8,477	1,486	1,170
NYS PROMISE				
18-month outcomes				
Enrolled in school	95.1	21.5	1,691	2.8
Employed in a paid job during the past year	16.8	37.4	1,689	4.8
Earnings in the past year ($)	571	2,110	1,689	273
Received SSA payments in 18-month period since RA	97.9	14.5	1,967	1.7
SSA payments in 18-month period since RA ($)	11,292	3,383	1,967	406
Total income in the past year ($)	7,824	3,073	1,691	397

Outcome	Control group mean	Standard deviation	Sample size	MDI
Five-year outcomes				
Enrolled in an educational or training program	57.1	49.5	1,623	6.5
Employed in a paid job in the past year	32.8	46.9	1,662	6.1
Earnings in the past year ($)	2,828	6,227	1,662	812
Received SSA payments in Year 5 after RA	67.8	46.8	1,967	5.6
SSA payments in Year 5 after RA ($)	5,426	4,231	1,967	507
Total income in the past year ($)	8,422	6,092	1,662	795
WI PROMISE				
18-month outcomes				
Enrolled in school	90.6	29.2	1,475	4.0
Employed in a paid job during the past year	26.3	44.0	1,473	6.1
Earnings in the past year ($)	882	2,440	1,473	338
Received SSA payments in 18-month period since RA	97.1	16.7	1,896	2.0
SSA payments in 18-month period since RA ($)	10,861	3,560	1,896	435
Total income in the past year ($)	7,854	3,445	1,475	477
Five-year outcomes				
Enrolled in an educational or training program	35.4	47.9	1,521	6.5
Employed in a paid job in the past year	50.6	50.0	1,591	6.7
Earnings in the past year ($)	4,904	9,010	1,591	1,202
Received SSA payments in Year 5 after RA	67.5	46.8	1,896	5.7
SSA payments in Year 5 after RA ($)	5,385	4,233	1,896	517
Total income in the past year ($)	10,493	8,080	1,591	1,077

Source: PROMISE 18-month and five-year surveys; SSA data.

Note: This table shows the observed control group means, standard deviations and sample sizes after pooling data across the six PROMISE programs and for each PROMISE program. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse. The MDI calculations assume a 95 percent confidence level with an 80 percent level of power, a two-tailed test, and a reduction in variance of 10 percent owing to the use of regression models. The MDIs differ for each program depending on program-specific control group means, standard deviations, and sample sizes.

MDI = minimum detectable impact; RA = random assignment; SSA = Social Security Administration

C. Missing data

For a variety of reasons, data were missing from the analyses. Survey data were not available for some sample members because of survey and item nonresponse and because some individuals in the research sample were not targeted for the surveys. More rarely, administrative data were missing because some enrollees or their parents could not be identified in the administrative records. Below we describe the approaches we used to address missing data on baseline characteristics and outcomes.

Data on enrollee baseline characteristics came primarily from administrative data; therefore, data on baseline characteristics were missing for only a small share of cases (no more than 5 percent) in each PROMISE program.[6] We treated categorical and continuous missing baseline data differently. 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.

Data on outcomes might be missing for some enrollees for various reasons. Administrative data on outcomes were never missing for youth but might be missing for a small subset of parents who could not be found in administrative data. (See Section B.1 above for a description of the procedure for including administrative data on parents.) Survey outcome data might not be available for youth or parents for several reasons: survey sampling, survey nonresponse, item nonresponse, and the targeting of some survey questions only to self-reporting youth. The sections that follow describe the approaches we used to address data that were missing for each of these reasons.

1. Missing data due to survey sampling and nonresponse

a. Sampling and nonresponse

For all programs except CaPROMISE, we attempted to survey all survey-eligible youth and parents. For CaPROMISE, we sampled 2,000 of the 3,097 randomly assigned enrollees. We initially selected the sample for the 18-month survey and then used the same sample for the five-year survey. We used stratified random sampling, in which we defined strata by the local educational agency and treatment status. Because CaPROMISE's enrollment was completed over a 21-month period, the 18-month survey effort began before all enrollments were completed. As a result, we sampled in two phases: first from the group that was enrolled by the time the 18-month survey effort began and then from the remainder of the enrollees (Matulewicz et al. 2018). Thus, we did not have survey data for members of the CaPROMISE research sample who were not selected for the survey.

Some sample members were targeted for surveys but did not provide survey responses because they could not be located, were located but refused to be interviewed, or did not participate in the survey for other reasons. However, nonresponse was limited among those targeted for surveys. As shown in Appendix Table A.2, response rates were greater than 80 percent for all programs.

[6] One exception was data on parents' earnings in the year before RA, which were missing for families when no parents could be identified in SSA data. When we included "Parent had any earnings in the year before RA" or "Parents' earnings in the year before RA" as a covariate in regressions, we used the missing indicator method: we set missing observations of the covariate to a fixed value (zero) and included an extra indicator variable in the model to indicate whether the value for that covariate was missing.

b. Differences between respondents and nonrespondents

As with any survey with less than a 100 percent response rate, there is the potential for survey respondents to differ systematically from nonrespondents. Among survey respondents, if the baseline characteristics of treatment and control groups were not equivalent, survey nonresponse could introduce bias in the impact estimates. In addition, numerous and large differences in the baseline characteristics of survey respondents and nonrespondents would render the impact estimates based on survey data less representative of the full sample of evaluation enrollees. To assess the extent to which survey nonresponse might limit generalizability of the impact findings to all evaluation enrollees, we compared the baseline characteristics between survey respondents and nonrespondents.

For each program and across all programs, we compared youth and parent survey respondents with nonrespondents across 25 baseline characteristics (Appendix Tables C.5–I.5 and C.6–I.6). Overall, even when the differences were statistically significant, they generally were small. The extent and magnitude of the differences suggested that the respondents were not markedly different from the nonrespondents.

c. Survey weights

To account for survey sampling and nonresponse, we calculated and used survey weights in all regression models to estimate impacts on the survey-based outcome measures. The weights for CaPROMISE also accounted for the probability that an enrollee was sampled for the survey. These weights were the product of the survey nonresponse weight and the sampling weight. Here we describe the procedure for constructing the weights.

We used two steps in calculating the survey nonresponse weights. First, we developed a "location model" to estimate the probability of locating a sample member. Second, we developed a "response model" to estimate the probability of survey response among the located sample members. We used logistic regression models to estimate the two probabilities, with youth and parent baseline characteristics and geographic location information as covariates. The location model for CaPROMISE used the sampling weight normalized to the sample size. The response models for all programs used the normalized location-adjusted weight. The set of covariates under consideration for the models differed by program. We identified potential interactions by using Chi-square Automatic Interaction Detector.[7] We included all available main and interaction effects identified with Chi-square Automatic Interaction Detector as covariates in forward and backward stepwise logistic regression models (using the STEPWISE option of the SAS LOGISTIC procedure). We excluded any covariate or interaction that was unlikely to be related to locating the respondent or to response propensity. Because the stepwise logistic regression procedures in SAS did not fully account for the sample design in the variance estimates, we developed the final weighted models by using a command that accounted for the complex sample design (the SURVEYLOGISTIC procedure in SAS).

Next, we evaluated a series of models comparing the following measures of predictive ability and goodness of fit: the R-squared statistic, the percentage of concordant and discordant pairs, and the Hosmer-Lemeshow goodness-of-fit test. Model fitting also involved reviewing the statistical significance of the coefficients of the covariates in the model and avoiding any unusually large adjustment factors. We created five weighting classes for both the location and the response models based on the quintiles of the estimated propensities and calculated the adjustments at each step as the inverse of the weighted response rate within each weighting class. We calculated the survey nonresponse weights as the product of the

[7] We calculated Chi-square Automatic Interaction Detector decision trees by using PROC HSPLIT in SAS.

location and response adjustments. As noted above, the survey nonresponse weights served as the analysis weights for all programs but CaPROMISE. For that program, the analysis weight was the product of the sampling and survey nonresponse weights. We assessed the distribution of the weights for unusually high values because widely varying weights make estimates less precise and risk bias if a few cases with high weights had an undue influence on the estimates. However, we did not observe major outliers. In the final step, we ratio-adjusted the marginal weighted sums so they matched the total number of eligible treatment and control group enrollees within each program.

We calculated sampling weights as the inverse of the probability of being selected for the sample. Because this was a stratified random sample in each phase, the sampling weights were simply the population size in each stratum divided by the sample size. The sample was proportionately allocated to each stratum, so the sampling weights were approximately equal to 1.50 for all strata in the first phase and 1.89 for all strata in the second phase.[8]

We developed separate weights for the youth and parent surveys because eligibility and nonresponse differed between them. Thus, for each PROMISE program, we developed two sets of cross-sectional weights—one for the youth survey and another for the parent survey.

2. Missing data due to survey item nonresponse

Sometimes survey respondents did not answer a subset of questions on the survey, resulting in item-level nonresponse. These cases included respondents who refused to answer or did not know the answer to a question. For a small number of cases, respondents did not have the opportunity to answer all questions because they completed the abbreviated, self-administered version of the five-year survey questionnaire.

In most cases, we excluded observations with missing data from the analyses of those outcomes.[9] However, we did not follow this approach when an outcome had a missing value conditional on the value of another variable. For example, any measure of earnings can be logically filled in with $0 for those who are not employed; therefore, earnings can be "truly missing" only for employed individuals. If we excluded cases with "truly missing" data on earnings, we would be excluding only people who were employed, so the impact estimates could be biased. To minimize this risk of bias, we used imputation procedures to retain records with conditionally "truly missing" data.[10] For example, for people with

[8] We obtained these values by dividing the population size by the sample size within each stratum. The population sizes were 2,604 in Phase 1 and 493 in Phase 2 across strata. The sample sizes were 1,739 in Phase 1 and 261 in Phase 2 across strata. We obtained 1.50 by dividing 2,604 by 1,739, and 1.89 by dividing 493 by 261. The actual weights varied from stratum to stratum but did not differ much from 1.50 and 1.89 because we used proportional allocation to the strata.

[9] An exception was the outcome "highest grade completed at the time of the survey." Instead of dropping missing data, we grouped them with other forms of ungraded programs to create the category "other forms of ungraded programs or do not know at the time of the survey."

[10] The following youth outcomes underwent multiple imputation: (1) conditional on youth being employed in the past year: employed in a paid job, weekly hours worked, total earnings, offered fringe benefits through a job, employment with coaching, employment in integrated settings, employment outside of school-sponsored activities, paid employment is current, current weekly hours worked, current weekly earnings; (2) conditional on youth not currently working for pay: in the labor force, in productive activities; (3) conditional on youth ever arrested: number of arrests; (4) conditional on youth ever incarcerated: length of incarceration; (4) conditional on youth having health insurance: covered by private health insurance, covered by health insurance purchased through an Affordable Care Act health exchange. The following parents' outcomes underwent multiple imputation: (1) conditional on either parent worked for pay in the past year: earnings, weekly hours worked, offered fringe benefits through a job, number of weeks worked; (2) conditional on either parent not currently working for pay: in the labor force.

missing earnings data, we first logically filled in $0 for people known to be not employed and then used imputed nonzero values for those known to be employed based on responses to other survey questions.

We primarily used multivariate imputation by chained equations to impute outcomes with conditionally missing values (Raghunathan et al. 2001; Van Buuren 2007) and predictive mean matching (Rubin 1986; Little 1988). A key advantage of the multiple imputation approach is to account for imputation uncertainty; common single imputation methods, such as mean-replacement imputation or hot decking, do not account for this uncertainty. As a result, standard errors from data based on single imputation methods may be understated, thus affecting inferences drawn from the data.

We conducted the multiple imputation procedure separately for each program. First, we developed predicted values for the missing cases of each variable using a multivariate regression model and a random disturbance term. Then, using predictive mean matching, we matched each missing data point to the 10 non-missing cases with the closest predicted values.[11] Next, we randomly selected 1 of the 10 matched cases to assign the value of that case to the missing data. We iterated this imputation procedure 10 times and created 10 imputed data sets; in other words, we estimated 10 replacement values for each missing case. After completing the imputation, we estimated impacts separately on each of the 10 imputed data sets. We then combined the impact estimates using the approach described in Rubin (1987), which accounts for the uncertainty created by imputing data and adjusts the standard error of impacts appropriately.

In rare instances, we were not able to conduct multiple imputation due to a small number of observations with non-missing data.[12] In these cases, we used mean imputation, filling in missing data with the mean value of the outcome for each program and research group. An example of such a case is if a youth survey respondent from the control group in NYS PROMISE reported receiving income from Temporary Assistance for Needy Families (TANF) but did not provide data on the amount of TANF support received. Because only 7.4 percent of all youth survey respondents reported receiving income from TANF, and only 1.6 percent reported the amount received, we did not have enough data to conduct the multiple imputation procedure described above. Instead, we filled in the mean value of TANF support received by other control group youth survey respondents that reported receiving TANF in NYS PROMISE.

We present estimates from impact analyses using the imputed data in the body of the report. In Appendices C–I, we present findings from an assessment of the sensitivity of the estimates to the use of imputation.

3. Missing data due to targeting survey questions to self-reporting youth

As noted above, the target respondent for the youth survey was the youth who enrolled in the PROMISE evaluation, but if the youth was unable to complete the interview on his or her own, we allowed a proxy to complete it on the youth's behalf. However, some items on the youth five-year survey were asked only if youth completed the survey themselves, not via proxies. In particular, we asked questions pertaining to

[11] In the imputation of length of incarceration, we matched to 3 cases instead of 10 due to the small number of observations at each site with positive values of length of incarceration. For example, out of the more than 12,000 enrollees in PROMISE, only 337 youth reported ever being incarcerated, and only 327 reported the length of incarceration.

[12] We used mean imputation when the multiple imputation procedure would likely be inaccurate due to the very small share of observations with positive values. We adopted the same procedure across all sources of income because we combined them to construct the measure of total household income.

the youth's self-determination and expectations for the future only of self-reporting youth. Thus, proxy respondents were likely to have more item-level missing data.

We compared the baseline characteristics of youth for whom we collected survey data through self-response versus proxy response (Appendix Tables C.7–I.7). This approach allowed us to assess whether systematically missing data from different survey modes might affect the estimated impacts on survey-based outcomes. We found some differences in baseline characteristics by survey response type. For example, in every program except Arkansas PROMISE, youth with proxy respondents were less likely to prefer English as their written and spoken language than other respondents. As another example, in all sites except MD PROMISE, youth with proxy respondents had more years since first becoming eligible for SSI and RA compared with other respondents. As a result of these types of differences, the findings for some outcomes (that is, those not queried of proxy respondents, such as the self-determination measures) might not be generalizable to all youth.

D. Outcomes measures

We organized the outcome descriptions by the youth and parent outcome domains and noted the data source for each outcome in parentheses. For most continuous measures, we removed extreme outliers and winsorized the distribution.[13] For most dollar-denominated measures, we inflation adjusted to 2020 dollars using the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W). When inflation adjusting measures that spanned multiple years, we inflation adjusted based on the number of months in each year. When inflation adjusting earnings in the year before the survey for a youth who completed the survey in March 2019, for example, we assumed 3 of 12 months of earnings occurred in 2019 and 9 of 12 months of earnings occurred in 2018.

1. Youth outcomes

We assessed youth 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. Below, for each domain, we describe the outcome measures that we examined.

a. Youth's education and training

This domain includes multiple measures of youth's education and training measured at the time of the five-year survey. The primary outcomes (and their data sources) in the youth education and training domain include the following:

[13] Winsorizing involves removing or transforming extreme values in a data distribution in order to reduce the effect of possibly spurious outliers. We winsorized outcome measures at the most granular level of data available. For example, for youth earnings, we winsorized earnings at the job level first rather than at the youth level. We took the following steps for all measures with 100 or more non-zero values. First, we calculated the 99th percentile, excluding zeroes and outlier values (values more than three times the inter-quartile range above the 75th percentile of non-zero values). We then top-coded values above the 99th percentile of the program-specific distribution of non-zero and non-outlier values at the 99th percentile of the program-specific distribution of non-zero and non-outlier values. We applied the same winsorizing procedure one more time to certain aggregated outcomes after their construction: youth's total earnings from all jobs and youth's and parents' household income. We also bottom-coded two measures (youth's hourly wage and weekly earnings at a job in the past year) at the 1st percentile of the program-specific distribution of the measure using the same procedure.

- **Youth enrolled in an educational or training program (youth five-year survey).** This binary measure indicates whether at interview the youth was attending or enrolled in school or a training program or was taking classes outside of school to help them learn job skills or get a job.
- **Youth had a General Educational Development (GED), high school diploma, or certificate of completion (youth five-year survey).** This binary measure indicates whether at interview the youth had received a GED, high school diploma, or certificate of completion from high school.

The supplementary outcomes in this domain include the following:

- **Youth enrolled in postsecondary education (youth five-year survey).** This binary measure indicates whether at interview the youth was enrolled in any type of postsecondary school, including vocational, technical or trade school, two-year or community college, four-year college or university, or a Masters, PhD, or other advanced degree program.
- **Type of school youth is attending (youth five-year survey).** This categorical measure indicates whether at interview the youth was attending a high school serving a variety of students; a high school serving only students with disabilities; a GED program or other adult education program; a postsecondary vocational, trade, or technical school; a postsecondary college or advanced degree program; other type of school; or no school.
- **Highest grade youth completed (youth five-year survey).** This categorical measure indicates whether at interview the youth had finished less than 12th grade; finished 12th grade or was a senior in high school; some or all of college or university; or other forms of ungraded programs, do not know, or refused to answer.
- **Youth was enrolled in a training program (youth five-year survey).** This binary measure indicates whether at interview the youth was enrolled in a training program or taking classes outside of school to learn job skills or get a job.
- **Youth received a training credential in the past year (youth five-year survey).** This binary measure indicates whether the youth received a job-related training diploma, certificate, or license in the year before the survey.
- **Youth had a school suspension or expulsion in the past year (youth five-year survey).** This binary measure indicates whether the youth had been suspended or expelled from school in the year before the survey.
- **Youth received an educational accommodation (youth five-year survey).** This binary measure indicates whether the youth was in school and reported receiving any services, supports, or accommodations to help in the school in which they were enrolled.
- **Youth received training accommodations (youth five-year survey).** This binary measure indicates whether the youth was enrolled in a training program and reported receiving any services, supports, or accommodations to help in the training program in which they were enrolled.
- **Youth received supports or services for postsecondary schooling in the past year (youth five-year survey).** This binary measure indicates whether the youth received any supports or services from someone who was not part of their family in continuing their education beyond high school in the year before the survey.

b. Youth's employment and earnings

This domain includes multiple measures of youth's employment and earnings at different points in time derived from three sources (five-year youth surveys, SSA data, and RSA data). The primary outcomes (and their data sources) in the youth employment and earnings domain include the following:

- **Youth was employed in a paid job in the past year (youth five-year survey).** This binary measure indicates whether the youth held a paid job in the year before the survey. If the youth held a job in the year before the survey but had missing information about whether the job was paid, we used multiple imputation at the program level to fill in the missing information.
- **Youth's total earnings in the past year (youth five-year survey).** This continuous measure shows the youth's total earnings from all paid jobs in the year before the survey. If the youth held a paid job in the year before the survey but had missing earnings information, we used multiple imputation at the program level to fill in the missing information.
- **Youth's earnings during the five calendar years after RA (SSA data).** This continuous measure shows the youth's total earnings in the five calendar years after RA.

The supplementary outcomes in this domain include the following:

- **Youth had paid or unpaid employment in the past year (youth five-year survey).** This binary measure indicates whether the youth held a paid or unpaid job in the year before the survey.
- **Youth's weekly hours worked in the past year (youth five-year survey).** This continuous measure shows the youth's average hours worked per week across all paid jobs in the year before the survey. If the youth did not report the number of hours worked at a job, he or she could report the number in ranges. We used the mid-point of each range to calculate weekly hours worked at a job. The top category was defined as more than 35 hours per week; we top-coded it at 40 hours. If the youth held a paid job in the year before the survey but reported neither the number nor range of hours, we used multiple imputation at the program level to fill in the missing information.
- **Youth was employed in a paid job that offered fringe benefits in the past year (youth five-year survey).** This binary measure indicates whether the youth had any paid jobs that offered health insurance, paid vacation or sick leave, or any kind of pension or retirement plan benefits in the year before the survey. If the youth held a paid job in the year before the survey but had missing information about fringe benefits, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Youth was employed in an integrated setting in the past year (youth five-year survey).** This binary measure indicates whether the youth had any paid jobs at which most of the other workers did not have disabilities in the year before the survey. If the youth held a paid job in the year before the survey but had missing information about integrated settings, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Youth was employed outside of school-sponsored activities in the past year (youth five-year survey).** This binary measure indicates whether the youth had any paid jobs that did not involve school-sponsored activities, such as a work-study job, an internship, or a job in a school-based business, in the year before the survey. If the youth held a paid job in the year before the survey but had missing information about school-sponsored activities, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.

- **Youth had a job with coaching in the past year (youth five-year survey).** This binary measure indicates in the year before the survey whether the youth had any paid jobs that involved a job coach or someone from school or from an agency who went with the youth to help them learn the job. If the youth held a paid job in the year before the survey but had missing information about coaching, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Youth received supports or services in getting or keeping a job in the past year (youth five-year survey).** This binary measure indicates whether the youth received any supports or services from someone who was not part of their family in getting or keeping a job in the year before the survey.
- **Youth had paid employment at the time of the survey (youth five-year survey).** This binary measure indicates whether the youth held a paid job at the time of the survey. If the youth held a job in the year before the survey but had missing information about whether the job was paid or the youth was still employed at the job at the time of the survey, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Youth's average weekly earnings at the time of the survey (youth five-year survey).** This continuous measure shows the youth's total weekly earnings from all paid jobs held at the time of the survey. If the youth held a paid job at the time of the survey but had missing earnings information, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Youth's weekly hours worked at the time of the survey (youth five-year survey).** This continuous measure shows the youth's hours worked per week across all paid jobs held at the time of the five-year survey. If the youth held a paid job at the time of the five-year survey but had missing hours information, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Youth participated in the labor force at the time of the survey (youth five-year survey).** This binary measure indicates whether the youth held any paid or unpaid job or was looking for work at the time of the survey. If the youth did not hold a job at the time of the survey but had missing information about whether he or she was looking for work at the time of the survey, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Youth's employment in each calendar year after RA (SSA data).** This binary measure indicates whether the youth had any earnings in each calendar year after RA.
- **Youth's employment during the five calendar years after RA (SSA data).** This binary measure indicates whether the youth had any earnings during the five calendar years after RA.
- **Youth's earnings in each calendar year after RA (SSA data).** This continuous measure shows the youth's total earnings in each calendar year after RA.
- **Youth applied for VR services after RA (RSA data).** This binary measure indicates whether the youth applied for VR services in the five calendar years after RA. Notably, youth with disabilities can receive pre-employment transition services from a VR agency without submitting a VR application, in which case they would not be counted as having applied for services if these were the only VR services used.
- **Youth used any VR services after RA (RSA data).** This binary measure indicates whether the youth had a signed an individual plan for employment (IPE) in the five calendar years after RA.

c. Youth's self-determination and expectations

We measured the outcomes in this domain at the time of the youth five-year survey. The primary outcomes (and their data sources) in the youth self-determination and expectations domain include the following:

- **Youth's self-determination score (youth five-year survey).** This composite score (values of 0 to 100) is based on the youth's responses to 26 questions designed to capture the extent to which the youth acted autonomously, initiated and responded to events in a psychologically empowered manner, and acted in a self-realizing manner, and their actions were defined by self-direction and pathways thinking. We rescaled the autonomy score to a 0 to 100 scale before aggregating the three domains into the composite youth's self-determination score. We based the questions on the ARC Self-Determination Scale (Wehmeyer 1996). To receive a score, the youth had to answer at least five of the seven questions on autonomy, four of the six questions on psychological empowerment, four of the six questions on agentic action, and five of the seven questions on self-realization. A higher score indicates greater self-determination.
- **Youth expected to be financially independent at age 25 (youth five-year survey).** This binary measure indicates whether the youth responded that they probably or definitely expected to support themselves without help from family or government benefit programs at the age of 25.

The supplementary outcomes in this domain include the following:

- **Youth's autonomy score (0 to 300 scale) (youth five-year survey).** This composite score is based on the youth's response to seven questions designed to capture the extent to which the youth acted autonomously at the time of the survey. We based the questions on the ARC Self-Determination Scale (Wehmeyer 1996). The youth had to answer at least five of the seven questions to receive a score. A higher score indicates greater autonomy.
- **Youth's psychological empowerment score (0 to 100 scale) (youth five-year survey).** This composite score reflects the average of the youth's responses to six questions designed to capture the extent to which the youth initiated and responded to events in a psychologically empowered manner at the time of the survey. We based the questions on the ARC Self-Determination Scale (Wehmeyer 1996). The youth had to answer at least four of the six questions to receive a score. A higher score indicates greater psychological empowerment.
- **Youth's self-realization score (0 to 100 scale) (youth five-year survey).** This composite score reflects the average of the youth's responses to seven questions designed to capture the extent to which the youth acted in a self-realizing manner at the time of the survey. We based the questions on the ARC Self-Determination scale (Wehmeyer 1996). The youth had to answer at least five of the seven questions to receive a score. A higher score indicates greater self-realization.
- **Youth's agentic action (0 to 100 scale) (youth five-year survey).** This composite score reflects the average of the youth's responses to six questions designed to capture the extent to which the youth's actions were defined by self-direction and pathways thinking at the time of the survey. We based the questions on the Self-Determination Inventory: Student Report (Shogren et al. 2017). The youth had to answer at least four of the six questions to receive a score. A higher score indicates greater agentic action.

- **Youth expected to get postsecondary education (youth five-year survey).** This binary measure indicates whether the youth expected at the time of the survey that his or her highest level of schooling would be greater than a high school diploma, certification of completion, or GED.
- **Youth expected to live independently at age 25 (youth five-year survey).** This binary measure indicates whether the youth expected at the time of the survey to live independently (on his or her own or with a partner) at the age of 25.
- **Youth expected to be employed at age 25 (youth five-year survey).** This binary measure indicates whether at the time of the survey the youth responded that he or she probably or definitely expected to be employed in a paid job at the age of 25.
- **Parent expected youth to get postsecondary education (parent five-year survey).** This binary measure indicates whether the parent expected at the time of the survey that the youth would continue schooling beyond high school.
- **Parent expected youth to live independently at age 25 (parent five-year survey).** This binary measure indicates whether at the time of the survey the parent expected that the youth would live independently (on his or her own or with a partner) at the age of 25.
- **Parent expected youth to be financially independent at age 25 (parent five-year survey).** This binary measure indicates whether the parent responded that they probably or definitely expected at the time of the survey that the youth would be able to support herself or himself without help from family or government benefit programs at the age of 25.
- **Parent expected youth to be employed at age 25 (parent five-year survey).** This binary measure indicates whether the parent responded that they probably or definitely expected at the time of the survey that the youth would be employed in a paid job at the age of 25.
- **Parent believed it important that youth be employed eventually (parent five-year survey).** This binary measure indicates whether at the time of the survey the parent believed it to be very or somewhat important that the youth worked at a paid job after the youth finished his or her schooling.

d. Youth's health insurance coverage and expenditures

This domain includes multiple measures of youth's health insurance and Medicaid and Medicare expenditures at different points in time, derived from two sources: the youth five-year survey and CMS data. We calculated expenditures regardless of enrollment in Medicaid or Medicare; those who were not enrolled in Medicaid or Medicare are included in the sample and assigned a value of zero for expenditures for the program(s) in which they were not enrolled. The primary outcomes (and their data sources) in this domain include the following:

- **Covered by any health insurance (youth five-year survey).** This binary measure indicates whether the youth had any kind of health insurance at the time of the survey.
- **Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA (CMS data).** This continuous measure shows the youth's average monthly expenditures across both Medicaid or Medicare for the full five years after RA, as captured in Medicaid and Medicare claims data. We calculated average monthly expenditures by summing the total dollar amounts in claims during the five years after RA and then dividing by 60.

The supplementary outcomes in this domain include the following:

- **Covered by private health insurance (youth five-year survey).** This binary measure indicates whether the youth had private health insurance (through an employer or purchased on their own) at interview. If the youth was covered by any health insurance at the time of the survey but had missing information about whether the insurance was private, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Covered by private health insurance purchased through an Affordable Care Act (ACA) health exchange (youth five-year survey).** This binary measure indicates whether the youth had private health insurance purchased through an ACA health exchange at interview. If the youth was covered by private health insurance at the time of the survey but had missing information about whether the insurance was purchased through an ACA health exchange, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Average monthly Medicaid and Medicare expenditures in each of Years 1–5 after RA (CMS data).** These continuous measures show the youth's combined average monthly Medicaid and Medicare expenditures in each of five years after RA, as captured in Medicaid and Medicare claims data. We calculated average monthly expenditures by summing the total dollar amounts in claims across the 12 months after RA (and subsequent years) and then dividing by 12.
- **Ever enrolled in Medicaid and Medicare in each of Years 1–5 after RA (CMS data).** These binary measures indicate whether the youth was enrolled in Medicaid or Medicare in each of the five years after RA, as captured in Medicaid and Medicare enrollment files.
- **Percentage of months enrolled in Medicaid and Medicare in the five years after RA (CMS data).** These continuous measures indicate the share of all months in the five years after RA in which the youth was enrolled in either Medicaid or Medicare, as captured by Medicaid and Medicare enrollment files.
- **Average monthly Medicaid expenditures in each of Years 1–5 after RA (CMS data).** These continuous measures show the youth's average monthly Medicaid expenditures in each of the five years after RA, as captured in Medicaid claims data. We calculated average monthly expenditures by summing the total dollar amounts in claims across the 12 months after RA (and subsequent years) and then dividing by 12.
- **Average monthly Medicaid expenditures in the five years after RA (CMS data).** This continuous measure shows the youth's average monthly Medicaid expenditures in the five years after RA, as captured in Medicaid claims data. We calculated average monthly expenditures by summing the total dollar amounts in claims across the five years after RA and then dividing by 60.
- **Ever enrolled in Medicaid in each of Years 1–5 after RA (CMS data).** These binary measures indicate whether the youth was enrolled in Medicaid in each of the five years after RA, as captured in Medicaid enrollment files.
- **Percentage of months enrolled in Medicaid in the five years after RA (CMS data).** This continuous measure indicates the share of all months in the five years after RA in which the youth was enrolled in Medicaid, as captured in Medicaid enrollment files.
- **Average monthly Medicare expenditures in each of Years 1–5 after RA (CMS data).** These continuous measures show the youth's average monthly Medicare expenditures in each of the five years after RA, as captured in Medicare claims data. We calculated average monthly expenditures by summing the total dollar amounts in claims across the 12 months after RA (and subsequent years) and then dividing by 12.

- **Average monthly Medicare expenditures in the five years after RA (CMS data).** This continuous measure shows the youth's average monthly Medicare expenditures in the five years after RA, as captured in Medicare claims data. We calculated average monthly expenditures by summing the total dollar amounts in claims across the five years and then dividing by 60.
- **Ever enrolled in Medicare in each of Years 1–5 after RA (CMS data).** These binary measures indicate whether the youth was enrolled in Medicare in each year after RA, as captured in Medicare enrollment files.
- **Percentage of months enrolled in Medicare in the five years after RA (CMS data).** This continuous measure indicates the share of all months in the five years after RA in which the youth was enrolled in Medicare, as captured in Medicare enrollment files.

e. Youth's SSA payments and knowledge of work supports

This domain includes multiple measures of youth's receipt of SSA payments and awareness of SSA policies and other work supports from two sources: the youth five-year survey and SSA data. The primary outcomes (and their data sources) in this domain include the following:

- **Received SSA payments in Year 5 after RA (SSA data).** This binary measure indicates whether youth received any SSA payments (SSI or OASDI) in the fifth year after RA.
- **SSA payments in Year 5 after RA (SSA data).** This continuous measure shows the amount of SSA payments (SSI and OASDI) that the youth received in the fifth year after RA.
- **SSA payments in the five years after RA (SSA data).** This continuous measure shows the total amount of SSA payments (SSI and OASDI) the youth received during the five years after RA.

The supplementary outcomes in this domain include the following:

- **Received SSA payments in each of Years 1–4 after RA (SSA data).** These binary measures indicate whether youth received any SSA payments (SSI or OASDI) in each of the first four years after RA. Year 5 is captured by the primary outcome measure listed above.
- **SSA payment amounts in each of Years 1–4 after RA (SSA data)**. These continuous measures show the amount of SSA payments (SSI and OASDI) youth received in each of the first four years after RA. Year 5 is captured by the primary outcome measure listed above.
- **Received SSI payments in each of Years 1–5 and all five years after RA (SSA data).** These binary measures indicate whether youth received SSI payments in each of the five years, and at any point during the five years, after RA.
- **SSI payment amounts in each of Years 1–5 and all five years after RA (SSA data).** These continuous measures show the annual SSI payment amounts youth received in each of the five years after RA and the total amount for all five years.
- **Received OASDI benefits in each of Years 1–5 and all five years after RA (SSA data).** These binary measures indicate whether youth received OASDI benefits in each of the five years, and at any point during the five years, after RA.
- **OASDI benefit amounts in each of Years 1–5 and all five years after RA (SSA data).** These continuous measures show the annual OASDI benefit amounts youth received in each of the five years after RA and the total amount for all five years.

- **Age-18 redetermination status (SSA data).** This categorical measure indicates the youth's age-18 redetermination status at five years after RA. The status was one of the following: continue with benefits, cease the benefits, pending a decision, or the youth did not have an age-18 redetermination.
- **Youth was aware that children receiving SSI are not automatically eligible for SSI as adults (youth five-year survey).** This binary measure indicates whether at the time of the survey the youth correctly identified that the statement "Children receiving SSI are automatically eligible for SSI as adults" was false.
- **Youth was aware that people receiving SSI can work for pay (youth five-year survey).** This binary measure indicates whether at the time of the survey youth correctly identified that the statement "People who get SSI are not allowed to work at a job for pay" was false.
- **Youth believed that people receiving SSI must report earnings to SSA (youth five-year survey).** This binary measure indicates whether at the time of the survey the youth agreed with the statement "People who receive SSI benefits must report any money they get from working to SSA" was true.
- **Youth was aware of the Student Earned Income Exclusion (youth five-year survey).** This binary measure indicates whether the youth had heard of the Student Earned Income Exclusion before the survey. This exclusion is applicable to youth under age 22 who are in school when they are working. In 2018, such youth could earn up to $1,820 per month or up to $7,350 per year and have it excluded when SSA calculates the SSI payment.
- **Youth was aware of the earned income exclusion (youth five-year survey).** This binary measure indicates whether the youth had heard of the earned income exclusion before the survey. This exclusion means one-half of one's earnings over $65 (plus any remaining amount of the $20 general income exclusion) are not counted when SSA calculates the SSI payment.
- **Youth was aware of the SSI Plan to Achieve Self-Support (PASS) (youth five-year survey).** This binary measure indicates whether the youth had heard of PASS before the survey. PASS lets SSI recipients set aside money to be used to help them reach a work goal; the money set aside does not affect their SSI eligibility or payments.
- **Youth was aware of the Achieving a Better Life Experience (ABLE) account (youth five-year survey).** This binary measure indicates whether the youth had heard of the ABLE account before the survey.

f. Youth's economic and social well-being

This domain includes multiple measures of youth's economic and social well-being at different points in time, derived from two sources: the five-year surveys and SSA data. The primary outcomes (and their data sources) in the economic and social well-being domain include the following:

- **Income in the past year (youth five-year survey and SSA data).** This continuous measure shows the total income from youth's earnings and SSA payments in the year before the survey. We derived the youth's earnings from all paid jobs and the youth's SSA payments in the year before the survey from SSA data. If the youth held a paid job in the year before the survey but had missing earnings information, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Total income in the five calendar years after RA (SSA data).** This continuous measure reflects the sum of the youth's earnings and SSA disability payments during the five calendar years after RA.

The supplementary outcomes in this domain include the following:

- **Income in each of Years 1–5 after RA (SSA data).** These continuous measures reflect the sum of the youth's earnings and SSA payments in each of the five calendar years after RA.
- **Engaged in productive activities (youth five-year survey).** This binary measure indicates whether the youth participated in the labor force or was enrolled in school or training at the time of the survey.
- **Household income in the past year (youth and parent five-year surveys).** This continuous measure is the total amount of household income from the following sources: TANF, Supplemental Nutrition Assistance Program (SNAP), government housing assistance, SSI and OASDI, retirement income, earnings, and all other sources. We derived this measure from either (1) the parent survey for youth who resided with a parent at the time of the survey or (2) the youth survey for youth who did not reside with a parent at the time of the survey.[14] For each income source, the survey asked whether any member of the youth's household received income from that source in the past month; if the respondent reported yes, the survey asked for the amount received. If a respondent reported that the household received income from a certain source but did not report the amount, we used mean imputation (tailored to each PROMISE program) to fill in the missing information. For household earnings, if respondents refused or could not provide a continuous amount, they had the option to report the household earnings in categories. In such cases, we used the mid-point of each category to calculate monthly household income; the highest category was defined as $6,500 or more, and we imputed $7,000 in earnings for respondents who selected this category. We multiplied the household's income in the past month by 12 to estimate the annual household income.
- **Household received TANF, SNAP, or housing assistance (youth and parent five-year surveys).** This binary measure indicates whether any member of the youth's household participated in TANF, SNAP, or government housing assistance at the time of the survey. Although this binary measure asks about participation in these programs at the time of the survey, the measures of the amounts received refer to the past month. We derived this measure from the parent survey for youth who resided with a parent at the time of the survey and from the youth survey for independent youth.
- **Total TANF benefits the household received in the past month (youth and parent five-year surveys).** This continuous measure is the amount of TANF benefits the household received in the past month. We derived this measure from the parent survey for youth who resided with a parent at the time of the survey and from the youth survey for independent youth. If an independent youth or parent reported receiving TANF but had missing information about the amount of support received, we used mean imputation at the program level to fill in the missing information.
- **Total SNAP benefits the household received in the past month (youth and parent five-year surveys).** This continuous measure is the amount of SNAP benefits the household received in the past month. We derived this measure from either the parent survey for youth who resided with a parent at the time of the survey or from the youth survey for independent youth. If an independent youth or parent reported receiving SNAP but had missing information about the benefit amounts received, we used mean imputation at the program level to fill in the missing information.
- **Total housing assistance amount the household received in the past month (youth and parent five-year surveys).** This continuous measure is the amount of housing assistance the household received in the past month. We derived this measure from either (1) the parent survey for youth who resided with a parent at the time of the survey or (2) the youth survey for youth who did not reside

[14] Most youth survey respondents (78 percent) resided with a parent at the time of the survey.

with a parent at the time of the survey. If an independent youth or parent reported receiving housing assistance but had missing information about the amount of assistance received, we used mean imputation at the program level to fill in the missing information.

- **Lived independently (youth five-year survey).** This binary measure indicates whether the youth lived independently at the time of the survey (that is, youth did not reside with a parent or guardian or in another setting, such as a group home, institution, or boarding school).
- **Married or in a marriage-like relationship (youth five-year survey).** This binary measure indicates whether the youth was married, engaged, or in a marriage-like relationship at the time of the survey.
- **Responsible for a child or children (youth five-year survey).** This binary measure indicates whether the youth was responsible for biological, adopted, foster, or any other children at the time of the survey.
- **Ever been arrested (youth five-year survey).** This binary measure indicates whether the youth had ever been arrested or been taken into custody for a crime or illegal offense. The measure is based on a survey question that did not specify a time period, so the measure is not restricted to the period after RA.
- **Number of arrests (youth five-year survey).** This continuous measure indicates the total number of times the youth had ever been arrested. If the youth was ever arrested but had missing information about the number of arrests, we conducted multiple imputation separately for each PROMISE program to fill in the missing information. The measure is based on a survey question that did not specify a time period, so the measure is not restricted to the period after RA.
- **Arrested in the past year (youth five-year survey).** This binary measure indicates whether the youth had been arrested in the year before the survey.
- **Ever incarcerated (youth five-year survey).** This binary measure indicates whether the youth had ever served time in a juvenile or adult prison, jail, or other correctional facility. The measure is based on a survey question that did not specify a time period, so the measure is not restricted to the period after RA.
- **Number of days of incarceration (youth five-year survey).** This continuous measure indicates the total number of days the youth had been incarcerated. If the youth was ever incarcerated at the time of the survey but had missing information about the number of days of incarceration, we conducted multiple imputation separately for each PROMISE program to fill in the missing information. The measure is based on a survey question that did not specify a time period, so the measure is not restricted to the period after RA.
- **Health status (youth five-year survey).** This categorical measure indicates whether the youth reported his or her health at the time of the survey to be poor, fair, good, very good, or excellent.
- **Received supports or services for getting accommodations for school, work, or living independently in the past year (youth five-year survey).** This binary measure indicates whether the youth received any supports or services from someone not part of their family in getting accommodations for school, work, or living independently in the year before the survey.

2. Parent outcomes

We assessed parents' outcomes in the following domains: employment and earnings, health insurance coverage and expenditures, SSA payments, and economic well-being. Below, for each domain, we describe the outcome measures that we examined. Note that the definition of a parent can vary across outcomes depending on the underlying data source (see Section A).

a. Employment and earnings

This domain includes multiple measures of parents' employment and earnings at different points in time, derived from two sources: five-year parent survey and SSA data. The primary outcomes (and their data sources) in this domain include the following:

- **Either parent worked for pay in the past year (parent five-year survey).** This binary measure indicates whether either the parent (or the parent's spouse if the parent reported having a spouse) held a paid job in the year before the survey.
- **Parents' earnings in the past year (parent five-year survey).** This continuous measure reflects the total earnings of the parent and the parent's spouse from all paid jobs in the year before the survey. If either parent held a paid job in the year before the survey but had missing earnings information, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Parents' earnings during the five calendar years after RA (SSA data).** This continuous measure reflects the total earnings of the parent and the parent's spouse during the five calendar years after RA.

The supplementary outcomes in this domain include the following:

- **Highest educational attainment achieved by either parent (parent five-year survey).** This categorical measure indicates the highest educational attainment that either the parent or the parent's spouse had attained at the time of the survey, according to the following categories: not a high school graduate; high school diploma or GED; some postsecondary education or more; or other or do not know.
- **Number of parents who worked for pay in the past year (parent five-year survey).** This continuous measure indicates whether zero, one, or two parents held a paid job in the year before the survey.
- **Number of weeks worked in the past year (parent five-year survey).** This continuous measure shows the total number of weeks that the parent and the parent's spouse worked in the past year across all paid jobs held at the time of the survey. If either parent held a paid job at the time of the survey but had missing information about the number of weeks worked, we conducted multiple imputation separately for each PROMISE program to fill in the missing information. We then added the hours across the two parents to construct the measure. Accordingly, this measure ranges from 0 to 104.
- **Weekly hours worked in the past year (parent five-year survey).** This continuous measure shows the average hours worked per week by the parent and the parent's spouse in the past year. If survey respondents did not report the number of hours that a parent or spouse worked, they could report the number in ranges. We used the mid-point at each range to calculate weekly hours worked by the parent or spouse. The top category was defined as "more than 35 hours per week," which we top-

coded at 40 hours. If either the parent or their spouse had been employed in the past year but had missing hours information, we conducted multiple imputation separately for each PROMISE program to fill in the missing information. We then added the hours across the two parents to construct the outcome measure. Accordingly, this measure ranges from 0 to 136.

- **Either parent was offered fringe benefits through a job in the past year (parent five-year survey).** This binary measure indicates whether either parent had a paid job that offered health insurance, paid vacation or sick leave, or any kind of pension or retirement plan fringe benefits in the year before the survey. If either parent held a paid job in the year before the survey but had missing information about fringe benefits, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Either parent was in the labor force at the time of the survey (parent five-year survey).** This binary measure indicates whether either parent held a paid or unpaid job or was looking for work at the time of the survey. If either parent wanted a job but had missing information about whether he or she was looking for a job at the time of the survey, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Either parent was working for pay at the time of the survey (parent five-year survey).** This binary measure indicates whether either parent held a paid job at the time of the survey.
- **Parents' employment in each of Years 1–5 after RA (SSA data).** This binary measure indicates whether a parent had any earnings in each of the five calendar years after RA.
- **Parents' employment during the five calendar years after RA (SSA data).** This binary measure indicates whether a parent had earnings in any of the five calendar years after RA.
- **Parents' earnings in each of Years 1–5 after RA (SSA data).** This continuous measure shows the parent's and the spouse's earnings in each of the five calendar years after RA.

b. SSA payments

This domain includes multiple measures of parents' receipt of SSA payments at various points in time, measured using SSA data. The primary outcomes (and their data sources) in this domain include the following:

- **Received SSA payments in Year 5 after RA (SSA data).** This binary measure indicates whether a parent received SSA payments (SSI or OASDI) in the fifth year after RA.
- **SSA payments in Year 5 after RA (SSA data).** This continuous measure shows the amount of SSA payments (SSI and OASDI) parents received in the fifth year after RA.
- **SSA payments in the five years after RA (SSA data).** This continuous measure shows the total amount of SSA payments (SSI and OASDI) parents received during the five years after RA.

The supplementary outcomes in this domain include the following:

- **Received SSA payments in each of Years 1–4 after RA (SSA data).** These binary measures indicate whether a parent received SSA payments (SSI or OASDI) in each of the first four years after RA. Year 5 is captured by the primary outcome measure listed above.
- **SSA payments in each of Years 1–4 after RA (SSA data).** These continuous measures show the amount of SSA payments (SSI and OASDI) that parents received in each of the first four years after RA. Year 5 is captured by the primary outcome measure listed above.

- **Received SSI payments in each of Years 1–5 and all five years after RA (SSA data).** These binary measures indicate whether a parent received SSI payments in each of the five years after RA and at any point during those five years.
- **SSI payment amounts in each of Years 1–5 and all five years after RA (SSA data).** These continuous measures show the annual SSI payment amounts parents received in each of the five years after RA and the total amount for all five years.
- **Received OASDI benefits in each of Years 1–5 and all five years after RA (SSA data).** These binary measures indicate whether a parent received OASDI benefits in each of the five years after RA and at any point during those five years.
- **OASDI benefit amounts in each of Years 1–5 and all five years after RA (SSA data).** These continuous measures show the annual OASDI benefit amounts parents received in each of the five years after RA and the total amount for all five years.

c. Health insurance coverage and expenditures

This domain includes multiple measures of parents' health insurance and Medicaid and Medicare expenditures at different points in time, derived from two sources: the parent five-year survey and CMS data. We calculated expenditures regardless of enrollment in Medicaid or Medicare; those who were not enrolled in Medicaid or Medicare are included in the sample and assigned a value of zero for expenditures for the program(s) in which they were not enrolled. The primary outcomes (and their data sources) in this domain include the following:

- **Either parent was covered by health insurance (parent five-year survey).** This binary measure indicates whether a parent had any kind of health insurance at the time of the survey.
- **Average monthly Medicaid and Medicare expenditures in the five years after RA (CMS data).** This continuous measure shows parents' average monthly expenditures across both Medicaid or Medicare for the full five years after RA, as captured in Medicaid and Medicare claims data. We calculated average monthly expenditures by summing parents' total dollar amounts in claims during the five years after RA and then dividing by 60.

The supplementary outcomes in this domain include the following:

- **Covered by private health insurance (parent five-year survey).** This binary measure indicates whether a parent had private health insurance (through an employer or purchased on their own) at interview. If the parent was covered by any health insurance at the time of the survey but had missing information about whether the insurance was private, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Average monthly Medicaid and Medicare expenditures in each of Years 1–5 after RA (CMS data).** These continuous measures show the parents' average monthly Medicaid and Medicare expenditures in each of five years after RA, as captured in Medicaid and Medicare claims data. We calculated average monthly expenditures by summing parents' total dollar amounts in claims across the 12 months after RA (and subsequent years) and then dividing by 12.
- **Ever enrolled in Medicaid and Medicare in each of Years 1–5 after RA (CMS data).** These binary measures indicate whether a parent was enrolled in Medicaid or Medicare in each of the five years after RA, as captured in Medicaid and Medicare enrollment files.

- **Percentage of months enrolled in Medicaid and Medicare in the five years after RA (CMS data).** These continuous measures indicate the share of all months in the five years after RA in which a parent was enrolled in either Medicaid or Medicare, as captured by Medicaid and Medicare enrollment files.
- **Average monthly Medicaid expenditures in each of Years 1–5 after RA (CMS data).** These continuous measures show the parents' average monthly Medicaid expenditures in each of the five years after RA, as captured in Medicaid claims data. We calculated average monthly expenditures by summing parents' total dollar amounts in claims across the 12 months after RA (and subsequent years) and then dividing by 12.
- **Average monthly Medicaid expenditures in the five years after RA (CMS data).** This continuous measure shows the parents' average monthly Medicaid expenditures in the five years after RA, as captured in Medicaid claims data. We calculated average monthly expenditures by summing parents' total dollar amounts in claims across the five years after RA and then dividing by 60.
- **Ever enrolled in Medicaid in each of Years 1–5 after RA (CMS data).** These binary measures indicate whether a parent was enrolled in Medicaid in each of the five years after RA, as captured in Medicaid enrollment files.
- **Percentage of months enrolled in Medicaid in the five years after RA (CMS data).** This continuous measure indicates the share of all months in the five years after RA in which a parent was enrolled in Medicaid, as captured in Medicaid enrollment files.
- **Average monthly Medicare expenditures in each of Years 1–5 after RA (CMS data).** These continuous measures show the parents' average monthly Medicare expenditures in each of the five years after RA, as captured in Medicare claims data. We calculated average monthly expenditures by summing parents' total dollar amounts in claims across the 12 months after RA (and subsequent years) and then dividing by 12.
- **Average monthly Medicare expenditures in the five years after RA (CMS data).** This continuous measure shows parents' average monthly Medicare expenditures for the full five years after RA, as captured in Medicaid and Medicare claims data. We calculated average monthly expenditures by summing parents' total dollar amounts in claims during the five years after RA and then dividing by 60.
- **Ever enrolled in Medicare in each of Years 1–5 after RA (CMS data).** These binary measures indicate whether a parent was enrolled in Medicare in each year after RA, as captured in Medicare enrollment files.
- **Percentage of months enrolled in Medicare in the five years after RA (CMS data).** This continuous measure indicates the share of all months in the five years after RA in which parents were enrolled in Medicare, as captured in Medicare enrollment files.

d. Economic well-being

This domain includes multiple measures of parents' economic well-being at different points in time, derived from two sources: the parent five-year survey and SSA data. The primary outcomes (and their data sources) in this domain include the following:

- **Income from earnings and SSA payments in the past year (parent five-year survey and SSA data).** This continuous measure shows the total income from the parent's and spouse's earnings and SSA payments in the year before the survey. If either parent held a paid job in the year before the survey but had missing earnings information, we conducted multiple imputation separately for each PROMISE program to fill in the missing information.
- **Total income during the five calendar years after RA (SSA data).** This continuous measure reflects parents' total earnings and SSA payments during the five calendar years after RA.

The supplementary outcomes in this domain include the following:

- **Income in each of Years 1–5 after RA (SSA data).** These continuous measures reflect the sum of the parents' earnings and SSA payments in each of the five calendar years after RA.
- **Household received TANF, SNAP, or housing assistance (parent five-year survey).** This binary measure indicates whether a member of the household received TANF, SNAP, or government housing assistance. Although this binary measure asks about participation in these programs at the time of the survey, the measures containing the amount received in these programs refer specifically to the month of the survey.
- **Household income in the past year (parent five-year survey).** This continuous measure is the total household income from the following sources: TANF, SNAP, government housing assistance, SSI and OASDI, retirement income, earnings, and all other sources. For each income source, the survey asked whether any member of the youth's household received income from the source in the past month; if the respondent reported yes, the survey asked for the amount received. If a respondent reported that the household received income from a certain source but did not report the amount, we used mean imputation (tailored to each PROMISE program) to fill in the missing information. For household earnings, if respondents refused to answer or could not provide a continuous amount, they had the option to report the household earnings in categories. In such cases, we used the mid-point of each category to calculate monthly household income; the highest category was defined as $6,500 or more, and we imputed $7,000 in earnings for respondents who selected this category. We multiplied the household's income in the past month by 12 to estimate the annual household income.
- **TANF benefits the household received in the past month (youth and parent five-year surveys).** This continuous measure is the amount of TANF the household received in the past month. If a parent reported receiving TANF but had missing information about the amount received, we used mean imputation at the program level to fill in the missing information.
- **SNAP benefits the household received in the past month (parent five-year surveys).** This continuous measure is the amount of SNAP benefits the household received in the past month. If a parent reported receiving SNAP benefits but had missing data information about the benefit amounts received, we used mean imputation at the program level to fill in the missing information.
- **Housing assistance amount the household received in the past month (parent five-year surveys).** This continuous measure is the amount of housing assistance the household received in the past month. If a parent reported receiving housing assistance but had missing information about the amount of assistance received, we used mean imputation at the program level to fill in the missing information.

Appendix B. Analytic Methods

This appendix provides information about the methods used to estimate program impacts, benefits, and costs. Section A describes the impact analysis methods, and Section B describes the benefit-cost analysis methods.

A. Impact analysis methods

1. Estimation methods

As proposed in the PROMISE evaluation design report (Fraker et al. 2014), the PROMISE evaluation has examined each of the six PROMISE programs as an independent site. The rationale for this approach is that, even though all six PROMISE programs broadly followed the same program model, they varied substantially in their implementation of the model components. Consistent with this heterogeneity, the findings from the 18-month impact analysis showed variation across programs in the existence and magnitude of impacts at 18 months after youth and families enrolled in PROMISE (Patnaik et al. 2021). Assessing the programs separately enabled the evaluation to consider qualitatively how differences in implementation and enrollee populations might influence the outcomes of a core intervention and help identify lessons for future programs. As supplementary analyses, we also estimated impacts by pooling data across the six programs; the pooled analyses provide estimates of the average impacts on outcomes across the six programs and illustrate the extent to which the programs' impacts differ significantly from each other.

We expected PROMISE enrollees in the treatment and control groups to be similar in their initial characteristics because of the experimental study design used to construct the two groups. 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. As described in Appendices C–H, we compared the baseline characteristics of treatment and control group youth in each PROMISE program and found few differences. The results of these baseline balance tests indicate that RA was well executed in each PROMISE program. Accordingly, a simple comparison of the outcomes five years after enrollment would provide an unbiased estimate of the impacts, on average.

To improve the statistical precision of the impact estimates and account for chance differences in baseline characteristics between treatment and control group members, we computed regression-adjusted impact estimates by using multivariate regression models. In all tables showing results from the impact analyses, the means for the treatment group reflect regression-adjusted means. The approach we used to implement covariate adjustment was as follows:

- For all programs, we included a core set of covariates (Appendix Table B.1).
- For each program, we included additional covariates in the model (Appendix Table B.1) as follows:
  - If we found any statistically significant differences in baseline characteristics, we used that characteristic as a covariate in all regressions for the program.
  - When analyzing ASPIRE's impacts, we included covariates derived from the ASPIRE baseline survey and the intake form administered by the program staff.
  - For ASPIRE and CaPROMISE, all regressions included region fixed effects to account for the fact that we used stratified RA at these sites.

Appendix Table B.1. Covariates used in regression-adjusted analyses of impacts

Program	Control variables
All programs	• Youth age (categories; age 16 is the omitted category) • Whether youth was female • Youth race and ethnicity (categories; non-Hispanic White is the omitted category) • Youth primary impairment (categories; physical disability is the omitted category) • Youth duration of SSI payments at RA • Youth total disability payment amount in the 12 months before the month of RA • Whether youth household has multiple SSI-eligible children • Parent SSA payment status at RA (categories; no parent received SSA payments is the omitted category) • For youth employment outcomes derived from SSA data: whether youth had any earnings in the year before RA • For parent employment outcomes derived from SSA data: parents' earnings in the year before RA • For Medicaid and Medicare expenditure outcomes derived from CMS data: average monthly Medicaid and Medicare expenditures in the year before RA
Arkansas PROMISE	• Whether youth had SSI payment in the month of RA • Number of parents used in SSA data analysis (categories; none is the omitted category)
ASPIRE	• Youth's living arrangements at RA (categories; living with parents is the omitted category) • Whether youth had OASDI benefits in the month of RA • Whether youth worked or volunteered at baseline • Whether youth talked with parent/teacher/caseworker about postsecondary education at RA • Whether youth talked with parent/teacher/caseworker about post-school employment at RA • Whether parent expected youth to be employed in the future at RA • Whether youth had difficulty with at least one activity of daily living at RA • Whether youth had difficulty with at least one instrumental activity of daily living at RA • Parent's self-assessment of financial knowledge at RA • Region fixed effects
CaPROMISE	• Whether youth had SSI payment in the month of RA • Whether youth had OASDI benefits in the month of RA • Youth age at most recent SSI application • Youth SSI payment amount in the 12 months before the month of RA • Youth OASDI benefit amount in the 12 months before the month of RA • Region fixed effects • For all outcomes except those derived from CMS data: whether parent was employed in the year before RA
MD PROMISE	• Youth SSI payment amount in the 12 months before the month of RA • Number of parents included in the administrative data (categories; "none" is the omitted category

Program	Control variables
NYS PROMISE	• Youth's living arrangements at the time of RA (categories; "living with parents" is the omitted category) • Youth age at most recent SSI application • Youth OASDI benefit amount in the 12 months before the month of RA • Number of parents used in SSA data analysis (categories; none is the omitted category)
WI PROMISE	• Parent race and ethnicity (categories; "non-Hispanic White" is the omitted category)
All programs (pooled)	• Whether youth had SSI benefits in the month of RA

OASDI = Old-Age, Survivors, and Disability Insurance Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

To estimate impacts, we estimated a regression model of the following form:

$$Y_i = \alpha + \beta Treatment_i + \lambda X_i + \in_i ,$$

where i denotes the individual observation, $Treatment_i$ denotes the indicator for assignment to the treatment group, X_i denotes the vector of covariates, and $\in_i$ denotes the error term. The coefficient β denotes the parameter of primary interest because it is the estimate of the program impact. We estimated this model using linear regression methods.

We addressed the possibility of heteroskedasticity of unknown form by using the method proposed by White (1980) to produce heteroskedasticity-consistent standard errors.[15] Because the ASPIRE program covered a region comprising multiple states, the models for that program accounted for the fact that outcomes for individuals in the same state might be correlated, whereas outcomes for individuals in different states were assumed to be uncorrelated.

We used Stata's "svy" commands, which were designed to fit statistical models for complex survey data. When examining survey-based outcomes, we specified probability weights in the form of either the parent or youth analysis weight, depending on the source of the outcome data (see Appendix A for more information about survey weights). When examining administrative outcomes, we did not use analysis weights. For an examination of survey-based outcomes for the CaPROMISE program, we specified that the survey sampling had been stratified by local educational agency. For survey-based outcomes constructed using multiple imputation (see Appendix A), we used Stata's "mi" commands combined with the appropriate "svy" commands to estimate impacts.

We used two-sided *t*-tests and a *p*-value threshold of .10 to determine whether an estimated program impact was statistically different from zero. To calculate effect sizes for continuous outcome measures, we reported the standardized mean difference, known as Hedges' g, estimated by dividing the estimated impact by the pooled standard deviation of the outcome measure. For binary outcome measures, we calculated effect sizes by dividing the log odds ratio by 1.65, thus providing a statistic that reflected the difference in the probability of the occurrence of an event between the two groups (Cox 1970).

[15] Heteroskedasticity refers to the circumstance in which the variability of an outcome is unequal across a range of values of a control variable used in the regression model.

2. Sensitivity analyses

In Appendix Tables C.18–I.18, we present results that helped us assess the sensitivity of the estimated impacts on primary outcomes to methodological choices we incorporated in the main impact estimates. For each outcome, we estimated alternative models that do not (1) use the survey weights, (2) include covariate adjustment, and (3) use imputed data for outcomes that underwent multiple imputation. The alternative models produced broadly similar results, suggesting that the main model's estimates of program impacts were not sensitive to the choice of estimation method.

As described in Appendix A, administrative data were available for all youth and most parents, but survey data were not available for all enrollees due to survey sampling and nonresponse. To assess the extent to which the lack of survey data for some enrollees would influence our estimates of program impacts, we compared how the estimated impacts on primary outcomes varied when nonrespondents were included and excluded from analyses of the administrative data (Appendix Tables C.19–I.19). We examined administrative data and estimated impacts that included those who did not respond to the survey and then compared these estimates to those obtained by limiting the sample to survey respondents only and applying the analysis weights. We conducted statistical tests to assess whether the impacts estimated with each sample differed significantly from one another. The findings suggest that use of the analysis weights minimized the potential for nonresponse bias because the estimated impacts for the survey respondent sample were comparable to those for the full research sample. Across the six PROMISE programs, impact estimates for the two samples were not statistically different from each other for any primary outcome derived from administrative data.

3. Subgroup impacts

To understand whether the impacts of PROMISE differed by enrollee characteristics, we estimated the five-year impacts for key subgroups of evaluation enrollees. To minimize the risk of drawing spurious conclusions due to multiple comparisons, we estimated subgroup impacts on the primary outcome measures only and restricted the number of subgroups examined. We selected the subgroups before beginning the analyses and identified them based on their policy relevance and the proportion of the samples with the given characteristic. We required each subgroup to represent about 25 percent or more of the analysis sample to ensure adequate statistical power to detect impacts large enough to be meaningful.[16]

Using these criteria, we focused on subgroups defined by the following baseline characteristics of youth: sex (females and males); age (ages 14 and 15, and age 16); primary impairment (intellectual or developmental disabilities, other mental impairments, and other disabilities); whether a youth's parent received SSA payments at the time of RA (yes or no); and whether the survey respondent completed the five-year survey before or after the onset of the COVID-19 pandemic. For ASPIRE, we also analyzed three state subgroups: Arizona, Colorado, and the remaining four states in the consortium (Montana, North Dakota, South Dakota, and Utah).

We adapted the main impact model (described in Appendix B) to conduct the subgroup analyses. We created an indicator variable for each subgroup. We estimated multivariate regression models that included an indicator for each of the relevant subgroups and the interaction between the subgroup

[16] In the PROMISE evaluation design report, we estimated that 25 percent survey samples would provide enough statistical power to detect an impact of 11 percentage points or larger on the likelihood of being employed during the year after RA (Fraker et al. 2014).

indicators and the treatment indicator. For example, to analyze program impacts for two comparison subgroups, we estimated the model as follows:

$$Y_i = \beta_1 Treatment_i * Subgroup1_i + \beta_2 Treatment_i * Subgroup2_i + \beta_3 Subgroup1_i + \beta_4 Subgroup2_i + \lambda X_i + \in_i,$$

where Y_i denotes the individual observation, $Subgroup1_i$ and $Subgroup2_i$ denote the indicators for each of the comparison subgroups, $Treatment_i$ denotes the indicator for assignment to the treatment group, X_i denotes the vector of covariates, and $\in_i$ denotes the error term. β_1 and β_2 are the parameters of primary interest because they denote the estimated program impact for each of the respective subgroups. We used two-sided *t*-tests to determine whether the estimated impact on each subgroup was significantly different from zero. We tested whether the estimated program impacts on the subgroups were significantly different from each other using adjusted Wald tests.

Appendix Tables C.20–I.20, C.21–I.21, C.22–I.22, C.23–I.23, C.24–I.24, C.25–I.25, and D.26 present the subgroup impact estimates. Because we are interested in understanding the heterogeneity of program impacts, we focused on assessing statistically significant differences in a program's impacts across subgroups, rather than the program's impacts for each subgroup. We discuss findings of statistically significant variation in the subgroup impacts in Chapters III through IX of the five-year impact evaluation report.

B. Benefit-cost analysis methods

An important component of the PROMISE evaluation is the assessment of the benefits of the intervention relative to its direct and indirect costs. Benefits are defined as quantifiable monetary gains that result from PROMISE services that we were able to measure over the five-year study period, such as additional earnings for PROMISE youth and families due to increased employment. Note that we do not include the benefits or costs for outcomes that are difficult to monetize, such as having health insurance coverage, and youth self-determination; however, the impact estimates on these outcomes are small (less than 2.5 percent of the control group mean) and typically are not statistically different from zero. Nonetheless, readers may impute their own expected costs to these outcomes. Direct costs are the costs of implementing each program. Indirect costs refer to additional costs beyond the program's direct costs that may have been incurred in other areas as a result of PROMISE's effects—for example, the cost of increased education (for example, tuition costs) for PROMISE youth and families (if PROMISE increased the amount of education that youth received). For each PROMISE program, we calculated the program's net monetized benefit—the benefits net of program costs and indirect costs—per treatment group family.

In this appendix, we describe how we calculated each of the benefit and cost measures used in the benefit-cost analyses. We also report the findings of sensitivity analyses we conducted to assess how the net benefit estimates changed in response to different assumptions. Finally, we describe the methods used to generate 10- and 20-year forecasts of each program's net benefit.

1. Accounting framework

We developed an accounting framework incorporating four perspectives to guide the benefit-cost data collection, analysis, and reporting: (1) the youth and families eligible for PROMISE services; (2) the federal government (separated into SSA, ED, and all other federal agencies); (3) state and local government, including PROMISE partners; and (4) all stakeholders combined (defined as the sum of the

previous three groups). We add up the costs and benefits per family; to be consistent with the impact analysis, the sample includes all treatment and control group members, regardless of whether they actually received services.

Appendix Table B.2 lists the monetary outcomes incorporated into the benefit-cost estimates as rows and each of the four perspectives as columns. Some program impacts may have been a benefit to some stakeholders but a cost to others. For each outcome, the table indicates whether an increase in the outcome would have represented a benefit (+ sign) or a cost (- sign) for the respective stakeholder. For example, an increase in SSI benefits would have represented a benefit to PROMISE youth and families (denoted by + in Column B) and a cost to SSA (denoted by - in Column C). A value of 0 indicates that an increase in the outcome would not have affected the stakeholder represented in the column label. For example, increased beneficiary earnings would have represented neither a cost nor a benefit to SSA and did not enter into the equation for calculating net benefits from SSA's perspective. Also, while some costs (such as public income support) are transfers from the government to beneficiaries, others (such as the costs of administering a public program) are strictly captured as a cost; therefore, we include separate components for benefit payments and administrative costs. The four accounting perspectives and the benefit and cost components reflected in each are described below.

PROMISE youth and their parents. Youth and parents who engaged in program services were expected to accrue benefits from increased earnings. However, youth and parents also might have borne some costs as a result of PROMISE's impacts—for example, increased commuting expenses and increased taxes associated with employment. Additionally, their SSA benefits and public assistance might decline if PROMISE increased earnings. Assessing benefits and costs from this perspective allowed us to address whether participating in PROMISE was a good investment for those the programs intended to help directly.

The federal government. SSA, ED, and federal agencies not directly involved in PROMISE could have accrued benefits and costs as a result of PROMISE. SSA would have benefited from PROMISE if the program reduced SSA payments to beneficiaries, whereas any increase in SSA payments would have represented a cost borne by SSA. ED funded the states, who ultimately implemented the PROMISE programs. We assign the cost of the programs to ED because the federal government was the ultimate source of the funds. Other federal agencies also could have incurred costs if PROMISE increased other public program expenditures, such as for TANF, SNAP, Medicare, and Medicaid. The reverse is also true; a reduction in families' reliance on public supports would have represented a benefit to federal agencies. Federal agencies also could have benefited from PROMISE if the program had increased earnings and thereby increased payroll and income tax revenue.

State and local government, including PROMISE partners. PROMISE also could have affected state and local government entities. If PROMISE increased earnings, state and local governments would have experienced benefits via higher state income and sales tax revenues. In addition, if PROMISE reduced Medicaid expenditures, TANF expenditures,[17] or incarceration rates, these entities also would have benefited. Finally, states incurred the costs of additional VR use resulting from the PROMISE programs, and some states donated goods and services to the program. States also may have incurred unmeasured costs for changing their systems due to PROMISE, which are not captured here.

[17] PROMISE may also have affected state supplemental SSI payments. We do not have state supplemental payment information for PROMISE enrollees and so were unable to account for this in the benefit cost analysis.

All key stakeholders. To assess the benefits and costs of PROMISE from the perspective of all key stakeholders, we summed benefits and costs across the three groups above (youth and families, the federal government, and state and local partners).

Appendix Table B.2. PROMISE's monetary benefits and indirect cost components, by accounting perspective

Outcome	PROMISE youth and families (B)	Federal government			State and local governments, including PROMISE partners (F)	All key stakeholders (G = B + E + F)
		SSA (C)	ED (D)	Federal government as a whole[a] (E)		
Youth outcomes						
Earnings	+	0	0	0	0	+
Fringe benefits	+	0	0	0	0	+
Income taxes	-	0	0	+	+	0
Payroll taxes	-	+	0	+	0	0
Sales taxes	-	0	0	0	+	0
Work-related and child care costs	-	0	0	0	0	-
SSI benefits	+	-	0	-	0	0
OASDI benefits	+	-	0	-	0	0
SSI administrative costs	0	-	0	-	0	-
OASDI administrative costs	0	-	0	-	0	-
Medicaid expenditures	+	0	0	-	-	0
Medicare expenditures	+	0	0	-	0	0
Medicaid administrative costs	0	0	0	-	-	-
Medicare administrative costs	0	0	0	-	0	-
Education-related costs (such as tuition)	-	0	0	0	0	-
Incarceration	0	0	0	0	-	-
Parent outcomes						
Earnings	+	0	0	0	0	+
Fringe benefits	+	0	0	0	0	+
Income taxes	-	0	0	+	+	0
Payroll taxes	-	+	0	+	0	0
Sales taxes	-	0	0	0	+	0
Work-related and child care costs	-	0	0	0	0	-

Outcome	PROMISE youth and families (B)	Federal government			State and local governments, including PROMISE partners (F)	All key stakeholders (G = B + E + F)
		SSA (C)	ED (D)	Federal government as a whole[a] (E)		
SSI benefits	+	-	0	-	0	0
OASDI benefits	+	-	0	-	0	0
SSI administrative costs	0	-	0	-	0	-
OASDI administrative costs	0	-	0	-	0	-
Medicaid expenditures	+	0	0	-	-	0
Medicare expenditures	+	0	0	-	0	0
Medicaid administrative costs	0	0	0	-	-	-
Medicare administrative costs	0	0	0	-	0	-
Household outcomes						
Other public benefits (such as TANF)	+	0	0	-	0	0
Administrative costs for other public benefits	0	0	0	-	0	-

Note: This table lists the benefit and indirect cost components used in the net-benefit calculation. Some impacts represented benefits for some stakeholders and costs for others. For each accounting perspective column, the + sign denotes that an increase in the outcome would have represented a benefit and the - sign denotes that an increase in the outcome would have represented a cost. A value of 0 indicates that an increase in the outcome would not have affected the stakeholder. For example, an increase in SSA administrative costs would not have affected PROMISE youth and families.

[a] The perspective of the federal government as a whole incorporates the perspectives of SSA, ED, and other federal agencies that might experience benefits or costs because of PROMISE and so may not reflect the sum of columns C and D.

ED = U.S. Department of Education; OASDI = Old-Age, Survivors, and Disability Insurance; SSA = Social Security Administration; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families.

2. Estimation methods

The principal benefit-cost analyses relied on three key inputs: (1) data on PROMISE program costs, which estimate the economic cost to implement each program; (2) the estimated impacts of PROMISE on youth and family outcomes; and (3) estimates from published literature identifying benefits and cost components not captured in the impact analysis.

a. Estimating program costs

The previous impact evaluation report (Mamun et al. 2019a; 2019b) presented the costs of implementing each PROMISE program. To produce these estimates, we followed a seven-step analytic framework (Handwerger and Thornton 1988). We began by identifying the key components of each PROMISE program (Step 1) and gathered data on the costs of delivering these components, which we then categorized (Step 2). We assessed these costs for a 12-month steady-state accounting period (Step 3) and assigned dollar values to resources a program used for which no internal dollar-denominated value was available (Step 4). Using the information from Steps 1 through 4, we calculated the total cost of a PROMISE program during the accounting period (Step 5), as well as the costs associated with the key program components (Step 6). Finally, we combined the estimate of total program costs with data on the number of treatment group enrollees to calculate the cost per treatment group enrollee; as noted above, to keep be consistent with the impact analysis, we include all treatment group members regardless of whether they received PROMISE services. We used the total program cost from the 12-month steady-state period to calculate the average annual cost per treatment group family. We applied that average to the average duration of program participation (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. Appendix Table B.3 shows the average duration, in years, of treatment group enrollment.

Note that 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. Additionally, costs may have been larger or smaller at start-up and wind-down.

Appendix Table B.3. Minimum, maximum, and average length of enrollment per treatment group family (in years), by PROMISE program

Program	Treatment group N	Minimum	Maximum	Mean
Arkansas PROMISE	904	3.2	4.8	4.1
ASPIRE	978	3.1	4.7	3.8
CaPROMISE	1,548	3.2	4.9	4.0
MD PROMISE	936	2.6	4.5	3.4
NYS PROMISE	986	3.3	4.9	3.9
WI PROMISE	950	2.4	4.4	3.3

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

b. Estimating benefits and indirect costs

We used the estimates of PROMISE's impacts on earnings, SSA payments, and relevant survey-based outcomes to obtain estimates of each program's benefits and indirect costs. We included all point estimates in the benefit-cost calculation even if they did not differ significantly from zero at conventional levels of statistical significance. Following guidance set by Boardman (2018), this approach allowed us to obtain a more accurate and complete accounting of a program's benefits by using the best evidence available on the size of its impact—the unbiased point estimates—even if they were imprecise.[18] We used bootstrapping methods to construct the 95 percent confidence intervals on the net-benefit impact estimates.

The benefit-cost analyses had two general limitations. First, they considered only groups directly affected by PROMISE and did not measure benefits or costs incurred by third parties, such as the employers of beneficiaries. Second, the accounting framework included only those costs that could be easily monetized. For example, in some programs, PROMISE affected some non-monetary outcomes, like health insurance coverage and youth's self-determination and physical and mental well-being. Because the costs and benefits of these impacts are difficult to measure and monetize, we did not include them in the estimation of the net benefits of PROMISE. However, because the programs' impacts on these outcomes are typically small and not significantly different from zero, we do not expect that the monetary value of these impacts would substantially change the estimates of whether a program imposed a net cost or delivered a net benefit to stakeholders.[19]

Appendix Table B.4 summarizes the benefit and cost components included in the analyses, as well as notes for each data source, calculation method, and potential limitations of the measure.

[18] In sensitivity analyses, we excluded nonsignificant impact estimates from the benefit-cost calculation, which illustrates the extent to which the nonsignificant impact estimates drive the overall net-benefit estimate.

[19] Arkansas PROMISE is the only program that affected the share of youth and parents that had health insurance, decreasing these shares by about 6 and 3 percentage points, respectively. The literature finds that low-income individuals' willingness to pay for health insurance is less than half of their own expected health costs (Finkelstein et al. 2019). The monthly Medicaid and Medicare expenditures in the five years after RA in Arkansas is about $624 among those insured. This implies that Arkansas enrollees covered by Medicaid or Medicare value health insurance at roughly $312 per month. A 5.5 percentage-point decline in health insurance coverage would therefore imply an additional $1,030 in PROMISE indirect costs to youth and their families over five years that we did not account for in the benefit-cost estimates.

Appendix Table B.4. Benefit and indirect cost measures, estimation, and potential limitations

Measure	Value	Source and estimation method	Potential limitations
Earnings	Sum of Year 1 through Year 5 earnings impact estimates (based on MEF data)	From impact analyses	Using the estimates based on MEF data allows us to have earnings information for the full five-year follow-up period; however, these estimates exclude earnings not reported in the MEF, which for the PROMISE population would generally be in the informal sector, and therefore may underestimate earnings, as well as the benefits and indirect costs based on earnings.
Fringe benefits	25.3 percent of the sum of Year 1 through Year 5 earnings impact estimates (based on MEF data)	We constructed a multiplier based on the percentage of compensation that employers spend on each type of fringe benefit for workers at the relevant level of the earnings distribution according to the BLS (2021a), which are available at the 10th, 50th, and 90th percentile of earnings. To do so, we first compared the mean of enrollee wages to the distribution of national wages in the BLS national compensation survey to determine which percentile reported by BLS corresponded most closely to our sample mean and used that data to construct the multiplier. Both mean youth and parent wages approximated the 10th percentile of civilian wage earners nationally, so we used the percentage of wages that employers spend on fringe benefits for the 10th percentile of civilian wage earners.	Although our multiplier aligns with the earnings distributions of the PROMISE samples, the actual fringe benefits enrollees received might have differed depending on the specific situation of their employment.
Federal income taxes	Multiplier of effectively 0 percent applied to the sum of Year 1 through Year 5 earnings impact estimates (based on MEF data)	We used federal tax rates and standard deduction information from published IRS tax rules to estimate the tax rate paid for the average youth and parent in our sample (IRS 2019). Because 90 percent of PROMISE youth were unmarried (based on the PROMISE five-year survey), we assumed tax rates based on single filing status; for parents, we estimated a weighted average of the tax rate paid by married and single parents. This approach yielded an effective marginal federal tax rate of zero for both youth and parents.	We tailored tax rates to reflect the mean earnings and marital status of the PROMISE population. The multiplier does not capture individual-level circumstances (such as personal deductions) that might affect a beneficiary's tax liability. Because most public support is not taxable, we applied the multiplier to the earnings estimates rather than the income estimates. We do not account for tax credits (such as the Earned Income Tax Credit) in our analyses.

Measure	Value	Source and estimation method	Potential limitations
State income taxes	State-specific income tax rates applied to the sum of Year 1 through Year 5 earnings impact estimates (based on MEF data)	We applied state-specific tax rates and the standard deduction for single and married households separately (Vermeer and Loughead 2022). For ASPIRE, we took a weighted average of the state-specific tax rates based on the number of enrollees in the six states. We refined this estimate by considering married and single households separately to create a weighted average for the multiplier accordingly. This approach yielded a multiplier of zero for youth and a range of 0.25 percent in New York to 4.8 percent in Wisconsin for parents.	We applied a separate state-specific multiplier to each PROMISE program. Although we could not fully replicate the tax code, we tailored tax rates to reflect the mean income and marital status of the PROMISE population. Because most public support is not taxable, we applied the multiplier to the earnings estimates rather than the income estimates.
Payroll taxes	15.9 percent of the sum of Year 1 through Year 5 earnings impact estimates (based on MEF data)	We constructed a 15.9 percent multiplier by adding 12.4 percent (employer plus employee share of Social Security tax) + 2.9 percent (employer plus employee share of Medicare tax) + 0.6 percent unemployment) (Center on Budget Policy Priorities 2020). We assumed all youth and parent earnings reported in administrative data were subject to payroll taxes. Although payroll taxes are split between the employer and employee, for the purpose of this analysis, we assumed the cost is borne by the employee because the tax incidence literature suggests that workers pay these costs through reduced wages (Hamermesh 1993).	We applied a multiplier consisting of standard payroll tax rates to the earnings estimate based on the MEF data, thus capturing those earnings that were likely subject to payroll taxes. Because both youth and parents in the PROMISE sample had low earnings on average, we assumed their earnings were not subject to the Social Security payroll cap that applies to annual earnings greater than a relatively high threshold ($137,700 in 2020).
Sales taxes	State-specific sales tax rates applied to the sum of Year 1 through Year 5 earnings impact estimates (based on MEF data)	We applied sales tax multipliers specific to the PROMISE programs based on data published by the Sales Tax Institute (Cammenga 2021). For ASPIRE, we used a weighted average of the sales tax rates in the six states based on the number of enrollees in each state. State sales tax rates ranged from 2 to 3 percent.	Increased earnings resulted in youth and parents having to spend more on sales taxes. For both youth and parents, we assumed all extra earnings were spent (a reasonable assumption for low-income workers such as those in the PROMISE sample) and that 36 percent of increased spending was subject to sales tax, based on published information (Walczak 2019).
Work-related costs (other than child care)	10.6 percent of the sum of Year 1 through Year 5 earnings impact estimates (based on MEF data)	We constructed a 10.6 percent multiplier by dividing average annual work-related expenses in 2015 based on SIPP data (Mohanty et al. 2017) by average earnings that same year according to BLS (2015).	We used a multiplier that assumed work-related expenses were a function of earnings. This approach would under- or overstate costs if work-related expenses differed as a percentage of earnings at different levels of the earnings distribution.

Measure	Value	Source and estimation method	Potential limitations
Work-related child care costs	Youth: 1.35 percent of the sum of Year 1 through Year 5 youth earnings impact estimates (based on MEF data) Parent: 6.7 percent of the sum of Year 1 through Year 5 parent earnings impact estimates (based on MEF data)	We estimated work-related expenses that resulted from the use of child-care services. For youth: We constructed a 1.26 percent multiplier by taking the product of 14 percent (based on SIPP data [reference year 2016] showing that 4 in 10 low-income families pay for child care and of these families, child-care expenditures represent 35 percent of their income [Malik 2019]), and 9 percent (the percentage of the PROMISE youth sample comprising a working mother with a child under age 6 in the household (based on the PROMISE five-year survey data). For parents: We assumed PROMISE households had similar child-care spending rates as their counterparts nationally, where a median of 6.7 percent of household income is spent on child care among households with a working mother (Knop and Mohanty 2018).	We used a multiplier based on data that aligned with the age distribution of the PROMISE population but might overstate child-care expenses to the extent that some PROMISE families incurring child-care costs did not have a working mother. On the other hand, child-care expenses may be understated if parents or youth needed child care for jobs not reported in administrative data. We applied the multiplier to earnings as a proxy for increased work hours (which in turn would lead to increased child-care needs).
SSI benefits	Sum of Year 1 through Year 5 SSI impact estimates	From impact analyses.	This measure should be accurate because it is based on administrative data from SSA. Note that this measure includes only federal SSI payments; we do not have data on state supplemental SSI payments.
OASDI benefits	Sum of Year 1 through Year 5 OASDI impact estimates	From impact analyses.	This measure should be accurate because it is based on administrative data from SSA.
SSI administrative costs	7.8 percent of the sum of Year 1 through Year 5 SSI impact estimates	We used a 7.8 percent multiplier applied to SSI payments based on the percentage of SSI payments spent on administrative costs according to SSA's Office of the Chief Actuary (SSA Board of Trustees 2020a).	The multiplier assumes the average percentage of SSI payments spent on administrative costs applied to those in our sample. This assumption would not capture administrative changes for events such as age-18 redeterminations or differences between PROMISE enrollees and the average SSI beneficiary.
OASDI administrative costs	1.9 percent of the sum of Year 1 through Year 5 OASDI impact estimates	We used a 1.9 percent multiplier applied to OASDI payments based on the percentage of DI benefits spent on administrative costs according to SSA's Office of the Chief Actuary (SSA Board of Trustees 2020b) and the assumption that most OASDI benefits for the PROMISE sample were from DI.	The multiplier assumes the average percentage of OASDI benefits spent on administrative costs applied to our sample. This assumption may not be valid if PROMISE enrollees differed substantially from the average OASDI beneficiary.

Measure	Value	Source and estimation method	Potential limitations
Medicaid and Medicare expenditures	Sum of Year 1 through Year 5 Medicaid and Medicare impact estimates	We derived this value from the impact analysis, with PROMISE state-specific shares of Medicaid expenditures apportioned to state and federal government stakeholders, based on the Federal Medicaid Assistance Percentage in each state (Medicaid and CHIP Payment and Access Commission 2021). Medicaid expenditures were divided among the federal and state government based on state-specific Federal Medical Assistance Percentages.	A reduction (or increase) in Medicaid or Medicare expenditures was captured as a benefit (or cost) to the federal government (for Medicare and Medicaid) and the state government (for Medicaid), but the costs associated with any resulting changes in beneficiary health outcomes was not captured. (We counted changes in insurance coverage as nonmonetary benefits—or costs—to youth and parents.)
Administrative costs for Medicaid and Medicare	8.5 percent of the sum of Year 1 through Year 5 Medicaid and Medicare impact estimates	We used an 8.5 percent multiplier applied to Medicaid and Medicare costs, based on the percentage of Medicaid and Medicare federal expenditures spent on administrative costs (Tollen et al. 2020). Medicaid administrative costs were divided among the federal and state government based on state-specific Federal Medical Assistance Percentages (Medicaid and CHIP Payment and Access Commission 2021).	The multiplier assumes the average percentage of Medicaid and Medicare expenditures spent on administrative costs applied to our sample.
Education-related costs	Impact estimates on college enrollment, multiplied by cost of tuition and of books	We assumed that youth completed their education between Year 3 and Year 5. We used the impact estimate on the survey variable "Completion of 'some or all of college or university'" as a measure of PROMISE's impact on college completion in the years before the five-year survey. Because we had no information on when 'some or all college or university' completion occurred, we assumed that half of the impact occurred in Year 3 and the other half in Year 4. For Year 5, we used the impact estimate on the survey variable "Enrolled in postsecondary education" as a measure of PROMISE's impact on enrollment in college in that year. We divided by 100 to convert the impact estimates from percentages to fractions and then summed the impact estimates to arrive at PROMISE's cumulative impact on the share of youth enrolled in college from Years 3 through 5. We then multiplied this value by the cost of education (assumed to be the cost of tuition and books). We obtained state-specific tuition costs for four-year public college tuition (without room and board) and state	The PROMISE five-year survey did not collect data on each individual's education costs. We used average education costs that aligned to those likely to be incurred by the PROMISE population based on the types of school they attended. We obtained information about the type of school attended from the survey data.

Measure	Value	Source and estimation method	Potential limitations
		community college tuition in the 2019-2020 academic year from the National Center for Education Statistics (2021). Community college tuition ranged from $1,270 per year in California to $5,476 per year in New York; four-year public college tuition ranged from $8,192 in California to $9,714 in Maryland. Because the impact estimates combined enrollment in community colleges and four-year public colleges, we calculated the cost of education as a weighted average of the percentage of PROMISE five-year survey respondents attending each type of college. For ASPIRE, we took a weighted average of the state-specific tuition prices based on the number of enrollees in the six states. We multiplied these costs by 44 percent because the National Center for Education Statistics suggests that low-income students pay an average of 44 percent of the list price for college costs (2021). Using this approach, the average tuition price per program were $2,346 (Arkansas), $2,258 (ASPIRE), $1,222 (California), $2,479 (Maryland), $2,818 (New York State), and $2,460 (Wisconsin). For the cost of books, we used the national average in the 2019-2020 academic year ($1,240) from the National Center for Education Statistics (2021) for all programs.	
Incarceration	Impact estimates for number of days ever incarcerated, multiplied by $97.44 (cost of incarceration per day)	We used impact estimates for days incarcerated, multiplied by the average daily federal incarceration cost in a residential reentry center for federal fiscal year 2020 ($97.44), from the Bureau of Prisons (2021). We used residential re-entry center costs rather than federal facility costs because given the PROMISE youth's ages, they were more likely to be incarcerated in a residential re-entry center.	The imputation method assumed the same cost of incarceration across all PROMISE programs and did not account for other associated costs of justice involvement (such as court costs) or differences in incarceration costs across local, state, and federal institutions.

Measure	Value	Source and estimation method	Potential limitations
Other public supports	Sum of Year 1 through Year 5 impact estimates on income from TANF, SNAP, and public housing assistance	We used survey-based outcomes and therefore had only one year of data—the year before the PROMISE five-year survey. We created Year 1 through Year 5 impacts equal to the estimated impact in the year before the five-year survey. The original impacts were estimated among households that included the enrolled youth. However, the impact analysis was limited to households that included the enrolled youth; households that consisted of only the parent(s) of the enrolled youth were not included. To obtain estimates of the impact on SNAP, TANF, and public housing assistance payments for all households, we separately estimated the impacts among households where the parent did not live with their youth (Appendix Table B.5). We then took an average of the two sets of estimates, weighting it by the share of the total survey households in each group. Because TANF costs are incurred by both the state and the federal government, we split the cost across both entities according to the state-specific TANF maintenance of effort expenditures as a percentage of total costs (Office of Family Assistance 2020).	We relied on self-reported data from the survey; these data may be less accurate than administrative data. In addition, because we had data for only one year, we used the same impacts for all five years and applied a discount rate. If the impacts on TANF, SNAP, and public housing assistance differed across this period, the net benefit calculations would not capture this change. Finally, we captured only measures of public assistance that we collected via the PROMISE surveys. Some types of public assistance, like the Special Supplemental Nutrition Program for Women, Infants, and Children, are not included in the analysis.
Administrative costs for other public supports	TANF: 7.8 percent of the sum of Year 1 to Year 5 impact estimates on income received from TANF SNAP: 10.5 percent of the sum of Year 1 to Year 5 impact estimates on income received from SNAP Public housing assistance: 5.2 percent of the sum of Year 1 to Year 5 impact estimates on income received from public housing assistance	We applied multipliers of 7.8 percent for TANF, 10.5 percent for SNAP, and 5.2 percent for public housing assistance to the relevant impact estimates. These multipliers were based on data from the U.S. Health and Human Services (2020), U.S. Department of Agriculture (2020), and a report prepared for the U.S. Department of Housing and Urban Development (Turnham et al. 2015), respectively.	The multipliers assumed the average percentage of benefits spent on administrative costs for each of these programs also applied to our sample.

Measure	Value	Source and estimation method	Potential limitations
VR costs	Impact estimates for VR service use multiplied by VR cost per user	We have reliable VR costs per user per year for only one PROMISE state (Wisconsin), so we apply the Wisconsin VR costs to the other states in our sample. We multiplied the average VR cost per person per year for Wisconsin PROMISE ($1,946) by 1.5 years, which is the average length of time that VR users typically receive VR services (Schimmel and O'Leary 2018); this yielded an estimated VR cost per user of $2,919. To obtain the VR cost per user for the other PROMISE states, we adjusted the Wisconsin cost per user by the ratio of "community and social service occupation" wages of each PROMISE state and Wisconsin, using 2020 BLS wage information (BLS 2021b). After estimating the VR cost per user for each program, we multiplied this cost by the point estimate of the program's impact on VR service use. We attributed 21.3 percent of VR costs to the state and 78.7 percent to the federal government. We report VR costs under "Employment services" in the benefit cost tables.	The measure of VR cost per user has several limitations. First, VR costs per user in Wisconsin may differ from VR costs in other states, even after making the wage differential adjustment. Second, we did not have information on the length of time youth used VR services and so used a rough estimate of 1.5 years. Third, the period over which VR costs were measured in Wisconsin (October 1, 2016 through September 30, 2017) differs from the period over which the impacts were estimated (we estimated impacts on VR service use during the five years after RA).

ASPIRE = Achieving Success by Promoting Readiness for Education and Employment; BLS = Bureau of Labor Statistics; CHIP = Children's Health Insurance Program; DI = Social Security Disability Insurance; IRS = Internal Revenue Service; MEF = Master Earnings File; PROMISE = Promoting Readiness of Minors in Supplemental Security Income; OASDI = Old-Age, Survivors, and Disability Insurance; SIPP = Survey of Income and Program Participation; SNAP = Supplemental Nutrition Assistance Program; SSI = Supplemental Security Income; TANF = Temporary Aid for Needy Families; VR = Vocational Rehabilitation.

Appendix Table B.5. PROMISE impacts on amounts of public assistance received by parent-only households

Amount of public assistance in past month ($), by source	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Arkansas PROMISE							
TANF benefits	0	0	n.a.[a]	n.a [a]	n.a.[a]	66	69
SNAP benefits	96	29	0.38	33	0.159	67	73
Housing assistance	34	50	0.15	35	0.296	67	73
ASPIRE							
TANF benefits	13	-7	0.37	8	-0.153	73	65
SNAP benefits	108	4	0.91	33	0.019	73	64
Housing assistance	84	-54	0.21	42	-0.229	76	64
CaPROMISE							
TANF benefits	38	-9	n.a.[b]	n.a [b]	-0.053	58	61
SNAP benefits	121	-80**	0.02	35	-0.460	57	60
Housing assistance	210	-116	0.31	115	-0.230	57	60
MD PROMISE							
TANF benefits	55	-42	0.47	58	-0.255	79	44
SNAP benefits	161	-14	0.79	52	-0.060	76	44
Housing assistance	337	-220**	0.02	97	-0.482	78	44
NYS PROMISE							
TANF benefits	34	-14	0.49	20	-0.160	48	37
SNAP benefits	135	84	0.13	55	0.338	49	36
Housing assistance	140	127	0.26	112	0.297	48	38
WI PROMISE							
TANF benefits	10	4	0.76	12	0.053	77	81
SNAP benefits	152	86**	0.04	43	0.383	75	76
Housing assistance	116	-27	0.47	37	-0.119	77	74

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted estimates of the impacts of PROMISE on the amounts of public assistance received by households in which parents live but youth do not (Appendix Tables C.13, D.13, E.13, F.13, G.13 and H.13 present similar estimates for households in which youth live). The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] For AR PROMISE, the p-value is missing for the impact on TANF benefits due to zero variance in the outcome. The effect size cannot be calculated for the same reason.

[b] Because one stratum in California contained only one person, we were not able to obtain the standard error and *p*-value of the impact estimate.

N = sample size; n.a. = not applicable; SNAP = Supplemental Nutrition Assistance Program; TANF = Temporary Assistance for Needy Families.

c. Accounting for differences in the timing of benefits and costs

Program costs accrued at the beginning of the demonstration, whereas benefits were realized later and might continue to accrue over time. Thus, we made two adjustments to account for differences in the timing of when benefits and costs occur. First, to account for inflation that erodes the value of a dollar over time, we used the CPI-W to convert all dollar-denominated measures into constant 2020 dollars. Second, we used a discount rate to convert all future benefits and costs to their present value and account for the opportunity cost of dollars not invested. We set the discount rate equal to 2.7 percent—the rate SSA used in its OASDI Trust Funds actuarial projections (SSA Board of Trustees 2020b).

d. Estimating net benefits and the benefit-cost ratio

The final step in the benefit-cost analysis was to combine the various estimates in a comprehensive assessment of the net benefits of a PROMISE program. We computed the *net benefit* by subtracting the direct costs (the cost of program components) from the sum of the quantitative outcome measures (which represents the program benefits net of its indirect costs). A positive value for this statistic signifies that a program's benefit exceeds its costs. We also calculated the *benefit-cost ratio*—the sum of the quantitative outcome measures (that is, benefits and indirect costs) divided by the sum of the direct costs. For each accounting perspective, we report the values of the quantitative outcome components, the costs of program components, the net benefits, and the benefit-cost ratio.

3. Sensitivity analyses

To assess the sensitivity of the benefit-cost estimates to changes in the underlying assumptions and methodological choices, we developed estimates under different scenarios: (1) accounting for variability in the estimates, (2) using only statistically significant impact estimates, and (3) varying several of the underlying assumptions and parameters. We describe the findings of these sensitivity analyses in the sections that follow.

a. Sample variability

As with the impact analysis, we derived most of the benefit-cost analysis measures from data on individual study enrollees, which are subject to sampling variability arising from chance factors in who participated in the program and the assignment of individuals to treatment and control groups. Different sampling draws would likely yield slightly different estimates, which are reflected in the standard errors that accompany the impact estimates. To account for this issue, we quantified uncertainty in the estimated net benefits by constructing nonparametric bootstrap confidence intervals. Bootstrapping is a nonparametric technique that allows researchers to estimate the sampling distribution of a target statistic, such as linear regression estimators. The net benefit calculations include estimates of benefits and costs that we estimated via linear regressions. Bootstrapping allows us to account for the sampling variation of each of these estimators when constructing the 95 percent confidence interval for the net benefit estimate.

For each program, we sampled with replacement from the study population 1,000 times to create 1,000 random samples with an equal size as the true sample. The study population was at the family level, with each observation representing a parent-youth pair, an independent youth, or a parent not living with his or her youth. Because we sampled with replacement, an observation may be represented more than once or not at all within a particular random sample. We stratified the sampling by research group (treatment and control) to ensure that the share of the sample belonging to each group was constant across samples. In addition to the treatment strata, we stratified sampling by an indicator for parent (which was on all records

except for independent youth). This stratification ensured that we estimated parent impacts using a correctly sized sample of parents. Finally, a small number of the impact estimates came from a subset of parents. We separately sampled this group of parents to generate the sampling distribution of these impact estimates.

We re-estimated all coefficients for each sample, resulting in a total of 1,000 instances for each coefficient.[20] For each sample, we calculated the net benefit for each accounting perspective, using the process described above. Appendix Tables C.27, D.29, and E.27–H.27 show the distribution of the resulting 1,000 net benefit estimates and identify various percentiles ranging from the 2.5th through the 97.5th The first and last estimates capture the 95 percent confidence interval of our main net benefit estimate. The range in estimates for all key stakeholders was large. For example, in Maryland, the 2.5th percentile was -$22,293, whereas the 97.5th percentile was -$7,469. Nonetheless, the estimated net benefits for all key stakeholders were negative across the entire distribution for all sites, suggesting that our main conclusion (that PROMISE did not generate net benefits across all key stakeholders) is robust.

b. Statistically significant impact estimates

The main benefit-cost calculations used PROMISE impact estimates regardless of whether they were statistically significant. To understand the extent to which the estimated net benefits were driven by nonsignificant impact estimates, we recalculated the net benefits using only those impact estimates that were significant at the 10 percent level. We set nonsignificant impact estimates equal to zero. The last row of Appendix Tables C.28, D.30, and E.28–H.28 presents the results of this analysis. For all key stakeholders, in this analysis, the net benefit was within 25 percent of the estimate from our main analysis within each program and continued to be negative and sizeable, suggesting that our main conclusion for all key stakeholders (that PROMISE did not generate net benefits across all key stakeholders) is robust.

c. Sensitivity of net benefit estimates to parameter assumptions

We considered whether the benefit-cost results were sensitive to the assumptions we used to estimate some of the individual components. Specifically, we assessed the sensitivity of the main estimates to the following:

- **Excluding fringe benefits.** It is possible that many PROMISE enrollees may not have had jobs with fringe benefits, so we varied this assumption accordingly, and assumed that youth did not receive any fringe benefits.
- **Excluding education tuition costs.** Given the distribution of incomes of PROMISE families, youth enrolled in two- or four-year colleges may have been eligible for financial aid, which could have reduced or eliminated tuition costs.
- **Using the highest state-specific cost of incarceration (California, $222/day) rather than the national average cost ($88/day).** Because there is a large variation in the daily incarceration rate across the PROMISE programs, we recalculated net benefits using incarceration costs for the highest-cost state (California) to provide an upper bound.
- **Using a fixed cost of $51 per week instead of 10.6 percent of earnings to estimate work-related costs.** At certain parts of the earning distribution, work-related costs may have more closely reflected fixed costs rather than proportional costs; we varied the assumptions to reflect this possibility. The

[20] Because the VR service use data is de-identified, we sampled these data separately to obtain the distribution of the impact estimate on VR service use.

$51 cost was based on the 2014 Survey of Income and Program Participation (SIPP), inflation-adjusted to 2020 dollars (Mohanty et al. 2017).

- **Using different discount rates.** We used alternative discount rates recommended by best practice guidelines for benefit-cost analyses (Boardman et al. 2018). In the sensitivity tests, we used discount rates of 1.0 percent and 5.0 percent rather than 2.7 percent.

Appendix Tables C.28, D.30, and E.28–H.28 present the estimates of net benefits when we applied the alternative assumptions noted above. From the perspective of all key stakeholders, net benefits under these alternative assumptions were always within 15 percent of the net benefits estimated under our main analysis, and net benefits were sizeable and negative under each scenario. However, net benefits for particular perspectives were sensitive to the alternative assumptions. First, those for PROMISE youth and families were particularly sensitive to whether we treated work-related costs as a fixed dollar amount. In Arkansas PROMISE, the net benefit over five years changed from $2,005 (in the main analysis) to -$510 when we assumed that work-related costs were fixed; similarly, in MD PROMISE, net benefits changed from $850 in the main analysis to -$357 under this alternative assumption. Second, the state and local government perspective was affected by altering the cost of incarceration because it was one of the main components for that perspective. For example, in WI PROMISE, the net benefits from the state and local government perspective changed from $1,426 to $3,413 when we assumed a higher cost of incarceration. Taken together, these results suggest that our main conclusion for all key stakeholders is robust, but the conclusions for particular perspectives are sensitive to the assumptions we used.

4. Long-term forecast

As a supplement to the five-year benefit-cost analysis, we projected the accrual of net benefits beyond the five-year evaluation period. We did so because additional benefits of PROMISE might be realized after the five-year evaluation follow-up period ends, particularly given the young ages of the enrolled youth and the fact that many were still in school and might have had little labor market experience at the time of the five-year follow-up. Focusing only on the five-year evaluation period could underestimate the net benefits of PROMISE if, as it intended, a large share of treatment group enrollees were building their human capital (such as enrolled in higher education or training programs, or engaging in employment experiences), the dividends of which would not accrue until later.

To account for this possibility, we projected youth earnings as well as the effects on SSA payments due to the change in earnings for Years 6 through 20 after RA under three scenarios that varied in their potential returns to education: high returns, diminishing returns, and no returns. We also projected earnings under two additional scenarios where we replaced the value of the Year 5 impact estimate with the upper or lower bound of the 95 percent confidence interval for that estimate. After projecting earnings and SSA payments for this additional 15-year period, we calculated net benefits over 10 and 20 years after RA under the five scenarios. As with the five-year benefit-cost analyses, we applied a discount rate to all impact estimates that were part of the calculations when we estimated net benefits over 10 and 20 years.

a. Projecting youth earnings

We used the following approach to project youth impacts across Years 6 through 20 after RA. We took the average of Year 4 and Year 5 earnings,[21] and then increased this average by a 10 percent annual

[21] For more than half of enrollees, the fifth year after RA is 2020 during which enrollees' earnings may have been affected by the COVID-19 pandemic. For this reason, we took the average of Year 4 and Year 5 earnings before applying the annual earnings growth rate.

growth rate between Year 6 and Year 10. We based this growth rate on the average annual earnings growth rate of control group youth ages 16 to 17 between 6 and 10 years after enrollment in the National Job Corps Study (Schochet 2021). For Years 11 through 20, we increased earnings by 2.6 percent, which is equivalent to the average annual earnings growth rate of the same control group youth between 11 and 20 years after enrollment (Schochet 2021).

Although, though the Job Corps intervention took place in the 1990s, economic conditions were similar to the PROMISE demonstration period. We used the average annual earnings growth rate for the National Job Corps Study age group most similar to the PROMISE youth age group; PROMISE youth were ages 14 to 16 at enrollment and members of the National Job Corps Study control group we used to estimate the long-term growth rate in earnings were ages 16 to 17 at enrollment. As youth earnings increase between Years 6 and 20, income, payroll and sales taxes, fringe benefits and work-related costs also change because these costs and benefits are a function of earnings.

b. Applying a return to education to youth earnings

Because youth's enrollment in education could deliver long-term benefits (in higher future earnings) not captured in the five-year study window, we constructed three scenarios related to the returns to education.

1. The "persistent high return" scenario accounted for PROMISE impacts on education in the long-term trajectories of youth earnings by assuming the PROMISE impacts on earnings would **increase** by approximately 10 percent per additional year of schooling, based on the returns to education for people with disabilities (Henderson et al. 2017). Operationally, we first estimated the impact of PROMISE on youth's number of years of education.[22] We then adjusted Year 6 earnings for youth in the treatment group to account for the returns to education. For example, if PROMISE increased education by 0.5 years, we would project that Year 6 earnings for the treatment group would increase by 0.5 times 10 percent, or 5 percent. We then projected Years 7 through 20 (for both the treatment and control groups) using the Job Corps growth rate (35 percent from Years 6 through 10 and 2.6 percent thereafter).
2. The "no return" scenario assumed no returns to education and used the Job Corps growth rate without adjusting earnings to account for PROMISE's impact on education.
3. The "diminishing return" scenario assumed the returns to education diminished over time, as was observed in the youngest Job Corps cohort (Schochet 2021). In this scenario, we assumed that the returns to education were 10 percent in Year 6, 6 percent in Year 7, 4 percent in Year 8, 1 percent in Year 9, and 0 percent in Years 10 through 20.

After projecting earnings for treatment and control group youth under the three scenarios, we re-estimated the yearly regression models to identify PROMISE's impact on earnings in Years 6 through 20 for each scenario. In scenarios in which we assumed returns to education, we would expect a larger impact estimate on youth earnings in Year 6 relative to Year 5 if PROMISE increased the educational attainment in Year 5. By the same token, if PROMISE decreased educational attainment, we would expect a smaller impact estimate on youth earnings in Year 6 relative to Year 5. For all scenarios, the dollar amount of the impact estimate in Year 6 would grow in absolute terms by 35 percent yearly from Years 6 through 10, and by 2.6 percent thereafter.

[22] The PROMISE programs' impacts on years of education were small and not statistically significant (ranging from -0.06 for CaPROMISE to 0.04 for WI PROMISE).

We found that PROMISE had a negative, though not statistically significant, impact on years of education in some programs. For these programs, the net benefit estimates under the scenario that assumed no return to education were larger than the estimates under the scenarios that assumed a return to education (Appendix Tables C.29, D.31, and E.29–H.29). For example, for CaPROMISE, the net benefit over 10 years for the "no return to education" scenario from the perspective of all stakeholders was -$21,826, higher than the -$21,985 net benefit estimated under the scenario that assumed a persistent high return to education.

b. Using the upper and lower bounds of the confidence interval

The confidence intervals on the impact estimates on youth earnings in Year 5 quantifies the sampling variability. That is, it shows the likely range of results from repeating PROMISE recruitment and the PROMISE demonstration many times. We constructed one scenario where we assume the upper bound of the confidence interval on the impact estimate on youth earnings in Year 5 was realized and another scenario where we assume the lower bound of the confidence interval was realized. After projecting earnings for treatment and control group youth under the two scenarios, we re-estimated the yearly regression models to identify PROMISE's impact on earnings in Years 6 through 20 for each scenario.

c. Projecting SSA payments

We used Years 6 through 20 earnings and SSA program rules regarding eligibility for SSI and DI benefits to project individual-level SSI and DI payments in those years. [23] In particular, we set benefits to zero in years when the projected youth earnings crossed key thresholds. We used the annualized SGA amount to assess eligibility for DI payments. For earnings below the SGA threshold, we projected the same benefits forwards (because DI benefits don't change with earnings below the SGA threshold). We reduced benefits by $1 for every $2 dollars earned in the case of SSI payments based on SSI program rules relating to earned income (SSA 2022).

The projections have several limitations. First, we could not observe, and therefore did not account for, impairment-related work expenses or other SSA work incentive provisions that raise the earnings threshold beyond which benefits terminate. Second, we used annualized thresholds to determine payment eligibility; SSA uses a monthly threshold. After projecting enrollees' SSI and DI payments for Years 6 through 20 based on projected earnings over the same period, we re-estimated the impact regression models for each year to obtain PROMISE impacts on SSI and DI payments. Because we assumed that SSA administrative costs are a function of SSA payments, SSA administrative costs changed as SSA payments changed.

d. Projecting other benefits and costs

We assumed that the impact on the cost of education was zero between Years 9 and 20 because people are less likely to be enrolled in school at ages 23 to 25 and older. We assumed the impacts on public supports and health care expenditures were constant between Years 6 and 20, meaning that enrollment in Medicaid, Medicare and other public programs did not change during this period; operationally, we assigned the Year 5 impacts on public supports and the average of Years 4 and 5 impacts on Medicare and Medicaid expenditures to Years 6 through 20. Finally, we assumed that impacts on VR service use

[23] We focused only on DI benefits because, given the ages of the youth, they were ineligible for old age and survivors benefits.

and incarceration measured during the five years after RA were lifetime impacts and therefore, set the impacts on those benefits and costs to zero in Years 6 through 20.

Appendix Tables C.29, D.31, and E.29–H.29 present the forecasted net benefits over the 10- and 20-year periods for each program.

e. Cost neutrality calculations

Finally, we calculated how large the impact on youth earnings would have to be, assuming all other impacts were the same as in the five-year analysis, for PROMISE program benefits to equal the costs in 10 and 20 years after RA. Using the net-benefit equation, we solved for the total impact on youth earnings needed from Years 6 through 10, assuming that all other impacts during this period would be the same as they were in Year 1 through Year 5 and accounting for the net benefits already accrued between Years 1 through 5. We divided this number by five to arrive at the average annual impact on youth earnings needed for PROMISE to be cost neutral in 10 years. For example, if a program had no benefits and indirect and program costs were equal to $20,000, the net benefit would be -$20,000 over the first five years. The program would need to generate a youth earnings impact of $20,000 over the next five years to be cost neutral in 10 years, or $4,000 per year in Years 6 through 10. We did an analogous calculation to obtain the average annual impact on youth earnings needed for PROMISE to be cost neutral in 20 years. These estimates are included in Appendix Figures C.1–H.1 and Section E of each program chapter of the main report.

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Appendix C. Arkansas PROMISE Impacts, Benefits, and Costs

A. Enrollees and analysis samples

The full research sample for the evaluation of Arkansas PROMISE consists of the 1,805 youth who enrolled in the evaluation and were randomly assigned, as well as their families. To assess the extent to which the findings might reflect the baseline characteristics of various samples, we compared differences between (1) the treatment and control groups, (2) survey respondents and nonrespondents, and (3) self-reporting and proxy youth respondents.

1. Differences between the treatment and control groups

We compared 25 baseline characteristics of the treatment and control groups for four samples: all youth survey respondents, all parent survey respondents, all enrollees, and all proxy youth respondents (Appendix Tables C.1–C.4). The similarity of samples across the characteristics examined suggest that RA created treatment and control groups that were equivalent in their baseline characteristics. Although we found statistically significant differences for a few characteristics, they are not concerning for two reasons. First, with a significance level of 10 percent, we expect to reject the null hypothesis that the groups were equivalent for 1 out of every 10 characteristics by chance alone, even when the two groups in fact had no underlying differences. Second, we included characteristics that were significantly different at baseline as covariates in our regression-adjusted impact analyses, allowing us to control for the observed differences.

Appendix Table C.1. Arkansas PROMISE: Baseline characteristics of youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	34.0	33.2	34.7	-1.4	0.56
Youth age at RA					0.29
14	38.8	38.9	38.6	0.3	
15	27.1	25.4	28.8	-3.4	
16	34.1	35.6	32.5	3.1	
Average age at RA	15.4	15.4	15.4	0.0	0.56
Youth language preference at SSI application					
Prefers English for written language	97.6	97.7	97.5	0.2	0.77
Prefers English for spoken language	97.5	97.6	97.5	0.1	0.90
Youth living arrangement at SSI application					0.11
In parents' household	86.6	85.1	88.1	-3.0	
Own household or alone	12.4	13.5	11.3	2.2	
Another household and receiving support	1.0	1.5	0.6	0.8	
Youth race and ethnicity					0.69
Non-Hispanic White	18.0	17.8	18.1	-0.3	
Non-Hispanic Black	48.2	48.7	47.7	1.0	
Hispanic	6.6	6.5	6.6	-0.1	
Non-Hispanic American Indian	0.8	0.8	0.8	0.0	
Non-Hispanic other or mixed race	6.9	7.8	5.9	1.9	
Missing	19.6	18.3	20.8	-2.5	
Enrolling parent age at RA	42.3	42.4	42.1	0.3	0.57
Parent race and ethnicity					0.76
Non-Hispanic White	23.0	23.2	22.8	0.4	
Non-Hispanic Black	50.9	50.9	51.0	-0.0	
Hispanic	5.3	5.6	5.0	0.7	
Non-Hispanic American Indian	0.8	0.7	0.9	-0.2	
Non-Hispanic other or mixed race	5.3	5.9	4.6	1.3	
Missing	14.8	13.7	15.8	-2.1	
Disability					
Youth primary impairment					0.59
Intellectual or developmental disability	42.6	43.6	41.7	1.9	
Speech, hearing, or visual impairment	1.1	1.3	1.0	0.2	
Physical disability	10.3	9.5	11.0	-1.5	
Other mental impairment	43.3	42.5	44.1	-1.7	
Other or unknown disability	2.7	3.2	2.2	1.0	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.2	92.7	95.6	-2.9**	0.02
Received OASDI	14.7	14.8	14.6	0.3	0.89
Years between youth's earliest SSI eligibility and RA	8.7	8.8	8.7	0.1	0.63
Youth age at most recent SSI application	7.1	7.1	7.2	-0.1	0.62
Youth payments in the year before RA ($)					
SSI	7,217	7,181	7,253	-72	0.54
OASDI	419	431	407	25	0.71
Total SSI and OASDI	7,636	7,613	7,660	-47	0.63
Household had multiple SSI-eligible children	27.5	26.5	28.4	-1.9	0.42
Enrolling parent provided a valid SSN at RA	90.5	89.5	91.5	-2.0	0.20
Parents included in the administrative data				†	0.09
None	1.9	2.5	1.4	1.2	
One parent	63.4	61.1	65.6	-4.5	
Two parents	34.7	36.4	33.0	3.4	
Parent SSA payment status at RA					0.41
Any parent received SSI only	9.7	9.1	10.3	-1.2	
Any parent received OASDI only	11.8	12.4	11.1	1.3	
Any parent received both SSI and OASDI	7.5	7.8	7.2	0.7	
No parent received any SSA payments	69.1	68.1	70.1	-2.0	
No parent was included in the SSA data analyses	1.9	2.5	1.4	1.2	
Earnings					
Youth had earnings in the calendar year before RA	0.7	0.8	0.7	0.1	0.75
Youth earnings in the calendar year before RA ($)	9	3	15	-12	0.23
Parent had earnings in the calendar year before RA	70.0	70.9	69.1	1.8	0.46
Parent earnings in the calendar year before RA ($)	15,630	16,376	14,893	1,483	0.11
Number of youth	1,441	733	708		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who completed the PROMISE five-year youth survey. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table C.2. Arkansas PROMISE: Baseline characteristics of parent survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.8	33.1	34.5	-1.4	0.59
Youth age at RA					0.33
14	39.0	38.6	39.4	-0.8	
15	27.2	25.8	28.5	-2.7	
16	33.8	35.6	32.1	3.5	
Average age at RA	15.4	15.4	15.4	0.1	0.34
Youth language preference at SSI application					
Prefers English for written language	97.4	97.4	97.3	0.0	0.96
Prefers English for spoken language	97.3	97.2	97.3	-0.1	0.91
Youth living arrangement at SSI application					0.47
In parents' household	87.4	86.6	88.2	-1.6	
Own household or alone	11.4	11.9	10.9	1.0	
Another household and receiving support	1.2	1.5	0.9	0.6	
Youth race and ethnicity					0.81
Non-Hispanic White	18.0	17.9	18.2	-0.3	
Non-Hispanic Black	49.8	50.1	49.5	0.6	
Hispanic	7.1	7.2	7.0	0.2	
Non-Hispanic American Indian	0.9	0.9	0.8	0.1	
Non-Hispanic other or mixed race	6.8	7.6	6.1	1.6	
Missing	17.4	16.3	18.5	-2.2	
Enrolling parent age at RA	42.0	42.0	42.0	-0.1	0.89
Parent race and ethnicity					0.74
Non-Hispanic White	22.9	23.4	22.4	1.0	
Non-Hispanic Black	50.8	50.8	50.8	0.0	
Hispanic	5.4	5.7	5.1	0.6	
Non-Hispanic American Indian	0.7	0.7	0.7	0.0	
Non-Hispanic other or mixed race	5.0	5.5	4.5	1.0	
Missing	15.2	13.8	16.5	-2.7	
Disability					
Youth primary impairment					0.52
Intellectual or developmental disability	43.1	44.5	41.7	2.8	
Speech, hearing, or visual impairment	1.0	1.2	0.7	0.5	
Physical disability	10.5	9.9	11.0	-1.1	
Other mental impairment	42.9	41.4	44.4	-3.0	
Other or unknown disability	2.6	2.9	2.2	0.8	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.1	92.3	95.9	-3.5***	0.01
Received OASDI	14.4	14.3	14.6	-0.3	0.89
Years between youth's earliest SSI eligibility and RA	8.7	8.7	8.7	0.0	0.93
Youth age at most recent SSI application	7.1	7.1	7.1	0.0	0.87
Youth payments in the year before RA ($)					
SSI	7,215	7,175	7,255	-80	0.49
OASDI	415	418	411	8	0.91
Total SSI and OASDI	7,630	7,593	7,666	-73	0.47
Household had multiple SSI-eligible children	28.4	26.8	30.0	-3.2	0.19
Enrolling parent provided a valid SSN at RA	90.9	90.2	91.6	-1.4	0.36
Parents included in the administrative data					0.28
None	1.7	2.0	1.3	0.7	
One parent	62.6	60.8	64.3	-3.5	
Two parents	35.7	37.1	34.3	2.8	
Parent SSA payment status at RA					0.82
Any parent received SSI only	9.2	9.1	9.4	-0.3	
Any parent received OASDI only	11.0	11.5	10.5	1.0	
Any parent received both SSI and OASDI	8.0	7.8	8.2	-0.4	
No parent received any SSA payments	70.1	69.6	70.6	-1.0	
No parent was included in the SSA data analyses	1.7	2.0	1.3	0.7	
Earnings					
Youth had earnings in the calendar year before RA	0.8	0.9	0.7	0.1	0.80
Youth earnings in the calendar year before RA ($)	16	4	28	-24	0.12
Parent had earnings in the calendar year before RA	70.8	71.6	70.1	1.5	0.54
Parent earnings in the calendar year before RA ($)	16,006	16,595	15,431	1,164	0.23
Number of youth	1,393	702	691		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth whose parent completed the PROMISE five-year youth survey. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table C.3. Arkansas PROMISE: Baseline characteristics of all youth enrollees (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.6	33.2	34.0	-0.8	0.73
Youth age at RA					0.51
14	38.3	37.8	38.8	-1.0	
15	27.5	26.8	28.3	-1.5	
16	34.1	35.4	32.9	2.5	
Average age at RA	15.4	15.4	15.4	0.0	0.38
Youth language preference at SSI application					
Prefers English for written language	97.5	97.7	97.3	0.3	0.64
Prefers English for spoken language	97.5	97.6	97.3	0.2	0.76
Youth living arrangement at SSI application					0.38
In parents' household	86.7	85.6	87.8	-2.2	
Own household or alone	12.1	13.1	11.2	1.8	
Another household and receiving support	1.2	1.3	1.0	0.3	
Youth race and ethnicity					0.32
Non-Hispanic White	18.1	17.9	18.3	-0.4	
Non-Hispanic Black	47.4	48.8	45.9	2.8	
Hispanic	6.6	6.3	7.0	-0.7	
Non-Hispanic American Indian	0.8	0.7	0.9	-0.2	
Non-Hispanic other or mixed race	6.8	7.6	5.9	1.8	
Missing	20.3	18.7	22.0	-3.3	
Enrolling parent age at RA	41.9	41.9	41.9	-0.0	0.98
Parent race and ethnicity					0.30
Non-Hispanic White	22.6	22.6	22.6	-0.1	
Non-Hispanic Black	50.0	51.4	48.6	2.8	
Hispanic	5.2	5.2	5.2	-0.0	
Non-Hispanic American Indian	0.8	0.6	1.0	-0.4	
Non-Hispanic other or mixed race	5.0	5.5	4.4	1.1	
Missing	16.4	14.7	18.1	-3.4	
Disability					
Youth primary impairment					0.92
Intellectual or developmental disability	41.9	42.5	41.4	1.1	
Speech, hearing, or visual impairment	1.1	1.0	1.1	-0.1	
Physical disability	9.4	9.0	9.9	-0.9	
Other mental impairment	44.7	44.5	45.0	-0.5	
Other or unknown disability	2.9	3.1	2.7	0.4	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.0	92.6	95.4	-2.9**	0.01
Received OASDI	14.7	15.2	14.2	0.9	0.57
Years between youth's earliest SSI eligibility and RA	8.7	8.7	8.7	0.0	0.84
Youth age at most recent SSI application	7.1	7.1	7.1	0.0	0.98
Youth payments in the year before RA ($)					
SSI	7,217	7,193	7,241	-48	0.65
OASDI	414	433	396	37	0.54
Total SSI and OASDI	7,632	7,626	7,637	-11	0.90
Household had multiple SSI-eligible children	28.1	27.5	28.6	-1.0	0.62
Enrolling parent provided a valid SSN at RA	90.4	89.6	91.2	-1.6	0.24
Parents included in the administrative data				†	0.08
None	1.8	2.3	1.2	1.1	
One parent	63.4	61.5	65.4	-3.9	
Two parents	34.8	36.2	33.4	2.8	
Parent SSA payment status at RA					0.49
Any parent received SSI only	9.8	9.8	9.8	0.1	
Any parent received OASDI only	11.5	11.6	11.3	0.3	
Any parent received both SSI and OASDI	7.6	7.7	7.4	0.3	
No parent received any SSA payments	69.4	68.5	70.3	-1.8	
No parent was included in the SSA data analyses	1.8	2.3	1.2	1.1	
Earnings					
Youth had earnings in the calendar year before RA	0.8	0.9	0.8	0.1	0.80
Youth earnings in the calendar year before RA ($)	14	6	22	-16	0.14
Parent had earnings in the calendar year before RA	70.9	71.0	70.8	0.2	0.92
Parent earnings in the calendar year before RA ($)	15,623	15,937	15,312	624	0.44
Number of youth	1,805	904	901		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who enrolled in PROMISE. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table C.4. Arkansas PROMISE: Baseline characteristics of proxy youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	26.9	25.3	28.1	-2.8	0.49
Youth age at RA					0.50
14	35.5	35.4	35.7	-0.3	
15	30.1	27.8	32.0	-4.2	
16	34.4	36.8	32.3	4.5	
Average age at RA	15.4	15.5	15.4	0.1	0.41
Youth language preference at SSI application					
Prefers English for written language	96.9	96.8	97.0	-0.2	0.90
Prefers English for spoken language	96.9	96.8	97.0	-0.2	0.90
Youth living arrangement at SSI application					0.22
In parents' household	86.0	83.2	88.3	-5.2	
Own household or alone	13.0	15.3	11.0	4.3	
Another household and receiving support	1.0	1.5	0.7	0.8	
Youth race and ethnicity					0.93
Non-Hispanic White	17.5	17.4	17.6	-0.2	
Non-Hispanic Black	46.5	45.4	47.5	-2.1	
Hispanic	6.5	6.8	6.3	0.6	
Non-Hispanic American Indian	0.8	0.9	0.7	0.2	
Non-Hispanic other or mixed race	5.3	6.5	4.3	2.2	
Missing	23.4	23.0	23.7	-0.6	
Enrolling parent age at RA	42.3	42.6	42.0	0.7	0.42
Parent race and ethnicity					0.47
Non-Hispanic White	21.9	22.7	21.2	1.5	
Non-Hispanic Black	50.1	47.8	52.1	-4.3	
Hispanic	6.5	8.1	5.1	3.0	
Non-Hispanic American Indian	0.7	1.1	0.3	0.8	
Non-Hispanic other or mixed race	4.0	5.0	3.2	1.7	
Missing	16.8	15.4	18.1	-2.7	
Disability					
Youth primary impairment					0.85
Intellectual or developmental disability	42.3	43.1	41.7	1.4	
Speech, hearing, or visual impairment	1.5	1.9	1.3	0.6	
Physical disability	11.3	12.6	10.3	2.3	
Other mental impairment	42.7	40.5	44.7	-4.2	
Other or unknown disability	2.0	2.0	2.1	-0.0	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	95.3	93.4	96.8	-3.4*	0.09
Received OASDI	12.3	13.2	11.6	1.6	0.59
Years between youth's earliest SSI eligibility and RA	9.1	9.0	9.2	-0.2	0.61
Youth age at most recent SSI application	6.9	6.9	6.8	0.1	0.89
Youth payments in the year before RA ($)					
SSI	7,319	7,389	7,259	130	0.52
OASDI	351	378	329	49	0.66
Total SSI and OASDI	7,670	7,767	7,588	179	0.30
Household had multiple SSI-eligible children	26.0	23.1	28.5	-5.5	0.19
Enrolling parent provided a valid SSN at RA	89.3	87.5	90.8	-3.4	0.25
Parents included in the administrative data					0.14
None	2.9	4.3	1.7	2.6	
One parent	64.0	60.6	66.9	-6.2	
Two parents	33.1	35.1	31.4	3.7	
Parent SSA payment status at RA					0.45
Any parent received SSI only	7.8	7.4	8.1	-0.8	
Any parent received OASDI only	7.7	8.2	7.3	0.9	
Any parent received both SSI and OASDI	8.2	9.1	7.4	1.7	
No parent received any SSA payments	73.5	71.1	75.5	-4.4	
No parent was included in the SSA data analyses	2.9	4.3	1.7	2.6	
Earnings					
Youth had earnings in the calendar year before RA	0.4	0.4	0.4	0.0	0.99
Youth earnings in the calendar year before RA ($)	13	1	22	-21	0.35
Parent had earnings in the calendar year before RA	72.1	75.7	69.2	6.5	0.12
Parent earnings in the calendar year before RA ($)	15,075	15,336	14,859	478	0.75
Number of youth	483	224	259		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who completed the PROMISE five-year youth survey by proxy. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

2. Differences between survey respondents and nonrespondents

We compared youth and parent survey respondents with nonrespondents across 25 baseline characteristics to assess the extent to which survey nonresponse might limit generalizability of the impact findings to all evaluation enrollees (Appendix Tables C.5 and C.6). Youth survey respondents differed from nonrespondents with respect to youth sex and age at RA, enrolling parent age at RA, the years between youth's earliest SSI eligibility and RA, the share of households with multiple SSI-eligible children, youth OASDI payments in the year before RA, and the share of parents with any earnings in the year before RA. Parent survey respondents differed from nonrespondents with respect to youth sex, enrolling parent age at RA, the years between youth's earliest SSI eligibility and RA, and youth age at most recent SSI application. Overall, even when the differences were statistically significant, they generally were small. The extent and magnitude of the differences suggested that the respondents were not markedly different from the nonrespondents. To account for survey nonresponse, we calculated and used survey weights in all regression models to estimate impacts on the survey-based outcome measures.

Appendix Table C.5. Arkansas PROMISE: Baseline characteristics of youth survey respondents and nonrespondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.6	35.4	26.4	9.0***	0.00
Youth age at RA					0.25
14	38.3	39.3	34.6	4.7	
15	27.5	27.0	29.7	-2.7	
16	34.1	33.7	35.7	-2.0	
Average age at RA	15.4	15.4	15.5	-0.1*	0.09
Youth language preference at SSI application					
Prefers English for written language	97.5	97.4	98.1	-0.7	0.39
Prefers English for spoken language	97.5	97.3	98.1	-0.8	0.35
Youth living arrangement at SSI application				††	0.02
In parents' household	86.7	85.7	90.7	-5.0	
Own household or alone	12.1	13.2	8.0	5.2	
Another household and receiving support	1.2	1.1	1.4	-0.3	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	18.1	19.2	14.0	5.1	
Non-Hispanic Black	47.4	50.9	33.5	17.4	
Hispanic	6.6	7.1	4.7	2.5	
Non-Hispanic American Indian	0.8	0.8	0.5	0.3	
Non-Hispanic other or mixed race	6.8	7.2	4.9	2.3	
Missing	20.3	14.8	42.3	-27.5	
Enrolling parent age at RA	41.9	42.5	39.8	2.7***	0.00
Parent race and ethnicity				†††	0.00
Non-Hispanic White	22.6	24.0	17.0	7.0	
Non-Hispanic Black	50.0	52.6	39.8	12.8	
Hispanic	5.2	5.6	3.6	2.0	
Non-Hispanic American Indian	0.8	0.8	0.5	0.3	
Non-Hispanic other or mixed race	5.0	5.4	3.3	2.1	
Missing	16.4	11.5	35.7	-24.2	
Disability					
Youth primary impairment				††	0.01
Intellectual or developmental disability	41.9	43.0	37.9	5.0	
Speech, hearing, or visual impairment	1.1	1.1	0.8	0.3	
Physical disability	9.4	10.3	6.0	4.2	
Other mental impairment	44.7	42.8	52.2	-9.4	
Other or unknown disability	2.9	2.8	3.0	-0.2	

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.0	94.1	93.7	0.4	0.77
Received OASDI	14.7	15.3	12.4	2.9	0.14
Years between youth's earliest SSI eligibility and RA	8.7	8.8	8.4	0.4*	0.08
Youth age at most recent SSI application	7.1	7.1	7.5	-0.4	0.11
Youth payments in the year before RA ($)					
SSI	7,217	7,192	7,316	-123	0.34
OASDI	414	441	309	132**	0.04
Total SSI and OASDI	7,632	7,633	7,625	9	0.94
Household had multiple SSI-eligible children	28.1	26.8	33.0	-6.2**	0.02
Enrolling parent provided a valid SSN at RA	90.4	90.5	90.1	0.4	0.83
Parents included in the administrative data					0.27
None	1.8	2.0	0.8	1.2	
One parent	63.4	63.6	62.9	0.7	
Two parents	34.8	34.4	36.3	-1.8	
Parent SSA payment status at RA				†	0.10
Any parent received SSI only	9.8	9.6	10.4	-0.8	
Any parent received OASDI only	11.5	12.3	8.2	4.0	
Any parent received both SSI and OASDI	7.6	7.7	7.1	0.6	
No parent received any SSA payments	69.4	68.4	73.4	-5.0	
No parent was included in the SSA data analyses	1.8	2.0	0.8	1.2	
Earnings					
Youth had earnings in the calendar year before RA	0.8	0.7	1.4	-0.7	0.29
Youth earnings in the calendar year before RA ($)	14	8	37	-29	0.17
Parent had earnings in the calendar year before RA	70.9	69.6	75.9	-6.3**	0.01
Parent earnings in the calendar year before RA ($)	15,623	15,635	15,579	55	0.96
Number of youth	1,805	1,441	364		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who enrolled in PROMISE. Nonrespondents include youth ineligible for the survey because they died or withdrew from the study. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table C.6. Arkansas PROMISE: Baseline characteristics of parent survey respondents and nonrespondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.6	34.7	29.9	4.8*	0.06
Youth age at RA					0.39
14	38.3	39.1	35.7	3.4	
15	27.5	26.9	29.6	-2.7	
16	34.1	34.0	34.7	-0.8	
Average age at RA	15.4	15.4	15.4	-0.0	0.42
Youth language preference at SSI application					
Prefers English for written language	97.5	97.3	98.1	-0.7	0.38
Prefers English for spoken language	97.5	97.3	98.1	-0.8	0.33
Youth living arrangement at SSI application					0.86
In parents' household	86.7	86.5	87.4	-0.9	
Own household or alone	12.1	12.3	11.7	0.6	
Another household and receiving support	1.2	1.2	1.0	0.2	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	18.1	18.6	16.5	2.1	
Non-Hispanic Black	47.4	52.1	31.3	20.8	
Hispanic	6.6	7.2	4.9	2.3	
Non-Hispanic American Indian	0.8	0.9	0.5	0.4	
Non-Hispanic other or mixed race	6.8	7.1	5.6	1.5	
Missing	20.3	14.1	41.3	-27.1	
Enrolling parent age at RA	41.9	42.2	41.1	1.0**	0.05
Parent race and ethnicity				†††	0.00
Non-Hispanic White	22.6	23.5	19.4	4.1	
Non-Hispanic Black	50.0	53.8	37.4	16.4	
Hispanic	5.2	5.5	4.4	1.1	
Non-Hispanic American Indian	0.8	0.7	1.0	-0.3	
Non-Hispanic other or mixed race	5.0	5.2	4.1	1.1	
Missing	16.4	11.3	33.7	-22.5	
Disability					
Youth primary impairment				†††	0.00
Intellectual or developmental disability	41.9	43.5	36.7	6.9	
Speech, hearing, or visual impairment	1.1	1.0	1.2	-0.2	
Physical disability	9.4	10.4	6.1	4.3	
Other mental impairment	44.7	42.4	52.4	-10.0	
Other or unknown disability	2.9	2.7	3.6	-1.0	

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.0	94.1	93.7	0.4	0.75
Received OASDI	14.7	14.4	15.5	-1.1	0.58
Years between youth's earliest SSI eligibility and RA	8.7	8.8	8.2	0.6***	0.01
Youth age at most recent SSI application	7.1	7.0	7.5	-0.5**	0.04
Youth payments in the year before RA ($)					
SSI	7,217	7,196	7,288	-91	0.47
OASDI	414	426	375	51	0.44
Total SSI and OASDI	7,632	7,622	7,663	-40	0.71
Household had multiple SSI-eligible children	28.1	27.4	30.2	-2.7	0.29
Enrolling parent provided a valid SSN at RA	90.4	90.9	88.8	2.0	0.24
Parents included in the administrative data					0.86
None	1.8	1.8	1.7	0.1	
One parent	63.4	63.7	62.4	1.4	
Two parents	34.8	34.5	35.9	-1.5	
Parent SSA payment status at RA					0.78
Any parent received SSI only	9.8	9.4	11.2	-1.8	
Any parent received OASDI only	11.5	11.3	12.1	-0.9	
Any parent received both SSI and OASDI	7.6	7.8	6.8	1.0	
No parent received any SSA payments	69.4	69.7	68.2	1.5	
No parent was included in the SSA data analyses	1.8	1.8	1.7	0.1	
Earnings					
Youth had earnings in the calendar year before RA	0.8	0.8	1.0	-0.2	0.74
Youth earnings in the calendar year before RA ($)	14	15	12	3	0.78
Parent had earnings in the calendar year before RA	70.9	70.4	72.6	-2.2	0.39
Parent earnings in the calendar year before RA ($)	15,623	15,817	14,970	847	0.37
Number of youth	1,805	1,393	412		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes the parents who were eligible for the survey. Nonrespondents include parents ineligible for the survey because they died or withdrew from the study. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

3. Differences between self-reporting and proxy youth respondents

We compared the baseline characteristics of youth who self-responded to the survey to those who responded via proxies to assess whether systematically missing data from different survey modes might affect the estimated impacts on survey-based outcomes (Appendix Table C.7). We found differences in 3 out of 25 baseline characteristics by survey response type. Compared with self-respondents, youth with proxy respondents were less likely to be female and have received OASDI at RA, and they had more years between their earliest SSI eligibility and RA. Because the number of differences is small (that is, about the same as we might expect to occur by chance), we can reasonably expect that the findings for survey-based outcomes that are available only for self-respondents generalize to all survey respondents.

Appendix Table C.7. Arkansas PROMISE: Baseline characteristics of proxy and self-reporting youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Proxy respondent (B)	Self-reporting respondent (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	34.0	26.9	37.6	-10.7***	0.00
Youth age at RA					0.12
14	38.8	35.5	40.5	-4.9	
15	27.1	30.1	25.6	4.5	
16	34.1	34.4	33.9	0.4	
Average age at RA	15.4	15.4	15.4	0.0	0.43
Youth language preference at SSI application					
Prefers English for written language	97.6	96.9	98.0	-1.1	0.21
Prefers English for spoken language	97.5	96.9	97.9	-1.0	0.25
Youth living arrangement at SSI application					0.88
In parents' household	86.6	86.0	86.9	-0.9	
Own household or alone	12.4	13.0	12.1	0.9	
Another household and receiving support	1.0	1.0	1.0	0.0	
Youth race and ethnicity					0.13
Non-Hispanic White	18.0	17.5	18.2	-0.6	
Non-Hispanic Black	48.2	46.5	49.1	-2.6	
Hispanic	6.6	6.5	6.6	-0.1	
Non-Hispanic American Indian	0.8	0.8	0.8	-0.0	
Non-Hispanic other or mixed race	6.9	5.3	7.7	-2.4	
Missing	19.6	23.4	17.6	5.7	
Enrolling parent age at RA	42.3	42.3	42.3	-0.0	0.98
Parent race and ethnicity					0.26
Non-Hispanic White	23.0	21.9	23.5	-1.6	
Non-Hispanic Black	50.9	50.1	51.4	-1.3	
Hispanic	5.3	6.5	4.7	1.8	
Non-Hispanic American Indian	0.8	0.7	0.8	-0.2	
Non-Hispanic other or mixed race	5.3	4.0	5.9	-1.9	
Missing	14.8	16.8	13.7	3.1	
Disability					
Youth primary impairment					0.57
Intellectual or developmental disability	42.6	42.3	42.8	-0.4	
Speech, hearing, or visual impairment	1.1	1.5	0.9	0.6	
Physical disability	10.3	11.3	9.7	1.6	
Other mental impairment	43.3	42.7	43.6	-0.8	
Other or unknown disability	2.7	2.0	3.0	-0.9	

Baseline characteristic	All (A)	Proxy respondent (B)	Self-reporting respondent (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.2	95.3	93.6	1.6	0.19
Received OASDI	14.7	12.3	16.0	-3.6*	0.06
Years between youth's earliest SSI eligibility and RA	8.7	9.1	8.5	0.6**	0.01
Youth age at most recent SSI application	7.1	6.9	7.3	-0.4	0.11
Youth payments in the year before RA ($)					
SSI	7,217	7,319	7,165	154	0.21
OASDI	419	351	454	-102	0.14
Total SSI and OASDI	7,636	7,670	7,619	52	0.62
Household had multiple SSI-eligible children	27.5	26.0	28.2	-2.2	0.39
Enrolling parent provided a valid SSN at RA	90.5	89.3	91.1	-1.8	0.29
Parents included in the administrative data					0.14
None	1.9	2.9	1.5	1.4	
One parent	63.4	64.0	63.0	1.0	
Two parents	34.7	33.1	35.5	-2.4	
Parent SSA payment status at RA				†††	0.00
Any parent received SSI only	9.7	7.8	10.6	-2.8	
Any parent received OASDI only	11.8	7.7	13.9	-6.2	
Any parent received both SSI and OASDI	7.5	8.2	7.1	1.0	
No parent received any SSA payments	69.1	73.5	66.9	6.6	
No parent was included in the SSA data analyses	1.9	2.9	1.5	1.4	
Earnings					
Youth had earnings in the calendar year before RA	0.7	0.4	0.9	-0.5	0.25
Youth earnings in the calendar year before RA ($)	9	13	7	5	0.67
Parent had earnings in the calendar year before RA	70.0	72.1	68.9	3.2	0.22
Parent earnings in the calendar year before RA ($)	15,630	15,075	15,910	-835	0.38
Number of youth	1,441	483	958		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all PROMISE five-year youth survey respondents. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

B. Findings from the impact analysis

In this section, we present findings from the impact analysis of Arkansas PROMISE. First, we present impacts estimated through the main models. Second, we present the results of sensitivity analyses. Third, we present impacts for key subgroups of evaluation enrollees.

1. Impact estimates

Appendix Tables C.8–C.17 provide results and inference statistics for the regression-adjusted impacts estimated through the main models described in Appendix B. For each outcome measure, we report the estimated regression-adjusted impact; the control group mean (weighted, as applicable); and additional inference statistics, such as standard errors, effect sizes, and sample sizes by treatment status.

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Appendix Table C.8. Arkansas PROMISE: Impact on the youth's education and training (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group sample size	Control group sample size
Primary outcomes							
Enrolled in an educational or training program	29.0	-1.7	0.49	2.4	-0.050	702	670
Has a GED, high school diploma, or certificate of completion	78.9	-2.2	0.31	2.2	-0.078	731	706
Supplementary outcomes							
Enrolled in postsecondary education	12.5	-1.2	0.50	1.7	-0.067	727	699
Type of school attending							
High school serving a variety of students	4.8	0.2	0.88	1.1	0.023	727	699
High school serving only students with disabilities	0.8	-0.1	0.85	0.5	-0.071	727	699
GED program or other adult education program	2.5	-0.4	0.59	0.8	-0.118	727	699
Postsecondary vocational, trade, or technical school	1.8	0.7	0.36	0.8	0.203	727	699
Postsecondary college or advanced degree program	10.6	-1.9	0.24	1.6	-0.129	727	699
Other type of school	2.0	-0.8	0.25	0.7	-0.313	727	699
Not attending school	77.4	2.3	0.29	2.1	0.082	727	699
Highest grade completed							
Lower than 12th grade	20.6	0.7	0.73	2.1	0.027	733	708
12th grade or senior in high school	68.6	0.2	0.92	2.5	0.007	733	708
Some or all of college or university	9.9	-1.3	0.41	1.5	-0.091	733	708
Other or do not know	0.9	0.3	0.62	0.6	0.162	733	708
Enrolled in a training program	8.3	0.8	0.61	1.6	0.061	698	661
Received any training credential in the past year	9.7	2.3	0.17	1.7	0.145	728	699
Any school suspensions or expulsions in the past year	2.1	1.2	0.19	0.9	0.274	697	664

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group sample size	Control group sample size
Accommodations							
Receives educational accommodation	12.2	-2.2	0.19	1.6	-0.135	727	699
Receives training accommodation	3.9	1.4	0.24	1.2	0.188	698	660
Received supports or services for postsecondary education in the past year	18.3	3.9*	0.07	2.1	0.146	729	700

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

GED = General Educational Development.

Appendix Table C.9. Arkansas PROMISE: Impact on the youth's employment and earnings (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Employed in a paid job in the past year[a]	48.6	3.3	0.21	2.7	0.080	733	708
Earnings in the past year ($)	5,198	-51	0.91	475	-0.006	733	708
Earnings during the five calendar years after RA ($)	13,359	830	0.32	828	0.045	904	901
Supplementary outcomes							
Employment in the past year							
Any employment	51.2	3.3	0.22	2.6	0.079	733	708
Weekly hours worked	8.9	0.2	0.77	0.8	0.016	733	708
Employed in a paid job offering fringe benefits	29.1	0.9	0.70	2.5	0.028	733	708
Employment settings							
Integrated	41.9	0.2	0.94	2.7	0.005	733	708
Outside of school-sponsored activities	44.7	2.7	0.31	2.7	0.066	733	708
With coaching	6.9	1.4	0.35	1.5	0.122	733	708
Received supports or services in getting or keeping a job	15.7	4.3**	0.04	2.1	0.177	732	699
Employment at the time of the survey							
Any paid employment	30.2	4.2*	0.09	2.5	0.117	733	708
Average weekly earnings ($)	107	9	0.39	11	0.046	733	708
Weekly hours worked	9.5	1.0	0.26	0.9	0.061	733	708
Labor force participation	60.8	2.2	0.40	2.6	0.056	733	708
Employment and earnings in calendar years after RA							
Ever employed in Year 1	15.5	40.5***	0.00	2.0	1.174	904	901
Ever employed in Year 2	29.2	23.2***	0.00	2.1	0.595	904	901
Ever employed in Year 3	44.4	17.0***	0.00	2.3	0.417	904	901
Ever employed in Year 4	55.7	1.7	0.45	2.3	0.042	904	901
Ever employed in Year 5	59.2	2.6	0.25	2.3	0.066	904	901
Ever employed during Years 1-5	72.9	17.7***	0.00	1.7	0.774	904	901
Earnings in Year 1 ($)	350	639***	0.00	56	0.492	904	901

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Earnings in Year 2 ($)	1,126	272**	0.02	118	0.104	904	901
Earnings in Year 3 ($)	2,354	108	0.58	195	0.025	904	901
Earnings in Year 4 ($)	3,929	-132	0.64	282	-0.021	904	901
Earnings in Year 5 ($)	5,600	-57	0.88	367	-0.007	904	901
VR services during the 5 years after RA[a]							
Applied for VR services	15.6	13.1***	0.00	1.9	0.470	904	901
Received VR services	10.5	8.6***	0.00	1.6	0.424	904	901

Source: PROMISE five-year survey, RSA-911 data (VR service outcomes), and SSA administrative records (employment and earnings in years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] RSA-911 data are available only through 2020. VR services outcomes used only four years of data for youth who enrolled in PROMISE in 2016.

N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration; VR = vocational rehabilitation.

Appendix Table C.10. Arkansas PROMISE: Impact on the youth's self-determination and expectations (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Self-determination score (scale: 0 to 100)[a]	78.7	0.1	0.93	0.9	0.006	479	421
Youth expects to be financially independent at age 25	62.6	0.6	0.84	3.2	0.017	500	439
Supplementary outcomes							
Scores on subdomains of self-determination[a]							
Autonomy (scale: 0 to 300)	136.4	5.7	0.15	4.0	0.096	479	420
Psychological empowerment (scale: 0 to 100)	87.0	-0.1	0.96	1.4	-0.003	476	421
Self-realization (scale: 0 to 100)	91.9	-1.1	0.28	1.0	-0.072	478	421
Agentic action (scale: 0 to 100)	90.4	-0.1	0.94	1.4	-0.005	479	420
Youth expects to:							
Get postsecondary education (beyond high school/GED)	60.3	-6.4*	0.05	3.3	-0.158	481	425
Live independently at age 25	74.0	0.9	0.74	2.9	0.030	489	434
Be employed in a paid job at age 25	85.3	0.5	0.83	2.3	0.025	502	443
Parent expects youth to:							
Get postsecondary education (beyond high school/GED)	41.5	1.6	0.56	2.7	0.039	656	629
Live independently at age 25	58.3	-1.5	0.57	2.7	-0.038	657	641
Be financially independent at age 25	54.5	3.6	0.19	2.7	0.088	670	651
Be employed in a paid job at age 25	80.0	2.5	0.25	2.1	0.098	670	658
Parent believes it important that youth be employed eventually	92.5	0.4	0.77	1.5	0.039	647	634

Source: PROMISE five-year survey.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] Higher scores on the scales indicate higher levels of self-determination.

GED = General Educational Development; N = sample size.

Appendix Table C.11. Arkansas PROMISE: Impact on the youth's SSA payments and knowledge (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Received SSA payments in Year 5 after RA	56.3	-0.4	0.86	2.2	-0.010	904	901
Total SSA payments in Year 5 after RA ($)	4,210	-65	0.73	189	-0.015	904	901
Total SSA payments during Years 1–5 after RA ($)	31,146	-462	0.43	585	-0.033	904	901
Supplementary outcomes							
Aware of the following SSA policies							
Children receiving SSI are not automatically eligible for SSI as adults	46.7	-2.3	0.51	3.4	-0.055	474	419
People receiving SSI can work for pay	67.3	-2.2	0.50	3.2	-0.059	475	419
People receiving SSI must report earnings to SSA	73.9	6.7**	0.02	2.9	0.230	473	419
Aware of the following work supports							
SSI Student Earned Income Exclusion	6.8	7.8***	0.00	2.1	0.517	475	420
SSI earned income exclusion	7.2	2.0	0.27	1.8	0.163	475	420
SSI PASS plan	6.1	4.2**	0.03	1.9	0.343	475	420
ABLE account	4.5	33.1***	0.00	2.5	1.547	475	420
SSA payments in years after RA							
Received any in Year 1	97.7	-0.3	0.60	0.6	-0.073	904	901
Received any in Year 2	92.7	-1.0	0.42	1.2	-0.081	904	901
Received any in Year 3	83.9	-1.8	0.28	1.7	-0.079	904	901
Received any in Year 4	70.4	-0.4	0.84	2.0	-0.012	904	901
Received any in Years 1–5	98.0	-0.2	0.69	0.5	-0.065	904	901
Amount in Year 1 ($)	8,086	-118	0.16	84	-0.047	904	901
Amount in Year 2 ($)	7,352	-209*	0.10	127	-0.068	904	901
Amount in Year 3 ($)	6,308	-45	0.78	161	-0.012	904	901
Amount in Year 4 ($)	5,191	-24	0.89	178	-0.006	904	901

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
SSI payments in years after RA							
Received any in Year 1	96.9	-0.2	0.73	0.5	-0.035	904	901
Received any in Year 2	90.5	-0.9	0.50	1.3	-0.058	904	901
Received any in Year 3	79.2	-0.3	0.87	1.8	-0.011	904	901
Received any in Year 4	66.4	0.7	0.75	2.1	0.018	904	901
Received any in Year 5	53.5	0.7	0.77	2.2	0.016	904	901
Received any in Years 1–5	97.2	-0.1	0.83	0.5	-0.025	904	901
Amount in Year 1 ($)	7,556	-117	0.26	104	-0.041	904	901
Amount in Year 2 ($)	6,796	-241*	0.08	139	-0.073	904	901
Amount in Year 3 ($)	5,744	-57	0.73	167	-0.015	904	901
Amount in Year 4 ($)	4,727	18	0.92	179	0.005	904	901
Amount in Year 5 ($)	3,865	-62	0.74	183	-0.015	904	901
Total amount during Years 1–5 ($)	28,688	-458	0.46	621	-0.031	904	901
OASDI benefits in years after RA							
Received any in Year 1	15.9	-0.2	0.89	1.6	-0.010	904	901
Received any in Year 2	16.9	0.3	0.84	1.6	0.014	904	901
Received any in Year 3	16.2	-0.3	0.83	1.6	-0.016	904	901
Received any in Year 4	13.5	-1.4	0.36	1.5	-0.075	904	901
Received any in Year 5	9.0	-0.3	0.80	1.3	-0.025	904	901
Received any in Years 1–5	19.5	0.8	0.67	1.8	0.029	904	901
Amount in Year 1 ($)	530	-2	0.98	73	-0.001	904	901
Amount in Year 2 ($)	556	32	0.68	76	0.019	904	901
Amount in Year 3 ($)	564	12	0.88	81	0.007	904	901
Amount in Year 4 ($)	464	-42	0.55	70	-0.028	904	901
Amount in Year 5 ($)	345	-4	0.96	71	-0.002	904	901
Total amount during Years 1–5 ($)	2,458	-4	0.99	313	-0.001	904	901

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Age-18 redetermination status five years after RA							
Final decision: benefits ceased	32.7	1.0	0.65	2.1	0.026	904	901
Final decision: benefits continued	27.6	-1.2	0.54	1.9	-0.036	904	901
Final decision is pending	10.9	-1.8	0.18	1.4	-0.125	904	901
Did not have an age-18 redetermination	28.7	2.1	0.31	2.0	0.060	904	901

Source: SSA administrative records and PROMISE five-year survey (awareness of work supports and SSA policies).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

ABLE = Achieving a Better Life Experience; OASDI = Old-Age, Survivors, and Disability Insurance; PASS = Plan for Achieving Self Support; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table C.12. Arkansas PROMISE: Impact on the youth's health insurance coverage and expenditures (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Covered by any health insurance	81.3	-5.5**	0.01	2.2	-0.200	703	678
Average monthly Medicaid and Medicare expenditures in the five years after RA ($)	440	2	0.94	20	0.003	904	901
Supplementary outcomes							
Covered by private health insurance	10.8	-2.0	0.22	1.6	-0.139	703	678
Covered by private health insurance purchased through an ACA health exchange	0.7	-0.6*	0.08	0.3	-1.303	703	678
Medicaid and Medicare participation in years after RA							
Ever enrolled in Year 1	97.6	1.5**	0.02	0.6	0.575	904	901
Ever enrolled in Year 2	95.3	-0.6	0.59	1.0	-0.072	904	901
Ever enrolled in Year 3	91.7	1.0	0.44	1.3	0.084	904	901
Ever enrolled in Year 4	88.1	-1.4	0.37	1.6	-0.077	904	901
Ever enrolled in Year 5	84.2	-1.2	0.47	1.7	-0.055	904	901
Percentage of months enrolled in Years 1–5	85.8	-0.5	0.60	1.1	-0.024	904	901
Average monthly Medicaid and Medicare expenditures in years after RA							
Year 1 ($)	510	20	0.33	21	0.032	904	901
Year 2 ($)	446	13	0.54	21	0.023	904	901
Year 3 ($)	357	7	0.73	19	0.014	904	901
Year 4 ($)	404	-23	0.52	35	-0.028	904	901
Year 5 ($)	483	-9	0.81	40	-0.010	904	901
Medicaid participation in years after RA							
Ever enrolled in Year 1	97.6	1.5**	0.02	0.6	0.575	904	901
Ever enrolled in Year 2	95.3	-0.6	0.59	1.0	-0.072	904	901
Ever enrolled in Year 3	91.7	1.0	0.44	1.3	0.084	904	901
Ever enrolled in Year 4	87.8	-1.1	0.49	1.6	-0.058	904	901
Ever enrolled in Year 5	83.8	-0.8	0.64	1.7	-0.035	904	901
Percentage of months enrolled in Years 1–5	85.7	-0.4	0.70	1.1	-0.017	904	901

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Average monthly Medicaid expenditures in years after RA							
Year 1 ($)	506	22	0.32	21	0.034	904	901
Year 2 ($)	445	10	0.62	21	0.019	904	901
Year 3 ($)	357	-2	0.90	18	-0.005	904	901
Year 4 ($)	380	-19	0.43	23	-0.033	904	901
Year 5 ($)	464	-19	0.58	33	-0.024	904	901
Years 1–5 ($)	430	-2	0.93	17	-0.003	904	901
Medicare participation in years after RA							
Ever enrolled in Year 1	0.1	0.0	0.92	0.1	0.077	904	901
Ever enrolled in Year 2	0.1	0.0	0.92	0.1	0.077	904	901
Ever enrolled in Year 3	0.7	-0.2	0.58	0.3	-0.207	904	901
Ever enrolled in Year 4	2.0	0.0	0.99	0.6	0.003	904	901
Ever enrolled in Year 5	3.9	-0.4	0.67	0.9	-0.063	904	901
Percentage of months enrolled in Years 1–5	0.9	0.1	0.83	0.3	0.010	904	901
Average monthly Medicare expenditures in years after RA							
Year 1 ($)	4	-1	0.84	5	-0.010	904	901
Year 2 ($)	1	3	0.45	4	0.033	904	901
Year 3 ($)	0	9	0.14	6	0.069	904	901
Year 4 ($)	23	-4	0.88	26	-0.007	904	901
Year 5 ($)	20	9	0.65	20	0.021	904	901
Years 1–5 ($)	10	3	0.75	10	0.015	904	901

Source: CMS administrative records and PROMISE five-year survey (non-Medicare/Medicaid outcomes).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

ACA = Affordable Care Act; CMS = Centers for Medicare & Medicaid Services; N = sample size; RA = random assignment.

Appendix Table C.13. Arkansas PROMISE: Impact on the youth's economic and social well-being (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Total income in the past year ($)	9,463	-162	0.72	457	-0.019	733	708
Total income during the five calendar years after RA ($)	45,215	114	0.89	854	0.006	904	901
Supplementary outcomes							
Engaging in productive market activities[a]	74.6	0.2	0.92	2.3	0.007	722	688
Income in calendar years after RA							
Year 1 ($)	8,717	388***	0.00	128	0.119	904	901
Year 2 ($)	8,592	162	0.36	178	0.040	904	901
Year 3 ($)	8,672	37	0.87	220	0.008	904	901
Year 4 ($)	9,237	-219	0.43	276	-0.037	904	901
Year 5 ($)	9,998	-255	0.46	348	-0.034	904	901
Household income in the past year ($)[b]	24,685	1,337	0.17	964	0.080	617	601
Household receives TANF, SNAP, or housing assistance[b]	37.6	0.2	0.93	2.7	0.006	637	621
Amount of public assistance in the past month							
TANF ($)[b]	1	4	0.21	3	0.069	640	629
SNAP benefits ($)[b]	101	19*	0.10	11	0.095	644	625
Housing assistance ($)[b]	44	-1	0.94	9	-0.005	645	625
Family structure and living arrangements							
Living independently	20.0	0.5	0.83	2.1	0.017	731	707
Married or in a marriage-like relationship	7.2	0.5	0.72	1.4	0.045	698	661
Responsible for a child or children	14.0	2.6	0.19	2.0	0.120	693	663
Engagement with the criminal justice system							
Ever arrested	15.2	0.1	0.95	2.0	0.005	693	656
Number of times arrested	0.4	-0.1	0.37	0.1	-0.048	693	656
Arrested in the past year	5.3	1.1	0.38	1.3	0.125	692	655
Ever incarcerated	6.6	-3.1**	0.01	1.2	-0.408	688	654
Length of incarceration (days)	42.5	-31.8***	0.00	8.9	-0.198	688	654

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Self-reported health status							
Poor	3.9	-0.3	0.74	1.1	-0.058	691	662
Fair	15.5	2.5	0.22	2.1	0.110	691	662
Good	40.5	-4.2	0.12	2.7	-0.108	691	662
Very good or excellent	40.1	2.0	0.46	2.7	0.050	691	662
Received help in getting accommodations for school, work, or living independently in past year	12.8	3.9**	0.04	1.9	0.188	726	700

Source: PROMISE five-year surveys and SSA administrative records (SSA payments and income in calendar years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] Productive market activities include engaging in any of the following at the time of the five-year survey: employment in paid or unpaid work, looking for work, or enrollment in school or a training program.

[b] This outcome is based on data from the parent survey about the parent's household if the youth lived with the parent at interview.

N = sample size; RA = random assignment; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; TANF = Temporary Assistance for Needy Families.

Appendix Table C.14. Arkansas PROMISE: Impact on the parents' employment and earnings (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent worked for pay in the past year	65.3	1.5	0.50	2.3	0.041	700	689
Parents' earnings in the past year ($)	18,734	815	0.47	1,130	0.037	700	690
Parents' earnings during the five calendar years after RA ($)	95,269	-1,124	0.69	2,786	-0.011	883	890
Supplementary outcomes							
Highest educational attainment achieved by either parent							
Not a high school graduate	18.7	3.0	0.15	2.1	0.112	702	691
High school diploma or GED	39.1	-1.3	0.63	2.6	-0.032	702	691
Some postsecondary education or more	41.2	-1.9	0.46	2.6	-0.048	702	691
Other or do not know	1.1	0.2	0.77	0.6	0.095	702	691
Employment in the past year							
Number of parents that worked for pay	0.8	0.0	0.76	0.0	0.015	698	688
Number of weeks worked	35.4	0.5	0.74	1.5	0.016	698	688
Weekly hours worked	28.2	0.4	0.76	1.3	0.015	700	690
Either parent was offered fringe benefits through a job	47.9	-0.5	0.86	2.6	-0.011	699	689
Employment at the time of survey							
Either parent is in the labor force	67.7	1.9	0.41	2.3	0.054	666	658
Either parent is working for pay	56.4	-1.2	0.64	2.6	-0.029	668	658
Employment and earnings in calendar years after RA							
Ever employed in Year 1	71.8	0.1	0.97	1.8	0.002	883	890
Ever employed in Year 2	69.6	1.1	0.55	1.8	0.031	883	890
Ever employed in Year 3	70.4	2.2	0.22	1.8	0.065	883	890
Ever employed in Year 4	71.3	1.3	0.46	1.8	0.040	883	890
Ever employed in Year 5	70.0	-0.4	0.81	1.9	-0.013	883	890
Ever employed in Years 1-5	80.1	2.1	0.18	1.6	0.084	883	890
Earnings in Year 1 ($)	17,320	213	0.68	510	0.011	883	890

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Earnings in Year 2 ($)	18,261	-379	0.53	602	-0.018	883	890
Earnings in Year 3 ($)	19,129	66	0.92	644	0.003	883	890
Earnings in Year 4 ($)	20,114	-447	0.52	696	-0.020	883	890
Earnings in Year 5 ($)	20,446	-577	0.46	784	-0.025	883	890

Source: PROMISE five-year survey and SSA administrative records (employment and earnings in years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

GED = General Educational Development; N = sample size; RA = random assignment.

Appendix Table C.15. Arkansas PROMISE: Impact on the parents' SSA payments (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent received SSA payments in Year 5	33.8	-0.1	0.95	1.4	-0.002	883	890
Total SSA payments received in Year 5 ($)	3,760	-56	0.78	201	-0.010	883	890
Total SSA payments during the five years after RA ($)	17,539	325	0.66	735	0.012	883	890
Supplementary outcomes							
SSA payments in years after RA							
Received any in Year 1	30.6	0.0	0.96	0.7	0.001	883	890
Received any in Year 2	31.2	0.6	0.51	1.0	0.018	883	890
Received any in Year 3	32.1	0.8	0.52	1.2	0.021	883	890
Received any in Year 4	32.8	-0.3	0.82	1.3	-0.008	883	890
Received any in Years 1–5	36.6	0.8	0.52	1.3	0.022	883	890
Amount in Year 1 ($)	3,247	188	0.16	134	0.033	883	890
Amount in Year 2 ($)	3,418	198	0.26	176	0.033	883	890
Amount in Year 3 ($)	3,556	83	0.66	187	0.014	883	890
Amount in Year 4 ($)	3,558	-87	0.62	174	-0.016	883	890
SSI payments in years after RA							
Received any in Year 1	17.0	0.9	0.19	0.7	0.038	883	890
Received any in Year 2	17.6	0.7	0.43	0.9	0.030	883	890
Received any in Year 3	18.0	-0.2	0.84	1.0	-0.009	883	890
Received any in Year 4	17.8	-1.9*	0.07	1.1	-0.083	883	890
Received any in Year 5	18.2	-1.5	0.21	1.2	-0.064	883	890
Received any in Years 1–5	22.0	0.4	0.77	1.2	0.012	883	890
Amount in Year 1 ($)	1,142	171**	0.04	83	0.053	883	890
Amount in Year 2 ($)	1,216	129	0.20	101	0.038	883	890
Amount in Year 3 ($)	1,250	-14	0.89	104	-0.004	883	890
Amount in Year 4 ($)	1,212	-105	0.28	97	-0.034	883	890
Amount in Year 5 ($)	1,319	-161	0.15	113	-0.049	883	890
Total amount during Years 1–5 ($)	6,138	20	0.96	404	0.001	883	890

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
OASDI benefits in years after RA							
Received any in Year 1	20.7	-0.3	0.64	0.7	-0.012	883	890
Received any in Year 2	21.3	0.3	0.71	0.9	0.012	883	890
Received any in Year 3	22.4	0.0	0.98	1.0	0.001	883	890
Received any in Year 4	22.9	-0.3	0.79	1.1	-0.010	883	890
Received any in Year 5	23.6	-0.4	0.74	1.2	-0.014	883	890
Received any in Years 1–5	25.4	0.7	0.59	1.2	0.021	883	890
Amount in Year 1 ($)	2,105	16	0.88	109	0.004	883	890
Amount in Year 2 ($)	2,202	69	0.60	133	0.014	883	890
Amount in Year 3 ($)	2,307	97	0.52	151	0.019	883	890
Amount in Year 4 ($)	2,347	18	0.91	151	0.004	883	890
Amount in Year 5 ($)	2,441	105	0.54	169	0.021	883	890
Total amount during Years 1–5 ($)	11,401	305	0.62	624	0.013	883	890

Source: SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

N = sample size; OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table C.16. Arkansas PROMISE: Impact on the parents' health insurance coverage and expenditures (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent is covered by health insurance	90.5	-3.1*	0.07	1.7	-0.191	697	685
Average monthly Medicaid and Medicare expenditures in the five years after RA ($)	319	36**	0.05	18	0.063	883	890
Supplementary outcomes							
Covered by private health insurance	28.9	-1.0	0.69	2.4	-0.029	697	686
Medicaid and Medicare participation in years after RA							
Ever enrolled in Year 1	83.6	0.2	0.92	1.6	0.007	883	890
Ever enrolled in Year 2	84.0	1.2	0.46	1.6	0.055	883	890
Ever enrolled in Year 3	83.4	-1.0	0.56	1.7	-0.042	883	890
Ever enrolled in Year 4	79.9	-0.8	0.67	1.8	-0.028	883	890
Ever enrolled in Year 5	75.6	0.6	0.74	1.9	0.021	883	890
Percentage of months enrolled in Years 1–5	76.8	0.3	0.86	1.5	0.007	883	890
Average monthly Medicaid and Medicare expenditures in years after RA							
Year 1 ($)	366	18	0.27	16	0.031	883	890
Year 2 ($)	305	60***	0.01	22	0.090	883	890
Year 3 ($)	300	59**	0.01	24	0.089	883	890
Year 4 ($)	291	38	0.11	24	0.062	883	890
Year 5 ($)	334	3	0.91	29	0.005	883	890
Medicaid participation in years after RA							
Ever enrolled in Year 1	81.1	-0.2	0.92	1.7	-0.007	883	890
Ever enrolled in Year 2	81.5	0.8	0.63	1.7	0.034	883	890
Ever enrolled in Year 3	80.1	-1.0	0.56	1.8	-0.039	883	890
Ever enrolled in Year 4	76.0	-0.3	0.90	1.9	-0.008	883	890
Ever enrolled in Year 5	71.3	1.2	0.54	2.0	0.037	883	890
Percentage of months enrolled in Years 1–5	72.7	0.5	0.78	1.6	0.012	883	890

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Average monthly Medicaid expenditures in years after RA							
Year 1 ($)	257	7	0.63	14	0.018	883	890
Year 2 ($)	181	20	0.14	14	0.059	883	890
Year 3 ($)	163	30**	0.01	12	0.099	883	890
Year 4 ($)	159	28**	0.03	13	0.088	883	890
Year 5 ($)	169	11	0.45	14	0.031	883	890
Years 1–5 ($)	186	19*	0.06	10	0.069	883	890
Medicare participation in years after RA							
Ever enrolled in Year 1	19.2	0.2	0.82	0.8	0.007	883	890
Ever enrolled in Year 2	20.6	-0.1	0.90	0.8	-0.004	883	890
Ever enrolled in Year 3	21.7	-0.7	0.47	0.9	-0.024	883	890
Ever enrolled in Year 4	23.4	-2.0*	0.07	1.1	-0.070	883	890
Ever enrolled in Year 5	23.8	-1.8	0.12	1.2	-0.062	883	890
Percentage of months enrolled in Years 1–5	21.0	-1.1	0.14	0.7	-0.028	883	890
Average monthly Medicare expenditures in years after RA							
Year 1 ($)	110	11	0.40	13	0.027	883	890
Year 2 ($)	124	40**	0.03	18	0.078	883	890
Year 3 ($)	137	29	0.15	20	0.053	883	890
Year 4 ($)	132	10	0.58	18	0.021	883	890
Year 5 ($)	165	-7	0.76	24	-0.012	883	890
Years 1–5 ($)	133	17	0.27	15	0.037	883	890

Source: CMS administrative records and PROMISE five-year survey (non-Medicare/Medicaid outcomes).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

CMS = Centers for Medicare & Medicaid Services; N = sample size.

Appendix Table C.17. Arkansas PROMISE: Impact on the parents' economic well-being (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Parents' total income in the past year ($)	22,779	800	0.47	1,111	0.039	685	680
Parents' total income during the five calendar years after RA ($)	114,598	-733	0.79	2,686	-0.008	883	890
Supplementary outcomes							
Parents' income in calendar years after RA							
Year 1 ($)	21,002	354	0.49	513	0.019	883	890
Year 2 ($)	22,008	-174	0.77	597	-0.009	883	890
Year 3 ($)	22,998	118	0.85	633	0.006	883	890
Year 4 ($)	24,076	-498	0.46	673	-0.024	883	890
Year 5 ($)	24,513	-533	0.48	754	-0.024	883	890
Household receives TANF, SNAP, or housing assistance	42.1	-2.8	0.29	2.7	-0.070	688	676
Household income in the past year ($)	26,720	535	0.57	931	0.032	668	655

Source: PROMISE five-year survey and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

N = sample size; RA = random assignment; SSA = Social Security Administration.

2. Sensitivity analyses

We assessed the sensitivity of the estimated impacts on primary outcomes to methodological choices we incorporated in the main impact estimates. In Appendix Table C.18, we show the impact estimated by the main regression model for each outcome, as well as by alternative models that do not (1) use the survey weights, (2) include covariate adjustment, and (3) use imputed data for outcomes that underwent multiple imputation. The alternative models produced broadly similar results, suggesting that the main model's estimates of program impacts were not sensitive to the choice of estimation method.

We also assessed the extent to which the lack of survey data for some enrollees would influence the estimates of program impacts. In Appendix Table C.19, we compare how the estimated impacts on primary outcomes varied when nonrespondents were included and excluded from analyses of outcomes measured using administrative data. For all outcomes, the impact estimated using the weighted survey respondent sample did not significantly differ from the impact estimated using the administrative analysis sample. The findings suggest that use of the analysis weights minimized the potential for nonresponse bias because the estimated impacts for the survey respondent sample were comparable to those for the full research sample.

Appendix Table C.18. Arkansas PROMISE: Impact on primary outcomes, by estimation approach (values measured at the time of the survey and shown in in percentages, unless otherwise noted)

Outcome	Main model	No weighting for non-response	No covariate adjustment	No imputation
Enrolled in an educational or training program	-1.7	-0.9	-1.6	n.a.
Has a GED, high school diploma, or certificate of completion	-2.2	-2.2	-2.1	n.a.
Youth employed in a paid job in the past year	3.3	3.7	3.4	3.9
Youth earnings in the past year ($)	-51	-9	43	124
Youth earnings during the five calendar years after RA ($)	830	n.a.	1,126	n.a.
Youth self-determination score (scale: 0 to 100)[a]	0.1	0.4	0.0	n.a.
Youth expects to be financially independent at age 25	0.6	1.3	1.2	n.a.
Youth received SSA payments in Year 5 after RA	-0.4	n.a.	-1.4	n.a.
Youth total SSA payments in Year 5 after RA ($)	-65	n.a.	-153	n.a.
Youth total SSA payments during Years 1–5 after RA ($)	-462	n.a.	-940	n.a.
Youth covered by any health insurance	-5.5**	-5.9***	-5.3**	n.a.
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	2	n.a.	2	n.a.
Youth total income in the past year ($)	-162	-168	-112	-55
Youth total income during the five calendar years after RA ($)	114	n.a.	-78	n.a.
Either parent worked for pay in the past year	1.5	1.7	1.8	n.a.
Parents' earnings in the past year ($)	815	1,133	1,272	963
Parents' earnings during the five calendar years after RA ($)	-1,124	n.a.	1,755	n.a.
Either parent received SSA payments in Year 5 after RA	-0.1	n.a.	0.8	n.a.
Parents' total SSA payments received in Year 5 after RA ($)	-56	n.a.	82	n.a.
Parents' total SSA payments during the five years after RA ($)	325	n.a.	1,052	n.a.
Parents' total income in the past year ($)	800	1,154	1,390	939
Parents' income during the five calendar years after RA ($)	-733	n.a.	2,909	n.a.
Either parent is covered by health insurance	-3.1*	-2.9*	-3.1*	n.a.
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	36**	n.a.	36**	n.a.

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the impact estimates of Arkansas PROMISE, using different modeling approaches. In the main model, we used covariate adjustment and, for outcomes derived from survey data, we weighted statistics to adjust for survey nonresponse and used multiple imputation when an outcome had

a missing value conditional on the value of another variable. In the model with "No weighting for non-response", we followed the main model but did not apply weights to adjust for non-response. In the model with "No covariate adjustment", we followed the main model but did not include covariates. For the model with "No multiple imputation", we followed the main model except that we excluded cases with outcomes that had a missing value conditional on the value of another variable.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; n.a.= not applicable; RA = random assignment; SSA = Social Security Administration.

Appendix Table C.19. Arkansas PROMISE: Impact on primary outcomes measured using administrative data, including and excluding five-year survey nonrespondents (percentage, unless otherwise noted)

Outcome	Administrative analysis samples			Five-year survey respondents (weighted)			*p*-value for difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth earnings during the five calendar years after RA ($)	13,359	830	0.32	12,624	1,534*	0.10	0.42
Youth received SSA payments in Year 5 after RA	56.3	-0.4	0.86	58.5	0.9	0.71	0.57
Youth total SSA payments in Year 5 after RA ($)	4,210	-65	0.73	4,469	-53	0.81	0.95
Youth total SSA payments during Years 1–5 after RA ($)	31,146	-462	0.43	31,959	-311	0.64	0.81
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	440	2	0.94	455	13	0.59	0.61
Youth total income during the five calendar years after RA ($)	45,215	114	0.89	45,491	936	0.33	0.36
Parents' earnings during the five calendar years after RA ($)	95,269	-1,124	0.69	96,034	1,379	0.67	0.41
Either parent received SSA payments in Year 5 after RA	33.8	-0.1	0.95	35.3	-0.9	0.59	0.60
Parents' total SSA payments received in Year 5 after RA ($)	3,760	-56	0.78	4,018	-139	0.56	0.71
Parents' total SSA payments during the five years after RA ($)	17,539	325	0.66	18,178	-274	0.74	0.44
Parents' total income during the five calendar years after RA ($)	114,598	-733	0.79	116,190	1,151	0.72	0.52
Parents' average monthly Medicaid and Medicare expenditures in years after RA in Years 1-5 after RA ($)	319	36**	0.05	338	22	0.29	0.46

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE for administrative analysis samples and five-year survey respondents. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For the sample of five-year survey respondents, we weighted the statistics to adjust for survey nonresponse, applying youth weights for youths' outcomes and parent weights for parents' outcomes.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for the two samples are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; N = sample size; RA = random assignment. SSA = Social Security Administration.

3. Subgroup impact estimates

We estimated the five-year impacts for key subgroups of evaluation enrollees to understand whether the impacts of Arkansas PROMISE differed by enrollee characteristics. We focused on subgroups defined by the following baseline characteristics of youth: age (ages 14 and 15, and age 16); sex (females and males); whether a youth's parent received SSA payments at the time of RA (yes or no); primary impairment (intellectual or developmental disabilities, other mental impairments, and other disabilities); and whether the survey respondent completed the five-year survey before or after the onset of the COVID-19 pandemic (yes or no). Appendix Tables C.20–C.25 present the subgroup impact estimates.

Appendix Table C.20. Arkansas PROMISE: Impacts on primary outcomes, by youth's age (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Age 14 and 15					Age 16					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	33.1	-3.0	0.32	450	461	20.2	1.0	0.79	252	209	0.41
Youth has a GED, high school diploma, or certificate of completion	77.4	-0.7	0.80	471	480	82.0	-5.2	0.15	260	226	0.32
Youth employed in a paid job in the past year	49.7	0.9	0.78	473	482	46.2	7.9*	0.08	260	226	0.21
Youth earnings in the past year ($)	4,830	88	0.87	473	482	5,961	-317	0.73	260	226	0.70
Youth earnings during the five calendar years after RA ($)	10,871	1,319	0.13	584	605	18,443	-187	0.92	320	296	0.44
Youth self-determination score (scale: 0 to 100)	78.9	0.4	0.70	308	288	78.2	-0.6	0.69	171	133	0.58
Youth expects to be financially independent at age 25	62.1	4.4	0.26	324	299	63.6	-6.8	0.23	176	140	0.10
Youth received SSA payments in Year 5 after RA	62.1	-3.2	0.23	584	605	44.3	5.0	0.18	320	296	0.07†
Youth total SSA payments in Year 5 after RA ($)	4,557	-257	0.27	584	605	3,500	304	0.34	320	296	0.15
Youth total SSA payments during Years 1–5 after RA ($)	32,136	-819	0.25	584	605	29,123	225	0.82	320	296	0.40
Youth covered by any health insurance	83.9	-6.1**	0.02	454	464	75.9	-4.5	0.27	249	214	0.74
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	478	-10	0.66	584	605	361	23	0.56	320	296	0.46
Youth total income in the past year ($)	9,385	-227	0.67	473	482	9,625	-39	0.96	260	226	0.85
Youth total income during the five calendar years after RA ($)	43,806	26	0.98	584	605	48,094	264	0.87	320	296	0.90

Outcome	Age 14 and 15					Age 16					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Either parent worked for pay in the past year	64.9	1.5	0.60	449	468	66.0	1.6	0.67	251	221	0.98
Parents' earnings in the past year ($)	18,323	969	0.48	449	469	19,602	516	0.79	251	221	0.85
Parents' earnings during the five calendar years after RA ($)	96,019	67	0.98	568	598	93,734	-3,408	0.47	315	292	0.55
Either parent received SSA payments in Year 5 after RA	33.4	0.3	0.87	568	598	34.6	-0.8	0.76	315	292	0.72
Parents' total SSA payments received in Year 5 after RA ($)	3,708	-117	0.61	568	598	3,865	60	0.87	315	292	0.69
Parents' total SSA payments during the five years after RA ($)	17,548	42	0.96	568	598	17,519	866	0.50	315	292	0.60
Parents' total income in the past year ($)	22,286	993	0.47	439	462	23,820	427	0.83	246	218	0.81
Parents' total income during the five calendar years after RA ($)	115,334	192	0.95	568	598	113,089	-2,516	0.58	315	292	0.63
Either parent is covered by health insurance	90.0	-2.4	0.26	447	466	91.6	-4.4	0.12	250	219	0.57
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	326	31	0.15	568	598	304	45	0.17	315	292	0.73

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; RA = random assignment; SSA = Social Security Administration.

Appendix Table C.21. Arkansas PROMISE: Impacts on primary outcomes, by youth's sex (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Male					Female					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	27.2	-2.8	0.33	456	429	32.3	0.6	0.88	246	241	0.50
Youth has a GED, high school diploma, or certificate of completion	77.3	-1.9	0.50	477	453	81.9	-2.9	0.41	254	253	0.82
Youth employed in a paid job in the past year	47.8	4.6	0.16	478	453	50.0	0.7	0.87	255	255	0.48
Youth earnings in the past year ($)	5,292	319	0.61	478	453	5,022	-779	0.27	255	255	0.23
Youth earnings during the five calendar years after RA ($)	13,219	861	0.41	604	595	13,630	767	0.58	300	306	0.96
Youth self-determination score (scale: 0 to 100)	78.0	-0.2	0.90	293	250	79.8	0.5	0.73	186	171	0.73
Youth expects to be financially independent at age 25	64.8	-0.7	0.87	307	264	59.2	2.8	0.59	193	175	0.59
Youth received SSA payments in Year 5 after RA	54.8	0.2	0.94	604	595	59.2	-1.6	0.68	300	306	0.70
Youth total SSA payments in Year 5 after RA ($)	4,050	51	0.83	604	595	4,520	-297	0.37	300	306	0.38
Youth total SSA payments during Years 1–5 after RA ($)	30,650	-375	0.60	604	595	32,110	-636	0.53	300	306	0.83
Youth covered by any health insurance	79.1	-8.3***	0.00	454	430	85.4	-0.2	0.96	249	248	0.06†
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	411	-13	0.58	604	595	496	31	0.40	300	306	0.31
Youth income in the past year ($)	9,460	237	0.69	478	453	9,468	-949	0.16	255	255	0.18
Youth total income during the five calendar years after RA ($)	44,516	225	0.83	604	595	46,574	-108	0.94	300	306	0.85
Either parent worked for pay in the past year	66.5	1.6	0.57	460	449	62.8	1.4	0.73	240	240	0.96

Outcome	Male					Female					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Parents' earnings in the past year ($)	19,719	999	0.49	460	449	16,856	450	0.80	240	241	0.81
Parents' earnings during the five calendar years after RA ($)	101,198	2,105	0.54	592	588	83,727	-7,622*	0.09	291	302	0.08†
Either parent received SSA payments in Year 5 after RA	33.0	-0.8	0.64	592	588	35.4	1.4	0.52	291	302	0.42
Parents' total SSA payments received in Year 5 after RA ($)	3,746	-309	0.22	592	588	3,786	453	0.17	291	302	0.06†
Parents' total SSA payments during the five years after RA ($)	17,094	-844	0.36	592	588	18,406	2,676**	0.03	291	302	0.02††
Parents' income in the past year ($)	23,584	900	0.53	453	443	21,240	600	0.74	232	237	0.90
Parents' income during the five calendar years after RA ($)	120,282	1,046	0.75	592	588	103,531	-4,312	0.33	291	302	0.33
Either parent is covered by health insurance	92.0	-3.9*	0.06	457	446	87.7	-1.5	0.62	240	239	0.52
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	297	33	0.13	592	588	361	41	0.20	291	302	0.83

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table C.22. Arkansas PROMISE: Impacts on primary outcomes, by whether parent received SSA payments before RA (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	No parent received SSA payments					At least one parent received SSA payments					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	32.0	-4.2	0.16	477	467	21.0	5.8	0.17	208	192	0.05†
Youth has a GED, high school diploma, or certificate of completion	81.3	-2.9	0.25	492	492	73.2	-0.5	0.92	222	203	0.62
Youth employed in a paid job in the past year	50.8	3.1	0.33	493	492	43.6	4.4	0.37	222	205	0.82
Youth earnings in the past year ($)	5,439	-136	0.82	493	492	4,549	261	0.75	222	205	0.69
Youth earnings during the five calendar years after RA ($)	13,753	790	0.42	619	633	12,356	1,130	0.47	264	257	0.85
Youth self-determination score (scale: 0 to 100)	79.3	-1.0	0.42	316	281	77.5	1.7	0.26	155	134	0.16
Youth expects to be financially independent at age 25	63.8	-1.4	0.72	329	294	60.0	5.6	0.33	162	139	0.31
Youth received SSA payments in Year 5 after RA	55.3	0.4	0.87	619	633	58.8	-3.5	0.39	264	257	0.41
Youth total SSA payments in Year 5 after RA ($)	4,106	64	0.77	619	633	4,435	-405	0.27	264	257	0.27
Youth total SSA payments during Years 1–5 after RA ($)	30,352	-383	0.59	619	633	32,892	-635	0.55	264	257	0.84
Youth covered by any health insurance	82.1	-4.5*	0.08	473	471	79.8	-8.5**	0.04	212	196	0.41
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	411	-9	0.65	619	633	510	11	0.82	264	257	0.69
Youth income in the past year ($)	9,669	-189	0.74	493	492	8,868	11	0.99	222	205	0.84
Youth total income during the five calendar years after RA ($)	44,818	246	0.81	619	633	45,909	6	1.00	264	257	0.90
Either parent worked for pay in the past year	80.5	-1.2	0.64	485	483	27.6	9.5**	0.04	200	196	0.04††

Outcome	No parent received SSA payments					At least one parent received SSA payments					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Parents' earnings in the past year ($)	23,882	-368	0.80	485	484	6,168	3,862**	0.02	200	196	0.05††
Parents' earnings during the five calendar years after RA ($)	119,958	-1,612	0.66	619	633	34,462	108	0.98	264	257	0.74
Either parent received SSA payments in Year 5 after RA	10.1	0.7	0.71	619	633	92.2	-1.8	0.49	264	257	0.43
Parents' total SSA payments received in Year 5 after RA ($)	1,232	-88	0.70	619	633	9,985	48	0.91	264	257	0.78
Parents' total SSA payments during the five years after RA ($)	3,895	-72	0.92	619	633	51,144	1,420	0.43	264	257	0.45
Parents' income in the past year ($)	25,199	-332	0.81	485	484	16,694	3,799**	0.02	200	196	0.05††
Parents' income during the five calendar years after RA ($)	124,747	-1,548	0.65	619	633	89,599	1,442	0.71	264	257	0.56
Either parent is covered by health insurance	89.5	-4.3**	0.05	484	481	95.0	-0.7	0.76	198	194	0.26
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	151	21	0.19	619	633	733	73	0.12	264	257	0.30

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table C.23. Arkansas PROMISE: Impacts on primary outcomes, by youth's primary impairment (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Intellectual or developmental disabilities			Other mental impairments			Other impairments			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth enrolled in an educational or training program	30.7	-2.3	0.54	24.2	-1.5	0.68	38.5	-0.8	0.90	0.98
Youth has a GED, high school diploma, or certificate of completion	81.6	-0.1	0.99	73.8	-4.2	0.26	86.6	-3.0	0.55	0.68
Youth employed in a paid job in the past year	43.6	1.9	0.63	54.7	4.7	0.25	44.2	4.8	0.49	0.87
Youth earnings in the past year ($)	4,265	-21	0.97	6,038	348	0.67	5,328	-1,212	0.29	0.53
Youth earnings during the five calendar years after RA ($)	11,511	842	0.49	15,270	1,174	0.36	12,668	-220	0.92	0.87
Youth self-determination score (scale: 0 to 100)	77.8	-0.4	0.79	78.5	0.6	0.70	81.9	-0.4	0.82	0.87
Youth expects to be financially independent at age 25	56.3	6.4	0.20	65.1	-2.2	0.65	73.0	-8.4	0.30	0.23
Youth received SSA payments in Year 5 after RA	65.4	-1.4	0.69	44.0	-1.2	0.71	69.1	5.2	0.34	0.54
Youth total SSA payments in Year 5 after RA ($)	5,280	-487	0.11	2,876	139	0.61	5,357	542	0.28	0.14
Youth total SSA payments during Years 1–5 after RA ($)	33,450	-927	0.32	28,312	-597	0.49	33,489	1,417	0.34	0.39
Youth covered by any health insurance	86.6	-6.7**	0.03	73.2	-4.9	0.20	91.0	-4.2	0.37	0.88
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	390	-6	0.80	404	-7	0.80	711	47	0.60	0.84
Youth income in the past year ($)	9,761	-700	0.26	8,879	443	0.58	10,403	-385	0.72	0.53
Youth total income during the five calendar years after RA ($)	46,474	-697	0.57	43,330	475	0.73	47,602	1,504	0.49	0.63
Either parent worked for pay in the past year	64.7	3.4	0.32	64.4	1.9	0.59	69.8	-5.1	0.40	0.46

Outcome	Intellectual or developmental disabilities			Other mental impairments			Other impairments			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Parents' earnings in the past year ($)	18,243	2,699	0.10	18,531	-299	0.86	20,849	-657	0.85	0.40
Parents' earnings during the five calendar years after RA ($)	105,339	-82	0.98	79,968	-2,092	0.60	115,772	-1,696	0.85	0.94
Either parent received SSA payments in Year 5 after RA	31.4	-0.1	0.94	36.7	-0.5	0.83	31.4	1.8	0.68	0.89
Parents' total SSA payments received in Year 5 after RA ($)	3,350	274	0.36	4,206	-329	0.29	3,512	-144	0.78	0.37
Parents' total SSA payments during the five years after RA ($)	15,644	1,337	0.21	19,691	-446	0.71	16,103	-120	0.95	0.51
Parents' income in the past year ($)	21,872	2,941*	0.07	22,974	-490	0.77	24,836	-808	0.81	0.29
Parents' income during the five calendar years after RA ($)	122,704	1,176	0.78	101,549	-2,295	0.54	133,535	-1,882	0.83	0.82
Either parent is covered by health insurance	88.6	-2.8	0.29	93.5	-4.4*	0.07	86.7	0.8	0.87	0.61
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	299	-11	0.68	347	64**	0.03	288	90**	0.03	0.06†

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table C.24. Arkansas PROMISE: Sample sizes for primary outcomes, by youth's primary impairment

Outcome	Intellectual or developmental disabilities		Other mental impairments		Other impairments	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Youth enrolled in an educational or training program	310	280	290	292	102	98
Youth has a GED, high school diploma, or certificate of completion	320	296	308	308	103	102
Youth employed in a paid job in the past year	322	297	308	309	103	102
Youth earnings in the past year ($)	322	297	308	309	103	102
Youth earnings during the five calendar years after RA ($)	384	373	402	405	118	123
Youth self-determination score (scale: 0 to 100)	215	179	199	180	65	62
Youth expects to be financially independent at age 25	222	183	213	190	65	66
Youth received SSA payments in Year 5 after RA	384	373	402	405	118	123
Youth total SSA payments in Year 5 after RA ($)	384	373	402	405	118	123
Youth total SSA payments during Years 1–5 after RA ($)	384	373	402	405	118	123
Youth covered by any health insurance	312	284	289	295	102	99
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	384	373	402	405	118	123
Youth income in the past year ($)	322	297	308	309	103	102
Youth total income during the five calendar years after RA ($)	384	373	402	405	118	123
Either parent worked for pay in the past year	313	290	287	303	100	96
Parents' earnings in the past year ($)	313	291	287	303	100	96
Parents' earnings during the five calendar years after RA ($)	375	366	394	403	114	121
Either parent received SSA payments in Year 5 after RA	375	366	394	403	114	121

Outcome	Intellectual or developmental disabilities		Other mental impairments		Other impairments	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Parents' total SSA payments received in Year 5 after RA ($)	375	366	394	403	114	121
Parents' total SSA payments during the five years after RA ($)	375	366	394	403	114	121
Parents' income in the past year ($)	306	284	283	301	96	95
Parents' income during the five calendar years after RA ($)	375	366	394	403	114	121
Either parent is covered by health insurance	312	289	285	301	100	95
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	375	366	394	403	114	121

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the sample size by subgroup for the estimates reported in Appendix Table C.23.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table C.25. Arkansas PROMISE: Impacts on primary outcomes, by whether the survey respondent completed the five-year survey before or during the pandemic (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Before pandemic					During pandemic					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	35.2	-7.5	0.11	196	181	26.7	0.6	0.83	502	488	0.13
Youth has a GED, high school diploma, or certificate of completion	80.3	-2.9	0.49	196	184	78.3	-1.9	0.46	531	521	0.85
Youth employed in a paid job in the past year	47.1	9.3*	0.07	196	184	49.2	0.9	0.77	533	523	0.16
Youth earnings in the past year ($)	4,100	1,208	0.17	196	184	5,597	-505	0.37	533	523	0.10†
Youth self-determination score (scale: 0 to 100)	79.5	-1.1	0.50	158	149	78.3	0.7	0.52	321	272	0.36
Youth expects to be financially independent at age 25	60.1	0.9	0.88	157	145	63.9	0.5	0.90	343	294	0.96
Youth covered by any health insurance	80.3	-6.9	0.12	188	175	81.7	-5.0**	0.05	515	503	0.70
Youth income in the past year ($)	9,105	994	0.22	196	184	9,606	-570	0.30	533	523	0.11
Either parent worked for pay in the past year	64.6	3.1	0.46	201	206	65.5	0.9	0.75	499	483	0.65
Parents' earnings in the past year ($)	20,663	-334	0.88	201	206	17,911	1,332	0.31	499	484	0.52
Parents' income in the past year ($)	25,688	-1,467	0.51	198	202	21,547	1,788	0.16	487	478	0.20
Either parent is covered by health insurance	93.8	-9.0***	0.00	200	203	89.2	-0.6	0.77	497	482	0.02††

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE on outcomes derived from survey data. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We weighted statistics to adjust for survey nonresponse. We defined before the pandemic as before March 13, 2020.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size.

C. Findings from the benefit-cost analysis

In this section, we present findings from the benefit-cost analysis of Arkansas PROMISE. First, we present benefits and costs estimated through the main model. Second, we present the results of sensitivity analyses. Third, we present the projected accrual of net benefits beyond the five-year evaluation period.

1. Benefit-cost estimates

Appendix Table C.26 provides estimates of the program's benefits and indirect costs, the costs of program components, and benefit-cost statistics estimated using the main model described in Appendix B.

Appendix Table C.26. Arkansas PROMISE: Benefits and costs ($) over the five-year evaluation time period, by accounting perspective

Benefit or cost measure	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Panel 1: Quantitative outcome measures						
Youth outcomes						
Earnings	927	0	0	0	0	927
Fringe benefits	235	0	0	0	0	235
Income, payroll, and sales taxes	-178	115	0	147	31	0
Work-related and child care costs	-110	0	0	0	0	-110
SSI benefits	-494	494	0	494	0	0
OASDI benefits	-2	2	0	2	0	0
SSI administrative costs	0	39	0	39	0	39
SSDI administrative costs	0	0	0	0	0	0
Medicaid and Medicare expenditures and administrative costs	134	0	0	-165	20	-11
Education-related costs	118	0	0	0	0	118
Incarceration	0	0	0	0	3,101	3,101
Parent outcomes						
Earnings	-1,140	0	0	0	0	-1,140
Fringe benefits	-289	0	0	0	0	-289
Income, payroll, and sales taxes	272	-141	0	-181	-91	0
Work-related and child care costs	197	0	0	0	0	197
SSI benefits	46	-46	0	-46	0	0
OASDI benefits	319	-319	0	-319	0	0
SSI administrative costs	0	-4	0	-4	0	-4
SSDI administrative costs	0	-6	0	-6	0	-6
Medicaid and Medicare expenditures and administrative costs	2,285	0	0	-2,082	-398	-194

Benefit or cost measure	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Household outcomes						
TANF, SNAP, housing assistance, and related administrative costs	1,770	0	0	-1,825	-110	-165
Total	4,089	134	0	-3,946	2,553	2,696
Panel 2: Costs of program components						
Program administration	0	0	-8,705	-8,705	-47	-8,752
Employment services	0	0	-11,973	-11,973	-68	-12,041
Education services	0	0	-2,280	-2,280	-18	-2,298
Case management services	0	0	-12,451	-12,451	-116	-12,567
Financial and benefits counseling	0	0	-858	-858	-8	-866
Parent training and information services	0	0	-1,601	-1,601	-13	-1,614
Youth self-determination services	0	0	-2,421	-2,421	-19	-2,440
Total	0	0	-40,289	-40,289	-289	-40,578
Panel 3: Benefit-cost statistics						
Net benefits (benefits minus costs)	4,089	134	-40,289	-44,234	2,264	-37,882
Net benefit ratio[b]	n.a.	n.a.	0	-0.10	8.83	0.07

Source: See Appendix Table B.4 for details on the sources and imputation methods for each benefit or cost component.

Note: To construct each component of the benefit-cost analysis, we used the estimated impacts on key outcomes (regardless of whether they were statistically significant), or imputation methods that combined the impact estimates with data from external sources**.** To construct program costs, we used data from program administrative records, financial documents, staff activity logs, and staff interviews. All benefits and costs are dollars per treatment group family over five years and are inflation-adjusted to 2020 dollars and discounted to 2020 present value.

[a] The perspective of the federal government as a whole incorporates the perspectives of SSA, ED, and other federal agencies that might experience benefits or costs because of PROMISE.

[b] Calculated for all key stakeholders as the sum of all quantitative measures in Panel 1, which include benefits and indirect costs, divided by the program costs.

ED = U.S. Department of Education; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; SSDI = Social Security Disability Insurance; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families.

2. Sensitivity analyses

We conducted three analyses to assess the sensitivity of the benefit-cost estimates to changes in the underlying assumptions and methodological choices.

First, we sampled with replacement from the study population 1,000 times to create 1,000 random samples with an equal size as the true sample. For each sample, we calculated the net benefit for each accounting perspective. In Appendix Table C.27, we show the distribution of the resulting 1,000 net benefit estimates. The estimated net benefits for all key stakeholders were negative across the entire distribution, suggesting that our main conclusion (that Arkansas PROMISE did not generate net benefits across all key stakeholders) is robust to sampling variability. The confidence interval on the net benefit estimate for all key stakeholders (-$37,882) ranged from -$45,102 (the 2.5th percentile) to -$31,293 (the 97.5th percentile).

Second, we recalculated the net benefits using only the impact estimates that were significant at the 10 percent level (Appendix Table C.28). From the perspective of all stakeholders, the net benefit was within 5 percent of the estimate from the main analysis and continued to be negative and sizeable.

Third, we considered whether the benefit-cost results were sensitive to the assumptions we used to estimate some of the individual components. In Appendix Table C.28, we show the estimates of net benefits when we applied the alternative assumptions. From the perspective of all stakeholders, net benefits under the alternative assumptions were always within 8 percent of the net benefits estimated under the main analysis, and net benefits were sizeable and negative under each scenario. However, net benefits for Arkansas PROMISE youth and families and for state and local governments were sensitive to the alternative assumptions. For example, net benefits from the perspective of Arkansas PROMISE youth and families ranged from $1,341 (when using a fixed work-related cost measure) to $4,407 (when using a high discount rate). The net benefits from the perspective of state and local governments did not vary much under alternative assumptions, except when we used higher incarceration costs than in the main model.[24] Taken together, these results suggest that our main conclusion for all key stakeholders is robust, but the conclusions for two of the perspectives are sensitive to the assumptions we used.

[24] This scenario assumes that incarceration costs equal the highest state-specific cost (California, $228/day) rather than the national average ($97/day), representing a more than two-fold change in daily incarceration costs.

Appendix Table C.27. Arkansas PROMISE: Sensitivity of net benefits to sampling variability

Estimate of net benefit	PROMISE youth and families	Federal government			State and local government, including PROMISE partners	All key stakeholders
		SSA	ED	Federal government as a whole[a]		
Original estimate	4,089	134	-40,289	-44,234	2,264	-37,882
Min	-7,108	-3,510	-40,408	-51,852	-495	-50,880
2.5th percentile	-1,773	-2,323	-40,349	-48,735	414	-45,102
25th percentile	1,786	-676	-40,308	-45,769	1,560	-40,026
50th percentile	3,970	151	-40,285	-44,093	2,208	-37,853
75th percentile	6,025	904	-40,260	-42,430	2,829	-35,723
97.5th percentile	9,675	2,498	-40,219	-39,320	4,207	-31,293
Max	15,944	3,634	-40,151	-37,239	5,095	-27,822

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: We quantified uncertainty in the estimated net benefits by constructing non-parametric bootstrap confidence intervals. We sampled with replacement from the study population 1,000 times and then re-estimated all cost and benefit parameters for these 1,000 random samples. We then calculated the net benefits for each bootstrap sample. The 2.5th percentile and 97.5th percentile of the resulting values represent the 95 percent confidence interval of the net benefit estimate.

Appendix Table C.28. Arkansas PROMISE: Sensitivity of net benefits to different assumptions in the benefit cost analysis

Assumption	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Main benefit-cost analysis model	4,089	134	-40,289	-44,234	2,264	-37,882
Excluded fringe benefits	4,143	134	-40,289	-44,234	2,264	-37,828
Excluded education tuition costs	4,002	134	-40,289	-44,234	2,264	-37,969
Used higher incarceration costs[b]	4,089	134	-40,289	-44,234	6,443	-33,703
Used a fixed work-related cost measure (non-child care)[c]	1,341	134	-40,289	-44,234	2,264	-40,630
Used a low discount rate[d]	3,736	129	-40,289	-43,987	2,297	-37,954
Used a high discount rate[d]	4,407	138	-40,289	-44,455	2,234	-37,815
Used only statistically significant estimates in the calculation [e]	3,202	200	-40,289	-42,357	2,606	-36,550

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: The inputs for the benefit-cost analysis are based on (1) program costs drawn from program administrative records, financial documents, staff activity logs and staff interviews (2) the estimated impacts on key outcomes (regardless of whether they were statistically significant), or (3) imputation methods that combined the impact estimates with data from external sources. All benefits and costs are dollars per treatment group family over five years and are inflation-adjusted to 2020 dollars and discounted to 2020 present value.

[a] The perspective of the federal government as a whole incorporates the perspectives of SSA, ED, and other federal agencies that might experience benefits or costs because of PROMISE.

[b] We changed incarceration costs from the national average ($97/day) to the highest state-specific cost (California, $228/day).

[c] We changed work-related costs from a multiplier of 10.6% to a fixed cost of $51 dollars per week.

[d] The low discount rate is 1 percent, and the high discount rate is 5 percent.

[e] This sensitivity analysis assigns a value of zero to impact estimates to impacts estimates that were not were significant at the .10 level. (The main analysis and all other sensitivity tests include impact estimates regardless of whether they were statistically significant).

ED = U.S. Department of Education; SSA = Social Security Administration.

3. Long-term forecast

We projected the accrual of net benefits over 10 and 20 years after RA to assess how costs and benefits may change after the five-year evaluation period. We projected the net benefits under three scenarios that varied in their potential returns to youth's education: high returns, diminishing returns, and no returns (Appendix Table C.29). Because Arkansas PROMISE caused a small and nonsignificant decrease in youth's years of education (-0.01 years), the scenario assuming "no returns" to education generates the highest net benefit estimate and the scenario assuming "high returns" to education generates the lowest estimate. Across all scenarios, the forecasted net benefits 10 and 20 years after RA are lower than the net benefits estimated at five years after RA. This is largely because treatment group youth had lower earnings than control group youth in the fourth and fifth years after RA, a disadvantage that gets compounded in the forecast as earnings grow by an annual percentage over time.

We also calculated how large the impact on youth earnings would have to be, assuming all other impacts were the same as in the five-year analysis, for Arkansas PROMISE's benefits to equal the costs in 10 and 20 years after RA (Appendix Figure C.1). The program would need to generate an average annual impact on youth earnings of $6,424 per year to be cost neutral 10 years after RA and $2,003 per year to be cost neutral 20 years after RA. Generating impacts of these sizes is unlikely given that the point estimate of the program's impact on youth earnings in the fifth year after RA was -$57.

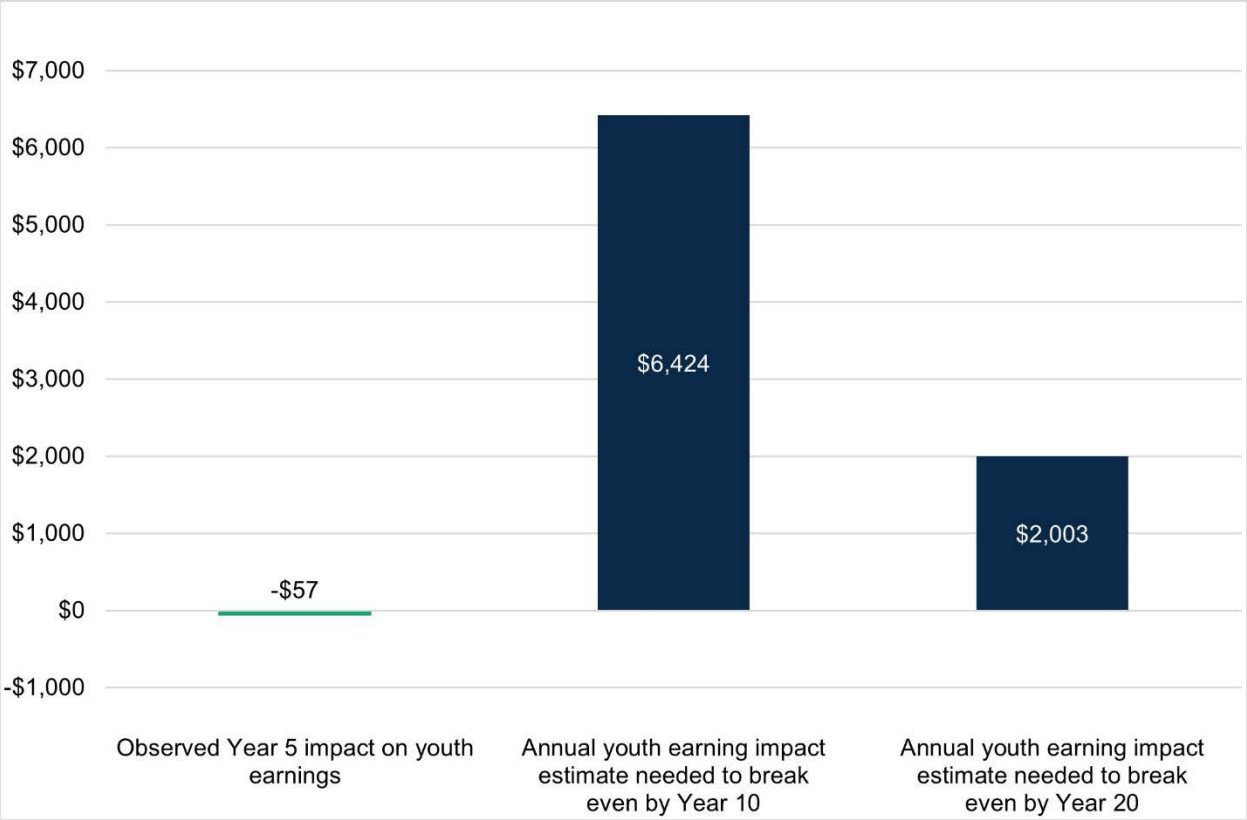
Appendix Table C.29. Arkansas PROMISE: Net benefits ($) to all stakeholders forecast over 10 and 20 years after RA, under different assumptions about the returns to education and using the upper and lower bound of the earnings impact

Assumption	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
10-year forecast						
Returns to education						
Persistent high return to education	2,770	523	-40,289	-45,818	1,948	-41,100
Diminishing return to education	2,788	528	-40,289	-45,812	1,948	-41,075
No return to education	2,800	531	-40,289	-45,808	1,949	-41,060
Confidence interval bounds						
Using upper bound of earnings impact	7,047	1,305	-40,289	-44,871	2,105	-35,719
Using lower bound of earnings impact	-903	-296	-40,289	-46,783	1,808	-45,878
20-year forecast						
Returns to education						
Persistent high return to education	164	962	-40,289	-48,631	1,416	-47,051
Diminishing return to education	254	983	-40,289	-48,606	1,419	-46,933
No return to education	265	986	-40,289	-48,603	1,420	-46,917
Confidence interval bounds						
Using upper bound of earnings impact	14,235	3,434	-40,289	-45,618	1,930	-29,453
Using lower bound of earnings impact	-12,076	-1,479	-40,289	-51,552	960	-62,668

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: To construct each component of the benefit-cost analysis, we used either (1) the impact estimates themselves (regardless of whether they were statistically significant), or (2) imputation methods to combine the impact estimates with data from external sources. To construct program costs, we used data from program administrative records, financial documents, staff activity logs, and staff interviews. All benefits and costs are dollars per treatment group family and are inflation-adjusted to 2020 dollars and discounted to 2020 present value. The 10-year and 20-year projections are based on costs observed from the five-year evaluation period and a forecasting scenario for the five and fifteen following years, respectively, assuming that earnings grow over time. Additionally, the persistent high return to education forecasting scenario assumes a return to education of 10 percent per additional year of schooling; the diminishing returns to education scenario assumes the returns to education are 10 percent in Year 6 and then diminish over time to zero percent in Year 10; and the no return to education scenario assumes no increase over time in the return to education.

Appendix Figure C.1. Arkansas PROMISE: Impacts needed for cost-neutrality from the perspective of all key stakeholders



Note: The first bar shows the estimated impact on youth earnings in Year 5 after RA. The second bar shows the impact on youth earnings needed every year between Years 6 and 10 after RA for the program to be cost neutral 10 years after RA, assuming other benefits and costs are held constant between Years 6 and 10 years after RA. The third bar shows the impact on youth earnings needed every year between Years 6 and 20 after RA for the program to be cost neutral 20 years after RA, assuming other benefits and costs are held constant between Years 6 and 20 after RA. All values are per treatment group family, inflation-adjusted to 2020 dollars, and discounted to 2020 present value.

RA = random assignment.

Appendix D. ASPIRE Impacts, Benefits, and Costs

A. Enrollees and analysis samples

The full research sample for the evaluation of ASPIRE consists of the 1,953 youth who enrolled in the evaluation and were randomly assigned, as well as their families. To assess the extent to which the findings might reflect the baseline characteristics of various samples, we compared differences between (1) the treatment and control groups, (2) survey respondents and nonrespondents, and (3) self-reporting and proxy youth respondents.

1. Differences between the treatment and control groups

We compared 25 baseline characteristics of the treatment and control groups for four samples: all youth survey respondents, all parent survey respondents, all enrollees, and all proxy youth respondents (Appendix Tables D.1–D.4). The similarity of samples across the characteristics examined suggest that RA created treatment and control groups that were equivalent in their baseline characteristics. Although we found statistically significant differences for a few characteristics, they are not concerning for two reasons. First, with a significance level of 10 percent, we expect to reject the null hypothesis that the groups were equivalent for 1 out of every 10 characteristics by chance alone, even when the two groups in fact had no underlying differences. Second, we included characteristics that were significantly different at baseline as covariates in our regression-adjusted impact analyses, allowing us to control for the observed differences.

Appendix Table D.1. ASPIRE: Baseline characteristics of youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.6	33.5	31.7	1.8	0.44
Youth age at RA					0.88
14	37.6	37.4	37.9	-0.6	
15	31.7	32.3	31.1	1.2	
16	30.7	30.4	31.0	-0.6	
Average age at RA	15.4	15.4	15.4	-0.0	0.86
Youth language preference at SSI application					
Prefers English for written language	91.8	91.0	92.5	-1.5	0.27
Prefers English for spoken language	91.3	90.8	91.9	-1.1	0.42
Youth living arrangement at SSI application				†	0.05
In parents' household	83.5	83.5	83.6	-0.1	
Own household or alone	13.6	14.6	12.7	1.9	
Another household and receiving support	2.8	1.9	3.8	-1.9	
Youth race and ethnicity					1.00
Non-Hispanic White	37.7	37.3	38.1	-0.8	
Non-Hispanic Black	11.3	11.1	11.5	-0.4	
Hispanic	37.4	37.9	36.9	1.0	
Non-Hispanic American Indian	5.8	5.9	5.7	0.2	
Non-Hispanic other or mixed race	7.5	7.5	7.5	0.1	
Missing	0.2	0.2	0.2	-0.0	
Enrolling parent age at RA	44.0	43.8	44.2	-0.4	0.39
Parent race and ethnicity					0.11
Non-Hispanic White	45.4	44.2	46.6	-2.4	
Non-Hispanic Black	11.5	10.6	12.4	-1.7	
Hispanic	31.9	33.3	30.6	2.7	
Non-Hispanic American Indian	5.9	5.6	6.3	-0.7	
Non-Hispanic other or mixed race	4.7	6.0	3.4	2.5	
Missing	0.6	0.4	0.7	-0.4	
Disability					
Youth primary impairment					0.47
Intellectual or developmental disability	45.0	46.2	43.9	2.3	
Speech, hearing, or visual impairment	2.3	2.1	2.5	-0.5	
Physical disability	19.1	20.0	18.3	1.7	
Other mental impairment	28.7	26.7	30.6	-3.9	
Other or unknown disability	4.9	5.0	4.7	0.4	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	91.2	91.2	91.2	0.0	0.99
Received OASDI	10.0	11.3	8.7	2.6*	0.08
Years between youth's earliest SSI eligibility and RA	8.8	8.8	8.8	0.0	0.93
Youth age at most recent SSI application	7.2	7.1	7.3	-0.1	0.50
Youth payments in the year before RA ($)					
SSI	7,087	7,060	7,114	-54	0.65
OASDI	298	313	284	28	0.62
Total SSI and OASDI	7,385	7,373	7,398	-25	0.82
Household had multiple SSI-eligible children	17.8	17.8	17.8	-0.1	0.97
Enrolling parent provided a valid SSN at RA	71.3	71.8	70.9	1.0	0.67
Parents included in the administrative data					0.86
None	8.1	7.9	8.3	-0.4	
One parent	49.6	49.1	50.0	-0.9	
Two parents	42.4	43.0	41.7	1.3	
Parent SSA payment status at RA					0.97
Any parent received SSI only	9.1	8.6	9.5	-0.9	
Any parent received OASDI only	9.3	9.5	9.2	0.3	
Any parent received both SSI and OASDI	4.4	4.4	4.5	-0.2	
No parent received any SSA payments	69.1	69.6	68.5	1.1	
No parent was included in the SSA data analyses	8.1	7.9	8.3	-0.4	
Earnings					
Youth had earnings in the calendar year before RA	1.6	1.8	1.4	0.4	0.53
Youth earnings in the calendar year before RA ($)	11	16	7	8	0.15
Parent had earnings in the calendar year before RA	71.9	71.3	72.4	-1.1	0.64
Parent earnings in the calendar year before RA ($)	19,682	19,944	19,422	522	0.64
Number of youth	1,592	797	795		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who completed the PROMISE five-year youth survey. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table D.2. ASPIRE: Baseline characteristics of parent survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.8	33.6	32.0	1.7	0.49
Youth age at RA					0.93
14	37.5	37.4	37.7	-0.3	
15	31.8	32.2	31.4	0.9	
16	30.7	30.4	31.0	-0.6	
Average age at RA	15.4	15.4	15.4	-0.0	0.62
Youth language preference at SSI application					
Prefers English for written language	91.6	91.1	92.1	-1.1	0.44
Prefers English for spoken language	91.1	90.7	91.5	-0.8	0.56
Youth living arrangement at SSI application				††	0.04
In parents' household	84.3	84.0	84.7	-0.7	
Own household or alone	13.1	14.3	11.8	2.5	
Another household and receiving support	2.6	1.7	3.5	-1.8	
Youth race and ethnicity					0.90
Non-Hispanic White	37.7	37.0	38.3	-1.3	
Non-Hispanic Black	10.8	10.3	11.2	-0.9	
Hispanic	37.9	38.2	37.5	0.7	
Non-Hispanic American Indian	5.9	6.5	5.3	1.1	
Non-Hispanic other or mixed race	7.6	7.7	7.5	0.2	
Missing	0.2	0.3	0.1	0.1	
Enrolling parent age at RA	43.6	43.6	43.6	0.0	0.93
Parent race and ethnicity					0.25
Non-Hispanic White	45.5	44.0	46.9	-2.9	
Non-Hispanic Black	11.2	10.3	12.1	-1.8	
Hispanic	32.3	33.4	31.1	2.4	
Non-Hispanic American Indian	6.0	6.0	5.9	0.0	
Non-Hispanic other or mixed race	4.7	5.9	3.6	2.3	
Missing	0.4	0.4	0.4	-0.0	
Disability					
Youth primary impairment					0.43
Intellectual or developmental disability	45.4	46.3	44.4	2.0	
Speech, hearing, or visual impairment	2.4	1.9	2.9	-1.0	
Physical disability	19.2	20.0	18.4	1.7	
Other mental impairment	28.1	26.7	29.6	-2.9	
Other or unknown disability	4.9	5.0	4.8	0.3	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	91.2	91.3	91.1	0.2	0.88
Received OASDI	10.2	11.4	9.1	2.4	0.13
Years between youth's earliest SSI eligibility and RA	8.8	8.8	8.7	0.0	0.85
Youth age at most recent SSI application	7.2	7.1	7.3	-0.2	0.40
Youth payments in the year before RA ($)					
SSI	7,073	7,045	7,101	-56	0.64
OASDI	301	317	285	32	0.58
Total SSI and OASDI	7,374	7,362	7,386	-24	0.83
Household had multiple SSI-eligible children	18.5	18.5	18.6	-0.1	0.95
Enrolling parent provided a valid SSN at RA	71.5	71.9	71.2	0.7	0.75
Parents included in the administrative data					0.95
None	7.8	8.0	7.6	0.4	
One parent	49.5	49.2	49.7	-0.4	
Two parents	42.8	42.8	42.8	0.0	
Parent SSA payment status at RA					0.87
Any parent received SSI only	8.7	8.0	9.5	-1.5	
Any parent received OASDI only	9.5	9.8	9.1	0.6	
Any parent received both SSI and OASDI	4.3	4.4	4.2	0.2	
No parent received any SSA payments	69.8	69.9	69.6	0.2	
No parent was included in the SSA data analyses	7.8	8.0	7.6	0.4	
Earnings					
Youth had earnings in the calendar year before RA	1.7	1.7	1.6	0.1	0.90
Youth earnings in the calendar year before RA ($)	12	15	10	5	0.39
Parent had earnings in the calendar year before RA	72.6	71.8	73.4	-1.6	0.50
Parent earnings in the calendar year before RA ($)	20,031	20,091	19,972	119	0.92
Number of youth	1,547	781	766		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth whose parent completed the PROMISE five-year youth survey. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table D.3. ASPIRE: Baseline characteristics of all youth enrollees (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.8	33.7	31.8	1.9	0.36
Youth age at RA					0.92
14	37.2	37.5	36.8	0.7	
15	32.0	31.6	32.4	-0.8	
16	30.8	30.9	30.8	0.1	
Average age at RA	15.4	15.4	15.4	-0.0	0.67
Youth language preference at SSI application					
Prefers English for written language	92.0	92.3	91.7	0.6	0.60
Prefers English for spoken language	91.7	92.0	91.3	0.7	0.55
Youth living arrangement at SSI application					0.15
In parents' household	83.6	83.9	83.2	0.8	
Own household or alone	13.6	13.9	13.2	0.7	
Another household and receiving support	2.9	2.1	3.6	-1.4	
Youth race and ethnicity					0.88
Non-Hispanic White	37.9	37.4	38.4	-0.9	
Non-Hispanic Black	11.6	11.6	11.6	-0.0	
Hispanic	37.1	36.7	37.4	-0.7	
Non-Hispanic American Indian	6.0	6.6	5.3	1.3	
Non-Hispanic other or mixed race	7.0	7.2	6.9	0.3	
Missing	0.5	0.5	0.4	0.1	
Enrolling parent age at RA	43.9	43.7	44.1	-0.3	0.47
Parent race and ethnicity					0.49
Non-Hispanic White	45.2	44.4	45.9	-1.6	
Non-Hispanic Black	12.0	11.7	12.3	-0.7	
Hispanic	31.4	31.7	31.1	0.6	
Non-Hispanic American Indian	6.2	6.3	6.2	0.2	
Non-Hispanic other or mixed race	4.4	5.2	3.5	1.7	
Missing	0.9	0.7	1.0	-0.3	
Disability					
Youth primary impairment					0.29
Intellectual or developmental disability	44.7	46.1	43.3	2.8	
Speech, hearing, or visual impairment	2.5	2.1	2.8	-0.6	
Physical disability	19.1	19.7	18.5	1.3	
Other mental impairment	28.9	26.9	30.9	-4.0	
Other or unknown disability	4.9	5.1	4.6	0.5	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	91.6	91.8	91.3	0.5	0.67
Received OASDI	10.4	11.9	8.9	2.9**	0.03
Years between youth's earliest SSI eligibility and RA	8.8	8.8	8.7	0.1	0.54
Youth age at most recent SSI application	7.2	7.1	7.3	-0.2	0.30
Youth payments in the year before RA ($)					
SSI	7,117	7,088	7,146	-58	0.58
OASDI	296	307	286	22	0.66
Total SSI and OASDI	7,414	7,396	7,432	-36	0.71
Household had multiple SSI-eligible children	17.7	18.2	17.2	1.0	0.57
Enrolling parent provided a valid SSN at RA	71.2	71.6	70.8	0.8	0.69
Parents included in the administrative data					0.73
None	8.5	8.1	8.9	-0.8	
One parent	49.8	49.6	50.1	-0.5	
Two parents	41.7	42.3	41.0	1.3	
Parent SSA payment status at RA					0.82
Any parent received SSI only	8.7	8.4	9.0	-0.6	
Any parent received OASDI only	9.6	10.2	8.9	1.3	
Any parent received both SSI and OASDI	4.0	4.1	4.0	0.1	
No parent received any SSA payments	69.2	69.2	69.1	0.1	
No parent was included in the SSA data analyses	8.5	8.1	8.9	-0.8	
Earnings					
Youth had earnings in the calendar year before RA	1.4	1.4	1.4	-0.0	0.99
Youth earnings in the calendar year before RA ($)	11	12	11	2	0.76
Parent had earnings in the calendar year before RA	72.3	71.4	73.2	-1.8	0.40
Parent earnings in the calendar year before RA ($)	19,798	19,787	19,808	-21	0.98
Number of youth	1,953	978	975		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who enrolled in PROMISE. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table D.4. ASPIRE: Baseline characteristics of proxy youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	28.2	30.1	26.5	3.6	0.38
Youth age at RA					0.69
14	35.1	37.0	33.3	3.7	
15	33.5	32.7	34.2	-1.5	
16	31.5	30.3	32.5	-2.2	
Average age at RA	15.4	15.4	15.5	-0.1	0.19
Youth language preference at SSI application					
Prefers English for written language	88.1	87.5	88.7	-1.2	0.67
Prefers English for spoken language	87.3	87.5	87.2	0.3	0.93
Youth living arrangement at SSI application					0.17
In parents' household	83.4	85.6	81.3	4.3	
Own household or alone	14.6	13.5	15.6	-2.1	
Another household and receiving support	2.1	0.9	3.1	-2.2	
Youth race and ethnicity					0.87
Non-Hispanic White	35.3	36.0	34.7	1.3	
Non-Hispanic Black	11.9	10.2	13.3	-3.1	
Hispanic	40.5	40.8	40.3	0.5	
Non-Hispanic American Indian	5.0	4.7	5.4	-0.7	
Non-Hispanic other or mixed race	6.9	7.9	6.0	1.9	
Missing	0.4	0.4	0.4	0.0	
Enrolling parent age at RA	44.3	43.8	44.7	-0.9	0.23
Parent race and ethnicity					0.12
Non-Hispanic White	42.7	43.5	41.9	1.6	
Non-Hispanic Black	12.2	10.2	14.0	-3.8	
Hispanic	34.9	34.5	35.3	-0.8	
Non-Hispanic American Indian	5.7	4.7	6.5	-1.8	
Non-Hispanic other or mixed race	4.0	6.3	1.9	4.5	
Missing	0.6	0.8	0.4	0.5	
Disability					
Youth primary impairment					0.71
Intellectual or developmental disability	45.6	45.1	46.1	-1.0	
Speech, hearing, or visual impairment	1.2	1.3	1.2	0.1	
Physical disability	22.1	24.7	19.8	4.9	
Other mental impairment	25.1	23.0	27.0	-3.9	
Other or unknown disability	5.9	5.9	6.0	-0.1	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	91.7	92.4	91.0	1.4	0.58
Received OASDI	10.2	12.1	8.5	3.6	0.20
Years between youth's earliest SSI eligibility and RA	9.3	9.1	9.4	-0.3	0.41
Youth age at most recent SSI application	6.8	6.9	6.8	0.2	0.66
Youth payments in the year before RA ($)					
SSI	7,182	7,158	7,203	-44	0.83
OASDI	307	308	306	2	0.98
Total SSI and OASDI	7,489	7,466	7,509	-42	0.83
Household had multiple SSI-eligible children	14.5	16.8	12.5	4.3	0.17
Enrolling parent provided a valid SSN at RA	69.3	71.3	67.4	3.9	0.35
Parents included in the administrative data					0.59
None	8.7	7.7	9.6	-1.8	
One parent	48.4	47.2	49.4	-2.2	
Two parents	42.9	45.0	41.0	4.0	
Parent SSA payment status at RA					0.88
Any parent received SSI only	6.9	5.9	7.7	-1.7	
Any parent received OASDI only	9.7	9.8	9.7	0.2	
Any parent received both SSI and OASDI	4.1	4.2	3.9	0.3	
No parent received any SSA payments	70.6	72.3	69.2	3.1	
No parent was included in the SSA data analyses	8.7	7.7	9.6	-1.8	
Earnings					
Youth had earnings in the calendar year before RA	0.4	0.0	0.8	-0.8	0.16
Youth earnings in the calendar year before RA ($)	99	0	2	-2	0.23
Parent had earnings in the calendar year before RA	72.1	70.6	73.6	-3.0	0.48
Parent earnings in the calendar year before RA ($)	20,565	20,259	20,846	-587	0.78
Number of youth	496	237	259		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who completed the PROMISE five-year youth survey by proxy. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

2. Differences between survey respondents and nonrespondents

We compared youth and parent survey respondents with nonrespondents across 25 baseline characteristics to assess the extent to which survey nonresponse might limit generalizability of the impact findings to all evaluation enrollees (Appendix Tables D.5 and D.6). Youth survey respondents differed from nonrespondents with respect to youth's spoken language preference. Parent survey respondents differed from nonrespondents with respect to youth's written and spoken language preferences, the years between youth's earliest SSI eligibility and RA, youth age at most recent SSI application, youth's SSI and total benefits in the year before RA, the share of youth with earnings in the year before RA, and parents' earnings in the year before RA. Overall, even when the differences were statistically significant, they generally were small. The extent and magnitude of the differences suggested that the respondents were not markedly different from the nonrespondents. To account for survey nonresponse, we calculated and used survey weights in all regression models to estimate impacts on the survey-based outcome measures.

Appendix Table D.5. ASPIRE: Baseline characteristics of youth survey respondents and nonrespondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.8	32.7	33.2	-0.6	0.83
Youth age at RA					0.58
14	37.2	37.7	34.9	2.8	
15	32.0	31.6	33.8	-2.2	
16	30.8	30.7	31.3	-0.6	
Average age at RA	15.4	15.4	15.4	-0.0	0.56
Youth language preference at SSI application					
Prefers English for written language	92.0	91.6	93.6	-2.0	0.17
Prefers English for spoken language	91.7	91.2	93.6	-2.4*	0.10
Youth living arrangement at SSI application					0.93
In parents' household	83.6	83.5	83.9	-0.5	
Own household or alone	13.6	13.7	13.0	0.7	
Another household and receiving support	2.9	2.8	3.0	-0.2	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	37.9	38.4	35.5	3.0	
Non-Hispanic Black	11.6	10.4	16.9	-6.5	
Hispanic	37.1	37.6	34.9	2.7	
Non-Hispanic American Indian	6.0	5.9	6.4	-0.5	
Non-Hispanic other or mixed race	7.0	7.5	5.0	2.5	
Missing	0.5	0.3	1.4	-1.1	
Enrolling parent age at RA	43.9	44.0	43.3	0.7	0.25
Parent race and ethnicity				†††	0.00
Non-Hispanic White	45.2	46.2	40.7	5.4	
Non-Hispanic Black	12.0	10.6	18.0	-7.4	
Hispanic	31.4	32.0	28.5	3.5	
Non-Hispanic American Indian	6.2	6.0	7.5	-1.5	
Non-Hispanic other or mixed race	4.4	4.6	3.0	1.6	
Missing	0.9	0.6	2.2	-1.7	
Disability					
Youth primary impairment					0.60
Intellectual or developmental disability	44.7	45.2	42.4	2.8	
Speech, hearing, or visual impairment	2.5	2.3	3.3	-1.1	
Physical disability	19.1	19.2	18.8	0.3	
Other mental impairment	28.9	28.4	31.0	-2.6	
Other or unknown disability	4.9	5.0	4.4	0.5	

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	91.6	91.2	93.1	-1.9	0.22
Received OASDI	10.4	10.0	12.2	-2.2	0.24
Years between youth's earliest SSI eligibility and RA	8.8	8.8	8.5	0.3	0.20
Youth age at most recent SSI application	7.2	7.2	7.5	-0.3	0.17
Youth payments in the year before RA ($)					
SSI	7,117	7,086	7,254	-168	0.19
OASDI	296	298	289	9	0.88
Total SSI and OASDI	7,414	7,384	7,543	-159	0.20
Household had multiple SSI-eligible children	17.7	18.2	15.6	2.7	0.21
Enrolling parent provided a valid SSN at RA	71.2	71.3	70.6	0.7	0.80
Parents included in the administrative data				†	0.07
None	8.5	8.0	10.5	-2.5	
One parent	49.8	49.2	52.6	-3.4	
Two parents	41.7	42.8	36.8	5.9	
Parent SSA payment status at RA					0.12
Any parent received SSI only	8.7	9.0	7.2	1.8	
Any parent received OASDI only	9.6	9.4	10.5	-1.2	
Any parent received both SSI and OASDI	4.0	4.5	2.2	2.2	
No parent received any SSA payments	69.2	69.1	69.5	-0.4	
No parent was included in the SSA data analyses	8.5	8.0	10.5	-2.5	
Earnings					
Youth had earnings in the calendar year before RA	1.4	1.6	0.8	0.7	0.20
Youth earnings in the calendar year before RA ($)	11	11	13	-2	0.80
Parent had earnings in the calendar year before RA	72.3	71.9	74.0	-2.1	0.45
Parent earnings in the calendar year before RA ($)	19,798	19,779	19,882	-103	0.93
Number of youth	1,953	1,592	361		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who enrolled in PROMISE. Nonrespondents include youth ineligible for the survey because they died or withdrew from the study. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table D.6. ASPIRE: Baseline characteristics of parent survey respondents and nonrespondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.8	32.8	32.5	0.3	0.90
Youth age at RA					0.43
14	37.2	37.9	34.5	3.4	
15	32.0	31.8	32.8	-1.0	
16	30.8	30.3	32.8	-2.4	
Average age at RA	15.4	15.4	15.4	-0.1	0.26
Youth language preference at SSI application					
Prefers English for written language	92.0	91.3	94.6	-3.2**	0.02
Prefers English for spoken language	91.7	90.8	94.8	-4.0***	0.00
Youth living arrangement at SSI application					0.35
In parents' household	83.6	83.8	82.8	1.0	
Own household or alone	13.6	13.6	13.3	0.3	
Another household and receiving support	2.9	2.6	3.9	-1.4	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	37.9	38.3	36.2	2.1	
Non-Hispanic Black	11.6	10.3	16.3	-5.9	
Hispanic	37.1	37.8	34.2	3.6	
Non-Hispanic American Indian	6.0	5.8	6.7	-0.8	
Non-Hispanic other or mixed race	7.0	7.5	5.2	2.3	
Missing	0.5	0.2	1.5	-1.3	
Enrolling parent age at RA	43.9	43.7	44.7	-1.0	0.15
Parent race and ethnicity				†††	0.00
Non-Hispanic White	45.2	46.2	41.1	5.1	
Non-Hispanic Black	12.0	10.8	16.5	-5.7	
Hispanic	31.4	32.3	28.1	4.2	
Non-Hispanic American Indian	6.2	5.8	7.9	-2.1	
Non-Hispanic other or mixed race	4.4	4.5	3.7	0.8	
Missing	0.9	0.4	2.7	-2.3	
Disability					
Youth primary impairment					0.29
Intellectual or developmental disability	44.7	45.4	42.1	3.3	
Speech, hearing, or visual impairment	2.5	2.4	2.7	-0.3	
Physical disability	19.1	19.3	18.2	1.1	
Other mental impairment	28.9	27.8	33.0	-5.2	
Other or unknown disability	4.9	5.1	3.9	1.2	

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	91.6	91.3	92.6	-1.3	0.37
Received OASDI	10.4	10.2	11.1	-0.9	0.62
Years between youth's earliest SSI eligibility and RA	8.8	8.8	8.5	0.4*	0.09
Youth age at most recent SSI application	7.2	7.1	7.6	-0.4*	0.06
Youth payments in the year before RA ($)					
SSI	7,117	7,075	7,280	-205*	0.09
OASDI	296	300	283	17	0.78
Total SSI and OASDI	7,414	7,374	7,563	-188*	0.10
Household had multiple SSI-eligible children	17.7	18.2	15.8	2.4	0.24
Enrolling parent provided a valid SSN at RA	71.2	71.3	70.7	0.6	0.81
Parents included in the administrative data				†††	0.00
None	8.5	8.0	10.3	-2.3	
One parent	49.8	48.4	55.2	-6.8	
Two parents	41.7	43.6	34.5	9.1	
Parent SSA payment status at RA					0.46
Any parent received SSI only	8.7	8.7	8.9	-0.2	
Any parent received OASDI only	9.6	9.6	9.6	-0.0	
Any parent received both SSI and OASDI	4.0	4.3	3.0	1.4	
No parent received any SSA payments	69.2	69.4	68.2	1.2	
No parent was included in the SSA data analyses	8.5	8.0	10.3	-2.3	
Earnings					
Youth had earnings in the calendar year before RA	1.4	1.6	0.7	0.9*	0.10
Youth earnings in the calendar year before RA ($)	11	12	10	2	0.81
Parent had earnings in the calendar year before RA	72.3	72.7	70.6	2.1	0.42
Parent earnings in the calendar year before RA ($)	19,798	20,226	18,122	2,104*	0.07
Number of youth	1,953	1,547	406		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes the parents who were eligible for the survey. Nonrespondents include parents ineligible for the survey because they died or withdrew from the study. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

3. Differences between self-reporting and proxy youth respondents

We compared the baseline characteristics of youth who self-responded to the survey to those who responded via proxies to assess whether systematically missing data from different survey modes might affect the estimated impacts on survey-based outcomes (Appendix Table D.7). We found differences in 7 of 25 baseline characteristics by survey response type. Compared with self-respondents, youth who responded by proxy were less likely to be female, prefer English as a spoken or written language, live in a household with multiple SSI-eligible children, and be employed in the year before RA; they had lower average earnings in the year before RA, more years between earliest SSI eligibility and RA, and were younger at the time of their most recent SSI application. Because of these differences, findings on survey-based outcomes that are available only for self-respondents might not generalize to all survey respondents.

Appendix Table D.7. ASPIRE: Baseline characteristics of proxy and self-reporting youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Proxy respondent (B)	Self-reporting respondent (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.6	28.2	34.6	-6.3**	0.01
Youth age at RA					0.35
14	37.6	35.1	38.8	-3.7	
15	31.7	33.5	30.9	2.6	
16	30.7	31.5	30.3	1.1	
Average age at RA	15.4	15.4	15.4	0.0	0.44
Youth language preference at SSI application					
Prefers English for written language	91.8	88.1	93.4	-5.3***	0.00
Prefers English for spoken language	91.3	87.3	93.1	-5.8***	0.00
Youth living arrangement at SSI application					0.36
In parents' household	83.5	83.4	83.6	-0.3	
Own household or alone	13.6	14.6	13.2	1.4	
Another household and receiving support	2.8	2.1	3.2	-1.1	
Youth race and ethnicity					0.43
Non-Hispanic White	37.7	35.3	38.8	-3.5	
Non-Hispanic Black	11.3	11.9	11.1	0.8	
Hispanic	37.4	40.5	36.0	4.6	
Non-Hispanic American Indian	5.8	5.0	6.2	-1.2	
Non-Hispanic other or mixed race	7.5	6.9	7.7	-0.8	
Missing	0.2	0.4	0.2	0.2	
Enrolling parent age at RA	44.0	44.3	43.9	0.3	0.51
Parent race and ethnicity					0.50
Non-Hispanic White	45.4	42.7	46.6	-3.9	
Non-Hispanic Black	11.5	12.2	11.2	1.0	
Hispanic	31.9	34.9	30.6	4.4	
Non-Hispanic American Indian	5.9	5.7	6.1	-0.4	
Non-Hispanic other or mixed race	4.7	4.0	5.0	-1.1	
Missing	0.6	0.6	0.5	0.1	
Disability					
Youth primary impairment				††	0.02
Intellectual or developmental disability	45.0	45.6	44.7	0.9	
Speech, hearing, or visual impairment	2.3	1.2	2.8	-1.5	
Physical disability	19.1	22.1	17.8	4.3	
Other mental impairment	28.7	25.1	30.3	-5.2	
Other or unknown disability	4.9	5.9	4.4	1.5	

Baseline characteristic	All (A)	Proxy respondent (B)	Self-reporting respondent (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	91.2	91.7	90.9	0.7	0.64
Received OASDI	10.0	10.2	9.9	0.3	0.84
Years between youth's earliest SSI eligibility and RA	8.8	9.3	8.6	0.7***	0.00
Youth age at most recent SSI application	7.2	6.8	7.4	-0.5**	0.03
Youth payments in the year before RA ($)					
SSI	7,087	7,182	7,045	137	0.27
OASDI	298	307	294	12	0.84
Total SSI and OASDI	7,385	7,489	7,339	149	0.21
Household had multiple SSI-eligible children	17.8	14.5	19.3	-4.8**	0.02
Enrolling parent provided a valid SSN at RA	71.3	69.3	72.3	-3.0	0.22
Parents included in the administrative data					0.74
None	8.1	8.7	7.8	0.9	
One parent	49.6	48.4	50.1	-1.7	
Two parents	42.4	42.9	42.1	0.8	
Parent SSA payment status at RA					0.31
Any parent received SSI only	9.1	6.9	10.1	-3.2	
Any parent received OASDI only	9.3	9.7	9.2	0.6	
Any parent received both SSI and OASDI	4.4	4.1	4.6	-0.5	
No parent received any SSA payments	69.1	70.6	68.4	2.3	
No parent was included in the SSA data analyses	8.1	8.7	7.8	0.9	
Earnings					
Youth had earnings in the calendar year before RA	1.6	0.4	2.2	-1.7***	0.00
Youth earnings in the calendar year before RA ($)	11	1	16	-15***	0.00
Parent had earnings in the calendar year before RA	71.9	72.1	71.8	0.4	0.89
Parent earnings in the calendar year before RA ($)	19,682	20,565	19,290	1,275	0.30
Number of youth	1,592	496	1,096		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all PROMISE five-year youth survey respondents. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

B. Findings from the impact analysis

In this section, we present findings from the impact analysis of ASPIRE. First, we present impacts estimated through the main models. Second, we present the results of sensitivity analyses. Third, we present impacts for key subgroups of evaluation enrollees.

1. Impact estimates

Appendix Tables D.8–D.17 provide results and inference statistics for the regression-adjusted impacts estimated through the main models described in Appendix B. For each outcome measure, we report the estimated regression-adjusted impact; the control group mean (weighted, as applicable); and additional inference statistics, such as standard errors, effect sizes, and sample sizes by treatment status.

Appendix Table D.8. ASPIRE: Impact on the youth's education and training (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group sample size	Control group sample size
Primary outcomes							
Enrolled in an educational or training program	38.7	0.4	0.86	2.4	0.011	775	775
Has a GED, high school diploma, or certificate of completion	74.1	-4.0*	0.07	2.2	-0.122	791	792
Supplementary outcomes							
Enrolled in postsecondary education	11.9	0.9	0.61	1.7	0.048	779	786
Type of school attending							
High school serving a variety of students	8.9	2.0	0.18	1.5	0.133	779	786
High school serving only students with disabilities	4.8	-0.2	0.83	1.0	-0.030	779	786
GED program or other adult education program	3.2	-1.9***	0.01	0.7	-0.559	779	786
Postsecondary vocational, trade, or technical school	2.7	0.3	0.70	0.8	0.071	779	786
Postsecondary college or advanced degree program	9.2	0.5	0.72	1.5	0.037	779	786
Other type of school	3.3	-0.8	0.34	0.8	-0.167	779	786
Not attending school	67.9	0.1	0.97	2.3	0.002	779	786
Highest grade completed							
Lower than 12th grade	20.7	2.9	0.15	2.1	0.103	797	795
12th grade or senior in high school	69.7	-4.8**	0.04	2.4	-0.133	797	795
Some or all of college or university	6.7	2.4*	0.08	1.4	0.202	797	795
Other or do not know	2.9	-0.5	0.55	0.8	-0.114	797	795
Enrolled in a training program	10.4	0.9	0.57	1.6	0.057	759	768
Received any training credential in the past year	6.6	2.6*	0.06	1.4	0.217	786	785
Any school suspensions or expulsions in the past year	1.2	1.3*	0.06	0.7	0.454	761	768

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group sample size	Control group sample size
Accommodations							
Receives educational accommodation	23.7	-0.7	0.74	2.0	-0.023	781	784
Receives training accommodation	6.7	0.1	0.93	1.3	0.010	758	767
Received supports or services for postsecondary education in the past year	26.3	-2.9	0.18	2.2	-0.095	786	788

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

GED = General Educational Development.

Appendix Table D.9. ASPIRE: Impact on the youth's employment and earnings (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Employed in a paid job in the past year[a]	43.1	-0.6	0.81	2.4	-0.014	797	795
Earnings in the past year ($)	4,984	110	0.81	461	0.012	797	795
Earnings during the five calendar years after RA ($)	12,892	-582	0.51	880	-0.028	978	975
Supplementary outcomes							
Employment in the past year							
Any employment	48.4	1.8	0.45	2.4	0.045	797	795
Weekly hours worked	7.7	0.2	0.74	0.7	0.016	797	795
Employed in a paid job offering fringe benefits	24.6	3.2	0.16	2.3	0.100	797	795
Employment settings							
Integrated	35.2	-2.9	0.21	2.3	-0.079	797	795
Outside of school-sponsored activities	39.4	-0.7	0.78	2.4	-0.017	797	795
With coaching	6.8	2.2	0.12	1.4	0.188	797	795
Received supports or services in getting or keeping a job	20.9	1.4	0.50	2.0	0.049	788	789
Employment at the time of the survey							
Any paid employment	28.1	-1.1	0.63	2.2	-0.033	797	795
Average weekly earnings ($)	99	-5	0.57	10	-0.028	797	795
Weekly hours worked	7.9	-0.3	0.67	0.7	-0.021	797	795
Labor force participation	49.9	2.5	0.31	2.4	0.060	797	795
Employment and earnings in calendar years after RA							
Ever employed in Year 1	14.3	2.5*	0.09	1.5	0.117	978	975
Ever employed in Year 2	27.5	2.7	0.15	1.9	0.081	978	975
Ever employed in Year 3	37.0	2.1	0.29	2.0	0.055	978	975
Ever employed in Year 4	44.5	2.2	0.30	2.1	0.053	978	975
Ever employed in Year 5	47.2	-0.6	0.77	2.1	-0.015	978	975
Ever employed during Years 1-5	59.1	1.8	0.37	2.0	0.046	978	975
Earnings in Year 1 ($)	348	32	0.56	56	0.025	978	975

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Earnings in Year 2 ($)	980	-108	0.31	107	-0.044	978	975
Earnings in Year 3 ($)	2,216	-29	0.89	202	-0.006	978	975
Earnings in Year 4 ($)	3,902	-75	0.80	301	-0.011	978	975
Earnings in Year 5 ($)	5,447	-403	0.30	385	-0.045	978	975
VR services during the 5 years after RA[a]							
Applied for VR services	25.9	15.2***	0.00	2.0	0.419	978	975
Received VR services	20.6	13.5***	0.00	1.9	0.418	978	975

Source: PROMISE five-year survey, RSA-911 data (VR service outcomes), and SSA administrative records (employment and earnings in years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] RSA-911 data are available only through 2020. VR services outcomes used only four years of data for youth who enrolled in PROMISE in 2016.

N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration; VR = vocational rehabilitation.

Appendix Table D.10. ASPIRE: Impact on the youth's self-determination and expectations (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Self-determination score (scale: 0 to 100)[a]	79.5	-0.6	0.48	0.9	-0.044	528	517
Youth expects to be financially independent at age 25	56.1	-0.0	0.99	3.0	-0.001	539	526
Supplementary outcomes							
Scores on subdomains of self-determination[a]							
Autonomy (scale: 0 to 300)	147.7	-1.3	0.73	3.6	-0.022	531	518
Psychological empowerment (scale: 0 to 100)	88.5	-0.6	0.57	1.1	-0.035	529	518
Self-realization (scale: 0 to 100)	91.2	-0.5	0.62	1.0	-0.031	530	516
Agentic action (scale: 0 to 100)	89.4	-1.0	0.46	1.4	-0.046	527	513
Youth expects to:							
Get postsecondary education (beyond high school/GED)	55.3	-4.0	0.18	3.0	-0.097	531	510
Live independently at age 25	60.1	0.1	0.96	2.9	0.004	532	515
Be employed in a paid job at age 25	87.5	-1.1	0.57	2.0	-0.060	548	529
Parent expects youth to:							
Get postsecondary education (beyond high school/GED)	40.1	-1.1	0.66	2.5	-0.027	747	719
Live independently at age 25	34.8	-1.5	0.52	2.3	-0.040	740	724
Be financially independent at age 25	37.9	-2.4	0.32	2.4	-0.062	755	733
Be employed in a paid job at age 25	76.4	0.1	0.95	2.0	0.004	755	735
Parent believes it important that youth be employed eventually	86.4	3.4**	0.03	1.5	0.199	730	724

Source: PROMISE five-year survey.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] Higher scores on the scales indicate higher levels of self-determination.

GED = General Educational Development; N = sample size.

Appendix Table D.11. ASPIRE: Impact on the youth's SSA payments and knowledge (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Received SSA payments in Year 5 after RA	66.5	-0.3	0.88	2.0	-0.009	978	975
Total SSA payments in Year 5 after RA ($)	5,313	43	0.81	182	0.010	978	975
Total SSA payments during Years 1–5 after RA ($)	31,502	177	0.77	600	0.012	978	975
Supplementary outcomes							
Aware of the following SSA policies							
Children receiving SSI are not automatically eligible for SSI as adults	44.6	-4.3	0.16	3.1	-0.107	529	518
People receiving SSI can work for pay	73.8	-2.1	0.45	2.7	-0.063	529	518
People receiving SSI must report earnings to SSA	77.8	0.4	0.88	2.6	0.014	529	518
Aware of the following work supports							
SSI Student Earned Income Exclusion	7.7	5.4***	0.00	1.9	0.358	529	518
SSI earned income exclusion	8.6	1.5	0.40	1.8	0.110	529	518
SSI PASS plan	6.6	6.4***	0.00	1.8	0.452	529	518
ABLE account	8.3	44.6***	0.00	2.5	1.527	529	518
SSA payments in years after RA							
Received any in Year 1	95.2	0.0	1.00	0.9	0.001	978	975
Received any in Year 2	88.0	-1.0	0.50	1.4	-0.054	978	975
Received any in Year 3	81.9	-0.6	0.72	1.7	-0.024	978	975
Received any in Year 4	73.2	0.4	0.85	1.9	0.011	978	975
Received any in Years 1–5	96.8	0.1	0.92	0.8	0.015	978	975
Amount in Year 1 ($)	7,526	4	0.97	97	0.001	978	975
Amount in Year 2 ($)	6,805	-19	0.89	135	-0.006	978	975
Amount in Year 3 ($)	6,248	42	0.79	158	0.011	978	975
Amount in Year 4 ($)	5,609	108	0.53	173	0.027	978	975

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
SSI payments in years after RA							
Received any in Year 1	93.8	0.9	0.35	1.0	0.107	978	975
Received any in Year 2	85.2	0.4	0.78	1.5	0.021	978	975
Received any in Year 3	78.3	1.2	0.49	1.8	0.045	978	975
Received any in Year 4	70.6	1.0	0.62	2.0	0.029	978	975
Received any in Year 5	64.1	0.2	0.92	2.1	0.006	978	975
Received any in Years 1–5	95.9	0.8	0.37	0.8	0.129	978	975
Amount in Year 1 ($)	7,165	30	0.77	103	0.010	978	975
Amount in Year 2 ($)	6,353	24	0.86	138	0.007	978	975
Amount in Year 3 ($)	5,842	73	0.65	160	0.019	978	975
Amount in Year 4 ($)	5,205	148	0.39	173	0.037	978	975
Amount in Year 5 ($)	4,882	74	0.68	180	0.018	978	975
Total amount during Years 1–5 ($)	29,446	349	0.57	612	0.023	978	975
OASDI benefits in years after RA							
Received any in Year 1	9.6	0.2	0.65	0.4	0.012	978	975
Received any in Year 2	10.8	0.2	0.81	0.6	0.009	978	975
Received any in Year 3	10.2	0.3	0.76	0.9	0.019	978	975
Received any in Year 4	8.7	-0.1	0.93	1.0	-0.007	978	975
Received any in Year 5	8.2	-0.5	0.66	1.1	-0.040	978	975
Received any in Years 1–5	13.7	0.2	0.84	1.0	0.010	978	975
Amount in Year 1 ($)	361	-26	0.57	45	-0.018	978	975
Amount in Year 2 ($)	453	-43	0.49	63	-0.025	978	975
Amount in Year 3 ($)	407	-31	0.62	62	-0.019	978	975
Amount in Year 4 ($)	404	-41	0.56	70	-0.024	978	975
Amount in Year 5 ($)	432	-31	0.69	78	-0.017	978	975
Total amount during Years 1–5 ($)	2,056	-171	0.53	271	-0.023	978	975

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Age-18 redetermination status five years after RA							
Final decision: benefits ceased	16.6	-1.0	0.52	1.6	-0.046	978	975
Final decision: benefits continued	42.8	1.0	0.62	2.1	0.025	978	975
Final decision is pending	5.4	-0.1	0.89	1.0	-0.016	978	975
Did not have an age-18 redetermination	35.2	0.1	0.95	2.1	0.003	978	975

Source: SSA administrative records and PROMISE five-year survey (awareness of work supports and SSA policies).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

ABLE = Achieving a Better Life Experience; OASDI = Old-Age, Survivors, and Disability Insurance; PASS = Plan for Achieving Self Support; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table D.12. ASPIRE: Impact on the youth's health insurance coverage and expenditures (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Covered by any health insurance	89.3	-1.9	0.24	1.6	-0.114	773	777
Average monthly Medicaid and Medicare expenditures in the five years after RA ($)	1,760	-21	0.66	47	-0.011	978	975
Supplementary outcomes							
Covered by private health insurance	13.7	-0.2	0.92	1.7	-0.009	773	777
Covered by private health insurance purchased through an ACA health exchange	0.1	0.0	0.97	0.2	0.029	773	777
Medicaid and Medicare participation in years after RA							
Ever enrolled in Year 1	96.7	1.3*	0.07	0.7	0.315	978	975
Ever enrolled in Year 2	95.9	0.1	0.89	0.9	0.020	978	975
Ever enrolled in Year 3	93.6	1.1	0.27	1.0	0.128	978	975
Ever enrolled in Year 4	89.7	0.9	0.49	1.3	0.063	978	975
Ever enrolled in Year 5	85.5	2.1	0.16	1.5	0.112	978	975
Percentage of months enrolled in Years 1–5	88.4	1.5	0.12	0.9	0.067	978	975
Average monthly Medicaid and Medicare expenditures in years after RA							
Year 1 ($)	1,594	3	0.92	32	0.002	978	975
Year 2 ($)	2,007	-48	0.36	53	-0.023	978	975
Year 3 ($)	1,896	16	0.81	68	0.007	978	975
Year 4 ($)	1,707	-36	0.59	68	-0.017	978	975
Year 5 ($)	1,595	-41	0.56	70	-0.020	978	975
Medicaid participation in years after RA							
Ever enrolled in Year 1	96.7	1.3*	0.07	0.7	0.315	978	975
Ever enrolled in Year 2	95.9	0.1	0.89	0.9	0.020	978	975
Ever enrolled in Year 3	93.6	1.1	0.27	1.0	0.128	978	975
Ever enrolled in Year 4	89.7	0.8	0.53	1.3	0.057	978	975
Ever enrolled in Year 5	85.3	2.0	0.18	1.5	0.104	978	975
Percentage of months enrolled in Years 1–5	88.3	1.4	0.13	0.9	0.065	978	975

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Average monthly Medicaid expenditures in years after RA							
Year 1 ($)	1,590	3	0.94	33	0.002	978	975
Year 2 ($)	2,006	-55	0.30	54	-0.026	978	975
Year 3 ($)	1,896	8	0.90	68	0.004	978	975
Year 4 ($)	1,698	-35	0.61	67	-0.016	978	975
Year 5 ($)	1,579	-40	0.55	67	-0.020	978	975
Years 1–5 ($)	1,754	-24	0.61	47	-0.013	978	975
Medicare participation in years after RA							
Ever enrolled in Year 1	0.1	-0.0	0.84	0.1	-0.201	978	975
Ever enrolled in Year 2	0.1	0.1	0.72	0.2	0.285	978	975
Ever enrolled in Year 3	0.0	0.3*	0.08	0.2		978	975
Ever enrolled in Year 4	2.2	-0.1	0.90	0.7	-0.024	978	975
Ever enrolled in Year 5	4.5	-0.3	0.73	0.9	-0.045	978	975
Percentage of months enrolled in Years 1–5	0.9	0.0	0.99	0.2	0.000	978	975
Average monthly Medicare expenditures in years after RA							
Year 1 ($)	4	1	0.90	7	0.005	978	975
Year 2 ($)	1	7	0.27	6	0.042	978	975
Year 3 ($)	0	8	0.16	6	0.054	978	975
Year 4 ($)	9	-2	0.89	12	-0.007	978	975
Year 5 ($)	17	-1	0.96	16	-0.002	978	975
Years 1–5 ($)	6	3	0.71	7	0.017	978	975

Source: CMS administrative records and PROMISE five-year survey (non-Medicare/Medicaid outcomes).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

ACA = Affordable Care Act; CMS = Centers for Medicare & Medicaid Services; N = sample size; RA = random assignment.

Appendix Table D.13. ASPIRE: Impact on the youth's economic and social well-being (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Total income in the past year ($)	10,570	89	0.83	422	0.011	797	795
Total income during the five calendar years after RA ($)	45,513	-324	0.71	856	-0.016	978	975
Supplementary outcomes							
Engaging in productive market activities[a]	72.1	0.1	0.95	2.3	0.004	786	786
Income in calendar years after RA							
Year 1 ($)	7,954	76	0.57	136	0.021	978	975
Year 2 ($)	7,979	-105	0.53	167	-0.026	978	975
Year 3 ($)	8,610	70	0.75	219	0.014	978	975
Year 4 ($)	9,845	19	0.95	285	0.003	978	975
Year 5 ($)	11,124	-384	0.27	347	-0.049	978	975
Household income in the past year ($)[b]	35,244	-809	0.51	1,235	-0.035	681	692
Household receives TANF, SNAP, or housing assistance[b]	36.1	2.3	0.37	2.5	0.060	707	707
Amount of public assistance in the past month							
TANF ($)[b]	3	8**	0.03	4	0.127	711	709
SNAP benefits ($)[b]	107	19*	0.10	12	0.089	715	710
Housing assistance ($)[b]	87	-4	0.79	14	-0.014	709	710
Family structure and living arrangements							
Living independently	13.7	1.6	0.36	1.8	0.078	795	793
Married or in a marriage-like relationship	5.2	1.6	0.19	1.2	0.172	757	769
Responsible for a child or children	5.5	0.5	0.67	1.2	0.056	758	767
Engagement with the criminal justice system							
Ever arrested	12.2	-0.6	0.71	1.6	-0.034	757	768
Number of times arrested	0.3	-0.0	0.71	0.1	-0.019	757	768
Arrested in the past year	3.9	-0.8	0.41	0.9	-0.141	757	767
Ever incarcerated	3.7	-0.2	0.82	0.9	-0.038	754	763
Length of incarceration (days)	12.2	-1.1	0.86	6.3	-0.009	754	763

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Self-reported health status							
Poor	4.1	1.0	0.36	1.1	0.139	756	768
Fair	16.3	-0.3	0.87	1.9	-0.014	756	768
Good	36.1	2.1	0.40	2.5	0.054	756	768
Very good or excellent	43.5	-2.8	0.28	2.5	-0.069	756	768
Received help in getting accommodations for school, work, or living independently in past year	20.5	0.1	0.95	2.0	0.005	788	790

Source: PROMISE five-year surveys and SSA administrative records (SSA payments and income in calendar years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] Productive market activities include engaging in any of the following at the time of the five-year survey: employment in paid or unpaid work, looking for work, or enrollment in school or a training program.

[b] This outcome is based on data from the parent survey about the parent's household if the youth lived with the parent at interview.

N = sample size; RA = random assignment; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; TANF = Temporary Assistance for Needy Families.

Appendix Table D.14. ASPIRE: Impact on the parents' employment and earnings (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent worked for pay in the past year	69.1	0.2	0.92	2.2	0.006	779	765
Parents' earnings in the past year ($)	28,252	-434	0.77	1,455	-0.014	779	765
Parents' earnings during the five calendar years after RA ($)	130,465	-2,813	0.41	3,443	-0.022	899	888
Supplementary outcomes							
Highest educational attainment achieved by either parent							
Not a high school graduate	17.6	-1.8	0.33	1.8	-0.079	781	766
High school diploma or GED	30.1	-0.8	0.72	2.4	-0.024	781	766
Some postsecondary education or more	50.9	2.6	0.29	2.5	0.064	781	766
Other or do not know	1.4	0.0	0.96	0.6	0.014	781	766
Employment in the past year							
Number of parents that worked for pay	0.9	-0.0	0.78	0.0	-0.013	777	765
Number of weeks worked	41.6	0.1	0.95	1.6	0.003	777	765
Weekly hours worked	33.4	-0.8	0.56	1.3	-0.027	779	765
Either parent was offered fringe benefits through a job	50.3	0.3	0.90	2.4	0.007	778	765
Employment at the time of survey							
Either parent is in the labor force	70.7	-0.5	0.81	2.2	-0.015	747	740
Either parent is working for pay	61.3	0.6	0.79	2.4	0.016	748	744
Employment and earnings in calendar years after RA							
Ever employed in Year 1	74.5	-0.1	0.96	1.7	-0.003	899	888
Ever employed in Year 2	75.3	0.3	0.86	1.7	0.010	899	888
Ever employed in Year 3	76.6	-1.8	0.30	1.7	-0.058	899	888
Ever employed in Year 4	75.9	-1.6	0.37	1.8	-0.051	899	888
Ever employed in Year 5	74.9	-2.4	0.18	1.8	-0.076	899	888
Ever employed in Years 1-5	84.7	-3.3**	0.03	1.5	-0.142	899	888
Earnings in Year 1 ($)	23,163	-389	0.52	599	-0.016	899	888

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Earnings in Year 2 ($)	25,000	-499	0.48	702	-0.019	899	888
Earnings in Year 3 ($)	26,541	-700	0.38	791	-0.026	899	888
Earnings in Year 4 ($)	27,534	-593	0.51	900	-0.021	899	888
Earnings in Year 5 ($)	28,227	-632	0.54	1,020	-0.021	899	888

Source: PROMISE five-year survey and SSA administrative records (employment and earnings in years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

GED = General Educational Development; N = sample size; RA = random assignment.

Appendix Table D.15. ASPIRE: Impact on the parents' SSA payments (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent received SSA payments in Year 5	28.8	-2.0	0.14	1.4	-0.061	899	888
Total SSA payments received in Year 5 ($)	3,133	37	0.86	210	0.006	899	888
Total SSA payments during the five years after RA ($)	14,707	335	0.65	745	0.013	899	888
Supplementary outcomes							
SSA payments in years after RA							
Received any in Year 1	25.1	-0.1	0.86	0.6	-0.004	899	888
Received any in Year 2	26.9	-1.0	0.30	0.9	-0.031	899	888
Received any in Year 3	27.6	-1.3	0.27	1.2	-0.039	899	888
Received any in Year 4	28.6	-2.7**	0.03	1.3	-0.082	899	888
Received any in Years 1–5	32.0	-1.3	0.31	1.3	-0.036	899	888
Amount in Year 1 ($)	2,733	157	0.26	141	0.028	899	888
Amount in Year 2 ($)	2,898	40	0.80	158	0.007	899	888
Amount in Year 3 ($)	2,920	33	0.85	176	0.006	899	888
Amount in Year 4 ($)	3,022	68	0.73	198	0.012	899	888
SSI payments in years after RA							
Received any in Year 1	14.8	-0.7	0.21	0.5	-0.034	899	888
Received any in Year 2	15.4	-1.4*	0.08	0.8	-0.070	899	888
Received any in Year 3	15.0	-0.3	0.74	1.0	-0.016	899	888
Received any in Year 4	14.8	-0.3	0.77	1.1	-0.015	899	888
Received any in Year 5	14.0	0.1	0.93	1.1	0.005	899	888
Received any in Years 1–5	18.5	-0.1	0.93	1.1	-0.004	899	888
Amount in Year 1 ($)	1,100	9	0.89	66	0.003	899	888
Amount in Year 2 ($)	1,210	-117	0.20	91	-0.037	899	888
Amount in Year 3 ($)	1,093	-8	0.93	94	-0.003	899	888
Amount in Year 4 ($)	1,001	148	0.17	107	0.049	899	888
Amount in Year 5 ($)	1,021	42	0.68	104	0.014	899	888
Total amount during Years 1–5 ($)	5,424	75	0.84	379	0.005	899	888

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
OASDI benefits in years after RA							
Received any in Year 1	15.1	0.5	0.38	0.6	0.025	899	888
Received any in Year 2	16.0	0.6	0.41	0.8	0.029	899	888
Received any in Year 3	17.5	-0.6	0.52	1.0	-0.027	899	888
Received any in Year 4	18.8	-1.6	0.15	1.1	-0.064	899	888
Received any in Year 5	19.0	-0.9	0.45	1.2	-0.036	899	888
Received any in Years 1–5	20.7	-0.6	0.62	1.2	-0.022	899	888
Amount in Year 1 ($)	1,634	148	0.23	123	0.032	899	888
Amount in Year 2 ($)	1,688	157	0.23	130	0.034	899	888
Amount in Year 3 ($)	1,827	41	0.78	147	0.009	899	888
Amount in Year 4 ($)	2,021	-80	0.63	165	-0.016	899	888
Amount in Year 5 ($)	2,113	-5	0.98	183	-0.001	899	888
Total amount during Years 1–5 ($)	9,283	261	0.69	651	0.012	899	888

Source: SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

N = sample size; OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table D.16. ASPIRE: Impact on the parents' health insurance coverage and expenditures (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent is covered by health insurance	87.0	1.7	0.31	1.7	0.097	776	761
Average monthly Medicaid and Medicare expenditures in the five years after RA ($)	681	24	0.37	26	0.029	899	888
Supplementary outcomes							
Covered by private health insurance	30.7	2.0	0.38	2.2	0.055	777	761
Medicaid and Medicare participation in years after RA							
Ever enrolled in Year 1	78.0	0.5	0.79	1.7	0.017	899	888
Ever enrolled in Year 2	77.6	-1.1	0.54	1.8	-0.037	899	888
Ever enrolled in Year 3	75.2	-1.1	0.57	1.8	-0.034	899	888
Ever enrolled in Year 4	72.4	-1.1	0.56	1.9	-0.034	899	888
Ever enrolled in Year 5	70.4	-1.8	0.35	2.0	-0.053	899	888
Percentage of months enrolled in Years 1–5	70.2	-0.9	0.58	1.6	-0.022	899	888
Average monthly Medicaid and Medicare expenditures in years after RA							
Year 1 ($)	663	20	0.37	22	0.024	899	888
Year 2 ($)	779	29	0.36	31	0.029	899	888
Year 3 ($)	706	32	0.36	35	0.033	899	888
Year 4 ($)	612	48	0.20	37	0.050	899	888
Year 5 ($)	648	-9	0.81	40	-0.010	899	888
Medicaid participation in years after RA							
Ever enrolled in Year 1	75.3	-0.0	0.98	1.8	-0.001	899	888
Ever enrolled in Year 2	74.5	-1.5	0.43	1.8	-0.046	899	888
Ever enrolled in Year 3	71.6	-0.9	0.64	1.9	-0.026	899	888
Ever enrolled in Year 4	68.0	-0.5	0.79	2.0	-0.015	899	888
Ever enrolled in Year 5	64.9	-0.0	1.00	2.1	-0.000	899	888
Percentage of months enrolled in Years 1–5	66.1	-0.6	0.72	1.6	-0.014	899	888

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Average monthly Medicaid expenditures in years after RA							
Year 1 ($)	565	9	0.68	21	0.013	899	888
Year 2 ($)	682	-5	0.85	28	-0.007	899	888
Year 3 ($)	595	4	0.90	29	0.005	899	888
Year 4 ($)	480	32	0.24	28	0.048	899	888
Year 5 ($)	493	0	1.00	29	0.000	899	888
Years 1–5 ($)	563	8	0.71	22	0.013	899	888
Medicare participation in years after RA							
Ever enrolled in Year 1	14.6	0.5	0.56	0.9	0.024	899	888
Ever enrolled in Year 2	15.2	0.7	0.45	0.9	0.031	899	888
Ever enrolled in Year 3	15.9	0.5	0.63	1.0	0.021	899	888
Ever enrolled in Year 4	17.3	-1.1	0.31	1.0	-0.046	899	888
Ever enrolled in Year 5	18.1	-0.6	0.58	1.1	-0.026	899	888
Percentage of months enrolled in Years 1–5	15.5	0.0	0.98	0.8	0.001	899	888
Average monthly Medicare expenditures in years after RA							
Year 1 ($)	97	11	0.53	17	0.023	899	888
Year 2 ($)	97	34*	0.08	20	0.068	899	888
Year 3 ($)	111	28	0.19	22	0.052	899	888
Year 4 ($)	132	15	0.55	25	0.025	899	888
Year 5 ($)	155	-10	0.73	27	-0.015	899	888
Years 1–5 ($)	118	16	0.39	18	0.033	899	888

Source: CMS administrative records and PROMISE five-year survey (non-Medicare/Medicaid outcomes).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

CMS = Centers for Medicare & Medicaid Services; N = sample size.

Appendix Table D.17. ASPIRE: Impact on the parents' economic well-being (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Parents' total income in the past year ($)	31,975	-327	0.82	1,469	-0.011	715	705
Parents' total income during the five calendar years after RA ($)	146,562	-2,392	0.48	3,408	-0.020	899	888
Supplementary outcomes							
Parents' income in calendar years after RA							
Year 1 ($)	26,219	-388	0.52	609	-0.017	899	888
Year 2 ($)	28,132	-386	0.59	710	-0.016	899	888
Year 3 ($)	29,803	-596	0.45	792	-0.023	899	888
Year 4 ($)	30,831	-496	0.58	887	-0.018	899	888
Year 5 ($)	31,578	-526	0.60	1,003	-0.018	899	888
Household receives TANF, SNAP, or housing assistance	37.6	1.8	0.46	2.4	0.046	771	759
Household income in the past year ($)	36,634	152	0.90	1,181	0.006	753	739

Source: PROMISE five-year survey and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

N = sample size; RA = random assignment; SSA = Social Security Administration.

2. Sensitivity analyses

We assessed the sensitivity of the estimated impacts on primary outcomes to methodological choices we incorporated in the main impact estimates. In Appendix Table D.18, we show the impact estimated by the main regression model for each outcome, as well as by alternative models that do not (1) use the survey weights, (2) include covariate adjustment, and (3) use imputed data for outcomes that underwent multiple imputation. The alternative models produced broadly similar results, suggesting that the main model's estimates of program impacts were not sensitive to the choice of estimation method.

We also assessed the extent to which the lack of survey data for some enrollees would influence the estimates of program impacts. In Appendix Table D.19, we compare how the estimated impacts on primary outcomes varied when nonrespondents were included and excluded from analyses of outcomes measured using administrative data. For all outcomes, the impact estimated using the weighted survey respondent sample did not significantly differ from the impact estimated using the administrative analysis sample. The findings suggest that use of the analysis weights minimized the potential for nonresponse bias because the estimated impacts for the survey respondent sample were comparable to those for the full research sample.

Appendix Table D.18. ASPIRE: Impact on primary outcomes, by estimation approach (values measured at the time of the survey and shown in in percentages, unless otherwise noted)

Outcome	Main model	No weighting for non-response	No covariate adjustment	No imputation
Enrolled in an educational or training program	0.4	0.6	0.3	n.a.
Has a GED, high school diploma, or certificate of completion	-4.0*	-4.1*	-3.8*	n.a.
Youth employed in a paid job in the past year	-0.6	-0.8	-0.6	-0.1
Youth earnings in the past year ($)	110	63	198	265
Youth earnings during the five calendar years after RA ($)	-582	n.a.	-507	n.a.
Youth self-determination score (scale: 0 to 100)[a]	-0.6	-0.5	-0.8	n.a.
Youth expects to be financially independent at age 25	-0.0	-0.1	-0.6	n.a.
Youth received SSA payments in Year 5 after RA	-0.3	n.a.	-0.3	n.a.
Youth total SSA payments in Year 5 after RA ($)	43	n.a.	51	n.a.
Youth total SSA payments during Years 1–5 after RA ($)	177	n.a.	82	n.a.
Youth covered by any health insurance	-1.9	-1.8	-2.3	n.a.
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	-21	n.a.	-21	n.a.
Youth total income in the past year ($)	89	54	179	215
Youth total income during the five calendar years after RA ($)	-324	n.a.	-365	n.a.
Either parent worked for pay in the past year	0.2	0.2	0.4	n.a.
Parents' earnings in the past year ($)	-434	-517	-703	-765
Parents' earnings during the five calendar years after RA ($)	-2,813	n.a.	-3,393	n.a.
Either parent received SSA payments in Year 5 after RA	-2.0	n.a.	-1.6	n.a.
Parents' total SSA payments received in Year 5 after RA ($)	37	n.a.	105	n.a.
Parents' total SSA payments during the five years after RA ($)	335	n.a.	674	n.a.
Parents' total income in the past year ($)	-327	-415	-664	-345
Parents' income during the five calendar years after RA ($)	-2,392	n.a.	-2,602	n.a.
Either parent is covered by health insurance	1.7	1.7	1.5	n.a.
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	24	n.a.	24	n.a.

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the impact estimates of ASPIRE, using different modeling approaches. In the main model, we used covariate adjustment and, for outcomes derived from survey data, we weighted statistics to adjust for survey nonresponse and used multiple imputation when an outcome had a

missing value conditional on the value of another variable. In the model with "No weighting for non-response", we followed the main model but did not apply weights to adjust for non-response. In the model with "No covariate adjustment", we followed the main model but did not include covariates except for region fixed effects. For the model with "No multiple imputation", we followed the main model except that we excluded cases with outcomes that had a missing value conditional on the value of another variable.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; n.a.= not applicable; RA = random assignment; SSA = Social Security Administration.

Appendix Table D.19. ASPIRE: Impact on primary outcomes measured using administrative data, including and excluding five-year survey nonrespondents (percentage, unless otherwise noted)

Outcome	Administrative analysis samples			Five-year survey respondents (weighted)			*p*-value for difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth earnings during the five calendar years after RA ($)	12,892	-582	0.51	11,783	245	0.80	0.37
Youth received SSA payments in Year 5 after RA	66.5	-0.3	0.88	70.4	-0.8	0.73	0.83
Youth total SSA payments in Year 5 after RA ($)	5,313	43	0.81	5,654	-44	0.83	0.65
Youth total SSA payments during Years 1–5 after RA ($)	31,502	177	0.77	32,281	17	0.98	0.80
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,760	-21	0.66	1,796	-32	0.53	0.82
Youth total income during the five calendar years after RA ($)	45,513	-324	0.71	45,437	361	0.69	0.44
Parents' earnings during the five calendar years after RA ($)	130,465	-2,813	0.41	130,907	-2,211	0.57	0.87
Either parent received SSA payments in Year 5 after RA	28.8	-2.0	0.14	30.2	-2.0	0.18	0.99
Parents' total SSA payments received in Year 5 after RA ($)	3,133	37	0.86	3,312	-6	0.98	0.84
Parents' total SSA payments during the five years after RA ($)	14,707	335	0.65	15,141	49	0.95	0.71
Parents' total income during the five calendar years after RA ($)	146,562	-2,392	0.48	147,583	-2,103	0.58	0.94
Parents' average monthly Medicaid and Medicare expenditures in years after RA in Years 1-5 after RA ($)	681	24	0.37	695	16	0.58	0.79

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE for administrative analysis samples and five-year survey respondents. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For the sample of five-year survey respondents, we weighted the statistics to adjust for survey nonresponse, applying youth weights for youths' outcomes and parent weights for parents' outcomes.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for the two samples are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; N = sample size; RA = random assignment. SSA = Social Security Administration.

3. Subgroup impact estimates

We estimated the five-year impacts for key subgroups of evaluation enrollees to understand whether the impacts of ASPIRE differed by enrollee characteristics. We focused on subgroups defined by the following baseline characteristics of youth: age (ages 14 and 15, and age 16); sex (females and males); whether a youth's parent received SSA payments at the time of RA (yes or no); primary impairment (intellectual or developmental disabilities, other mental impairments, and other disabilities); whether the survey respondent completed the five-year survey before or after the onset of the COVID-19 pandemic (yes or no); and state (Arizona, Colorado, and the remaining four states in the consortium [Montana, North Dakota, South Dakota, and Utah]). Appendix Tables D.20–D.27 present the subgroup impact estimates.

Appendix Table D.20. ASPIRE: Impacts on primary outcomes, by youth's age (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Age 14 and 15					Age 16					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	43.6	1.0	0.73	540	536	27.7	-0.9	0.83	235	239	0.70
Youth has a GED, high school diploma, or certificate of completion	70.8	-4.3	0.12	550	547	81.4	-3.4	0.35	241	245	0.83
Youth employed in a paid job in the past year	42.3	0.4	0.88	554	549	44.9	-2.9	0.50	243	246	0.51
Youth earnings in the past year ($)	4,513	439	0.41	554	549	6,034	-641	0.47	243	246	0.29
Youth earnings during the five calendar years after RA ($)	10,582	470	0.62	676	675	18,089	-3,076	0.11	302	300	0.09†
Youth self-determination score (scale: 0 to 100)	79.4	-0.7	0.49	368	362	79.9	-0.4	0.81	160	155	0.85
Youth expects to be financially independent at age 25	59.8	-2.3	0.52	372	366	47.8	5.3	0.34	167	160	0.24
Youth received SSA payments in Year 5 after RA	66.7	1.3	0.59	676	675	66.0	-3.9	0.29	302	300	0.23
Youth total SSA payments in Year 5 after RA ($)	5,223	173	0.43	676	675	5,518	-246	0.46	302	300	0.29
Youth total SSA payments during Years 1–5 after RA ($)	31,392	471	0.51	676	675	31,751	-479	0.67	302	300	0.47
Youth covered by any health insurance	90.5	-1.6	0.39	538	536	86.5	-2.7	0.41	235	241	0.78
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,727	-21	0.70	676	675	1,834	-20	0.81	302	300	0.99
Youth total income in the past year ($)	9,930	556	0.27	554	549	11,998	-973	0.21	243	246	0.09†
Youth total income during the five calendar years after RA ($)	43,031	1,015	0.30	676	675	51,098	-3,437**	0.04	302	300	0.02††

Outcome	Age 14 and 15					Age 16					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Either parent worked for pay in the past year	70.1	-0.4	0.87	544	531	67.0	1.7	0.66	235	234	0.64
Parents' earnings in the past year ($)	28,960	-1,297	0.47	544	531	26,677	1,514	0.55	235	234	0.36
Parents' earnings during the five calendar years after RA ($)	131,106	-2,307	0.58	619	616	129,014	-3,632	0.55	280	272	0.86
Either parent received SSA payments in Year 5 after RA	28.2	-1.7	0.31	619	616	30.1	-2.7	0.24	280	272	0.72
Parents' total SSA payments received in Year 5 after RA ($)	3,101	-36	0.89	619	616	3,208	199	0.59	280	272	0.59
Parents' total SSA payments during the five years after RA ($)	14,370	194	0.83	619	616	15,468	650	0.62	280	272	0.78
Parents' total income in the past year ($)	32,683	-1,265	0.48	499	489	30,407	1,782	0.49	216	216	0.33
Parents' total income during the five calendar years after RA ($)	146,870	-2,060	0.62	619	616	145,866	-2,893	0.64	280	272	0.91
Either parent is covered by health insurance	87.1	0.9	0.65	542	530	86.7	3.5	0.25	234	231	0.46
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	685	39	0.22	619	616	673	-11	0.81	280	272	0.36

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; RA = random assignment; SSA = Social Security Administration.

Appendix Table D.21. ASPIRE: Impacts on primary outcomes, by youth's sex (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Male					Female					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	37.9	-1.1	0.71	513	526	40.4	3.5	0.41	262	249	0.37
Youth has a GED, high school diploma, or certificate of completion	72.5	-4.5	0.11	526	539	77.6	-3.1	0.40	265	253	0.76
Youth employed in a paid job in the past year	45.2	1.6	0.58	531	541	38.8	-5.1	0.21	266	254	0.17
Youth earnings in the past year ($)	5,649	59	0.92	531	541	3,553	213	0.76	266	254	0.86
Youth earnings during the five calendar years after RA ($)	14,040	-763	0.50	648	665	10,429	-213	0.88	330	310	0.76
Youth self-determination score (scale: 0 to 100)	79.6	0.0	0.99	343	338	79.4	-1.8	0.25	185	179	0.32
Youth expects to be financially independent at age 25	59.4	-0.4	0.91	352	344	49.9	0.7	0.89	187	182	0.85
Youth received SSA payments in Year 5 after RA	62.9	1.6	0.52	648	665	74.2	-4.2	0.23	330	310	0.18
Youth total SSA payments in Year 5 after RA ($)	4,936	235	0.29	648	665	6,123	-349	0.28	330	310	0.13
Youth total SSA payments during Years 1–5 after RA ($)	30,521	986	0.18	648	665	33,605	-1,475	0.16	330	310	0.05†
Youth covered by any health insurance	87.9	-2.0	0.33	511	528	92.2	-1.8	0.49	262	249	0.93
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,700	-50	0.38	648	665	1,889	38	0.65	330	310	0.38
Youth income in the past year ($)	10,873	136	0.81	531	541	9,920	-8	0.99	266	254	0.86
Youth total income during the five calendar years after RA ($)	45,484	209	0.85	648	665	45,574	-1,414	0.31	330	310	0.35
Either parent worked for pay in the past year	69.2	0.4	0.89	518	519	69.0	-0.1	0.98	261	246	0.92

Outcome	Male					Female					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Parents' earnings in the past year ($)	28,813	-1,199	0.51	518	519	27,060	1,130	0.63	261	246	0.42
Parents' earnings during the five calendar years after RA ($)	130,950	-5,309	0.21	595	601	129,450	2,225	0.72	304	287	0.31
Either parent received SSA payments in Year 5 after RA	28.5	-1.3	0.43	595	601	29.6	-3.5	0.15	304	287	0.46
Parents' total SSA payments received in Year 5 after RA ($)	3,108	97	0.71	595	601	3,186	-83	0.81	304	287	0.67
Parents' total SSA payments during the five years after RA ($)	14,636	518	0.57	595	601	14,855	-33	0.98	304	287	0.73
Parents' income in the past year ($)	32,461	-1,435	0.43	473	476	30,958	1,911	0.42	242	229	0.26
Parents' income during the five calendar years after RA ($)	146,958	-4,654	0.26	595	601	145,735	2,173	0.72	304	287	0.35
Either parent is covered by health insurance	85.9	2.4	0.26	515	517	89.4	0.3	0.90	261	244	0.55
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	670	32	0.31	595	601	706	8	0.87	304	287	0.67

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table D.22. ASPIRE: Impacts on primary outcomes, by whether parent received SSA payments before RA (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	No parent received SSA payments					At least one parent received SSA payments					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	41.3	-0.6	0.83	537	529	33.9	-2.6	0.60	176	183	0.73
Youth has a GED, high school diploma, or certificate of completion	74.0	-1.8	0.50	551	541	76.0	-10.7**	0.03	178	185	0.10
Youth employed in a paid job in the past year	42.8	0.4	0.90	556	544	41.1	-0.8	0.87	179	185	0.84
Youth earnings in the past year ($)	4,920	566	0.31	556	544	4,690	-944	0.29	179	185	0.15
Youth earnings during the five calendar years after RA ($)	12,952	-771	0.46	677	674	12,091	129	0.94	222	214	0.67
Youth self-determination score (scale: 0 to 100)	79.8	-0.8	0.41	359	350	78.3	0.4	0.83	126	128	0.56
Youth expects to be financially independent at age 25	56.6	-1.8	0.62	370	356	54.5	4.9	0.44	127	129	0.35
Youth received SSA payments in Year 5 after RA	66.2	1.5	0.53	677	674	66.4	-0.8	0.85	222	214	0.63
Youth total SSA payments in Year 5 after RA ($)	5,211	226	0.30	677	674	5,620	-224	0.57	222	214	0.32
Youth total SSA payments during Years 1–5 after RA ($)	29,966	710	0.33	677	674	35,432	-457	0.70	222	214	0.40
Youth covered by any health insurance	90.2	-2.4	0.21	537	534	84.1	2.9	0.44	176	177	0.21
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,729	3	0.95	677	674	1,564	-21	0.81	222	214	0.82
Youth income in the past year ($)	10,386	643	0.21	556	544	10,466	-807	0.33	179	185	0.14
Youth total income during the five calendar years after RA ($)	44,078	145	0.89	677	674	48,734	-476	0.79	222	214	0.76
Either parent worked for pay in the past year	78.9	3.3	0.17	542	530	41.5	-5.3	0.31	173	175	0.13

Outcome	No parent received SSA payments					At least one parent received SSA payments					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Parents' earnings in the past year ($)	33,709	698	0.71	542	530	13,327	-3,696	0.12	173	175	0.14
Parents' earnings during the five calendar years after RA ($)	156,238	-4,238	0.32	677	674	49,291	1,416	0.78	222	214	0.39
Either parent received SSA payments in Year 5 after RA	9.3	-1.5	0.32	677	674	90.2	-3.3	0.28	222	214	0.60
Parents' total SSA payments received in Year 5 after RA ($)	1,080	17	0.94	677	674	9,599	230	0.66	222	214	0.71
Parents' total SSA payments during the five years after RA ($)	3,323	438	0.55	677	674	50,558	620	0.78	222	214	0.94
Parents' income in the past year ($)	34,887	662	0.71	542	530	23,092	-3,386	0.13	173	175	0.16
Parents' income during the five calendar years after RA ($)	160,240	-3,546	0.40	677	674	103,486	1,656	0.75	222	214	0.43
Either parent is covered by health insurance	86.7	1.5	0.45	539	526	93.1	1.5	0.57	173	175	0.99
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	453	41	0.11	677	674	1,400	-40	0.57	222	214	0.27

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table D.23. ASPIRE: Impacts on primary outcomes, by youth's primary impairment (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Intellectual or developmental disabilities			Other mental impairments			Other impairments			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth enrolled in an educational or training program	40.6	-0.3	0.93	32.6	-1.2	0.79	42.5	3.6	0.45	0.73
Youth has a GED, high school diploma, or certificate of completion	77.9	-7.3**	0.02	66.1	-4.0	0.38	77.1	1.4	0.73	0.23
Youth employed in a paid job in the past year	34.5	3.2	0.36	55.3	-0.9	0.84	43.4	-7.0	0.12	0.19
Youth earnings in the past year ($)	3,818	550	0.39	6,786	-7	0.99	4,828	-560	0.50	0.56
Youth earnings during the five calendar years after RA ($)	10,683	487	0.69	16,421	-1,240	0.49	12,377	-1,862	0.27	0.47
Youth self-determination score (scale: 0 to 100)	78.3	-0.6	0.66	79.0	-0.7	0.65	82.4	-0.5	0.72	1.00
Youth expects to be financially independent at age 25	52.1	5.5	0.23	55.4	2.1	0.71	63.9	-12.6**	0.03	0.04††
Youth received SSA payments in Year 5 after RA	72.0	-0.6	0.83	53.2	2.3	0.56	73.0	-2.5	0.50	0.67
Youth total SSA payments in Year 5 after RA ($)	5,872	84	0.76	3,922	333	0.34	6,040	-323	0.34	0.38
Youth total SSA payments during Years 1–5 after RA ($)	32,890	186	0.84	29,350	620	0.57	31,748	-339	0.77	0.83
Youth covered by any health insurance	89.5	-2.7	0.27	84.6	0.0	0.99	94.4	-2.7	0.28	0.79
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,880	-99	0.16	1,205	-20	0.79	2,222	120	0.25	0.22
Youth income in the past year ($)	9,846	844	0.15	11,009	4	1.00	11,291	-1,126	0.11	0.10†
Youth total income during the five calendar years after RA ($)	44,980	793	0.51	45,921	-414	0.82	45,916	-2,314	0.15	0.29
Either parent worked for pay in the past year	65.7	2.0	0.53	70.4	-1.9	0.64	73.5	-0.5	0.89	0.73

Outcome	Intellectual or developmental disabilities			Other mental impairments			Other impairments			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Parents' earnings in the past year ($)	26,424	587	0.78	28,994	-1,580	0.57	30,513	-965	0.73	0.80
Parents' earnings during the five calendar years after RA ($)	128,571	-1,294	0.79	128,680	-16,347***	0.01	135,819	9,333	0.22	0.02††
Either parent received SSA payments in Year 5 after RA	30.4	-4.1*	0.05	29.5	-1.2	0.64	25.4	0.5	0.86	0.38
Parents' total SSA payments received in Year 5 after RA ($)	3,327	-351	0.28	3,019	231	0.50	2,935	517	0.23	0.22
Parents' total SSA payments during the five years after RA ($)	14,920	-362	0.74	15,814	286	0.84	13,037	1,673	0.25	0.54
Parents' income in the past year ($)	30,044	285	0.89	33,029	-1,475	0.60	34,154	-4	1.00	0.88
Parents' income during the five calendar years after RA ($)	145,031	-1,855	0.70	145,660	-15,931***	0.01	150,256	11,533	0.13	0.01††
Either parent is covered by health insurance	88.9	0.8	0.73	86.5	3.8	0.23	84.3	1.2	0.74	0.74
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	689	19	0.64	715	27	0.60	629	27	0.54	0.99

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table D.24. ASPIRE: Sample sizes for primary outcomes, by youth's primary impairment

Outcome	Intellectual or developmental disabilities		Other mental impairments		Other impairments	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Youth enrolled in an educational or training program	358	344	205	233	212	198
Youth has a GED, high school diploma, or certificate of completion	364	351	211	238	216	203
Youth employed in a paid job in the past year	369	351	212	240	216	204
Youth earnings in the past year ($)	369	351	212	240	216	204
Youth earnings during the five calendar years after RA ($)	451	422	263	301	264	252
Youth self-determination score (scale: 0 to 100)	249	223	150	166	129	128
Youth expects to be financially independent at age 25	247	225	154	168	138	133
Youth received SSA payments in Year 5 after RA	451	422	263	301	264	252
Youth total SSA payments in Year 5 after RA ($)	451	422	263	301	264	252
Youth total SSA payments during Years 1–5 after RA ($)	451	422	263	301	264	252
Youth covered by any health insurance	359	344	204	232	210	201
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	451	422	263	301	264	252
Youth income in the past year ($)	369	351	212	240	216	204
Youth total income during the five calendar years after RA ($)	451	422	263	301	264	252
Either parent worked for pay in the past year	362	339	206	224	211	202
Parents' earnings in the past year ($)	362	339	206	224	211	202
Parents' earnings during the five calendar years after RA ($)	414	392	242	268	243	228
Either parent received SSA payments in Year 5 after RA	414	392	242	268	243	228

Outcome	Intellectual or developmental disabilities		Other mental impairments		Other impairments	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Parents' total SSA payments received in Year 5 after RA ($)	414	392	242	268	243	228
Parents' total SSA payments during the five years after RA ($)	414	392	242	268	243	228
Parents' income in the past year ($)	331	317	191	205	193	183
Parents' income during the five calendar years after RA ($)	414	392	242	268	243	228
Either parent is covered by health insurance	359	338	204	222	213	201
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	414	392	242	268	243	228

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the sample size by subgroup for the estimates reported in Appendix Table D.23.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table D.25. ASPIRE: Impacts on primary outcomes, by whether the survey respondent completed the five-year survey before or during the pandemic (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Before pandemic					During pandemic					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	48.7	0.9	0.89	102	92	37.4	0.0	0.99	671	681	0.91
Youth has a GED, high school diploma, or certificate of completion	79.3	-7.7	0.20	102	92	73.5	-3.5	0.15	687	698	0.51
Youth employed in a paid job in the past year	43.0	2.3	0.73	102	92	43.3	-1.0	0.70	693	701	0.64
Youth earnings in the past year ($)	4,755	-1,170	0.29	102	92	5,031	313	0.54	693	701	0.22
Youth self-determination score (scale: 0 to 100)	80.4	1.0	0.61	84	78	79.4	-0.9	0.33	444	439	0.37
Youth expects to be financially independent at age 25	56.9	-11.0	0.15	80	78	56.0	2.0	0.55	459	448	0.12
Youth covered by any health insurance	93.3	-2.0	0.60	100	92	88.7	-2.0	0.27	673	685	1.00
Youth income in the past year ($)	11,027	-497	0.63	102	92	10,529	187	0.69	693	701	0.54
Either parent worked for pay in the past year	67.6	3.0	0.63	101	90	69.3	-0.1	0.96	678	675	0.63
Parents' earnings in the past year ($)	29,311	1,567	0.71	101	90	28,108	-723	0.64	678	675	0.61
Parents' income in the past year ($)	33,174	2,127	0.60	99	87	31,803	-730	0.64	616	618	0.51
Either parent is covered by health insurance	92.2	1.0	0.79	100	89	86.3	1.7	0.35	676	672	0.87

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE on outcomes derived from survey data. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We weighted statistics to adjust for survey nonresponse. We defined before the pandemic as before March 13, 2020.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size.

Appendix Table D.26. ASPIRE: Impacts on primary outcomes, by region (values measured at survey and shown in percentages, unless otherwise noted)

Outcome	Colorado			Arizona			Other states			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth enrolled in an educational or training program	34.6	-0.7	0.84	43.0	5.1	0.34	42.2	-1.0	0.82	0.61
Youth has a GED, high school diploma, or certificate of completion	72.4	-4.2	0.19	74.9	-5.0	0.28	76.1	-3.0	0.45	0.94
Youth employed in a paid job in the past year	42.8	-3.6	0.29	40.5	0.6	0.91	45.4	3.4	0.44	0.43
Youth total earnings in the past year ($)	5,359	-571	0.40	4,646	858	0.38	4,636	658	0.41	0.35
Youth earnings during the five calendar years after RA ($)	14,116	-1,403	0.29	11,275	241	0.89	12,046	173	0.91	0.66
Youth self-determination score (scale: 0 to 100)	79.5	-2.0	0.12	79.9	-0.4	0.84	79.4	1.2	0.43	0.25
Youth expects to be financially independent at age 25	59.6	-2.3	0.61	57.3	1.5	0.81	50.8	1.7	0.75	0.81
Youth received SSA payments in Year 5 after RA	61.7	-2.2	0.46	67.1	5.5	0.18	73.9	-1.4	0.70	0.28
Youth total SSA payments in Year 5 after RA ($)	4,884	-81	0.76	5,366	486	0.19	5,997	-77	0.82	0.41
Youth total SSA payments during Years 1–5 after RA ($)	30,286	432	0.63	32,396	965	0.42	32,877	-827	0.43	0.49
Youth covered by any health insurance	88.7	-2.0	0.42	92.1	-2.3	0.47	88.1	-1.6	0.61	0.99
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	2,300	-42	0.53	1,431	-34	0.74	1,099	23	0.79	0.83
Youth income in the past year ($)	10,599	-652	0.30	10,062	1,065	0.24	10,886	571	0.43	0.22
Youth total income during the five calendar years after RA ($)	45,043	-851	0.50	44,737	1,823	0.31	46,886	-1,034	0.50	0.40
Either parent worked for pay in the past year	67.9	-2.1	0.51	70.7	1.6	0.73	69.9	3.0	0.43	0.56

Outcome	Colorado			Arizona			Other states			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Parents' earnings in the past year ($)	25,483	372	0.85	30,484	-1,214	0.73	31,161	-1,183	0.65	0.86
Parents' earnings during the five calendar years after RA ($)	118,857	6,062	0.23	142,678	-3,890	0.59	139,502	-15,522**	0.01	0.03††
Either parent received SSA payments in Year 5 after RA	29.8	-4.4**	0.02	23.9	0.7	0.80	30.9	-0.4	0.88	0.23
Parents' total SSA payments received in Year 5 after RA ($)	3,180	-166	0.54	2,566	292	0.50	3,473	165	0.70	0.61
Parents' total SSA payments during the five years after RA ($)	15,523	-518	0.62	12,150	1,561	0.31	15,300	764	0.61	0.49
Parents' income in the past year ($)	29,742	-9	1.00	33,162	-583	0.87	34,462	-559	0.82	0.98
Parents' income during the five calendar years after RA ($)	135,784	5,357	0.28	156,030	-2,349	0.74	156,309	-14,186**	0.02	0.05††
Either parent is covered by health insurance	88.0	1.4	0.54	88.2	0.0	1.00	84.5	3.4	0.29	0.77
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	791	41	0.28	619	-9	0.87	558	21	0.67	0.75

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table D.27. ASPIRE: Sample sizes for primary outcomes, by region

Outcome	Colorado		Arizona		Other states	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Youth enrolled in an educational or training program	379	374	173	163	223	238
Youth has a GED, high school diploma, or certificate of completion	390	378	176	168	225	246
Youth employed in a paid job in the past year	391	380	176	169	230	246
Youth earnings in the past year ($)	391	380	176	169	230	246
Youth earnings during the five calendar years after RA ($)	479	478	214	213	285	284
Youth self-determination score (scale: 0 to 100)	248	235	125	107	155	175
Youth expects to be financially independent at age 25	250	235	127	111	162	180
Youth received SSA payments in Year 5 after RA	479	478	214	213	285	284
Youth total SSA payments in Year 5 after RA ($)	479	478	214	213	285	284
Youth total SSA payments during Years 1–5 after RA ($)	479	478	214	213	285	284
Youth covered by any health insurance	380	369	171	167	222	241
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	479	478	214	213	285	284
Youth income in the past year ($)	391	380	176	169	230	246
Youth total income during the five calendar years after RA ($)	479	478	214	213	285	284
Either parent worked for pay in the past year	385	374	169	161	225	230
Parents' earnings in the past year ($)	385	374	169	161	225	230
Parents' earnings during the five calendar years after RA ($)	423	419	198	197	278	272
Either parent received SSA payments in Year 5 after RA	423	419	198	197	278	272

Outcome	Colorado		Arizona		Other states	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Parents' total SSA payments received in Year 5 after RA ($)	423	419	198	197	278	272
Parents' total SSA payments during the five years after RA ($)	423	419	198	197	278	272
Parents' income in the past year ($)	335	330	157	153	223	222
Parents' income during the five calendar years after RA ($)	423	419	198	197	278	272
Either parent is covered by health insurance	385	372	167	161	224	228
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	423	419	198	197	278	272

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the sample size by subgroup for the estimates reported in Appendix Table D.26.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

C. Findings from the benefit-cost analysis

In this section, we present findings from the benefit-cost analysis of ASPIRE. First, we present benefits and costs estimated through the main model. Second, we present the results of sensitivity analyses. Third, we present the projected accrual of net benefits beyond the five-year evaluation period.

1. Benefit-cost estimates

Appendix Table D.28 provides estimates of the program's benefits and indirect costs, the costs of program components, and benefit-cost statistics estimated using the main model as described in Appendix B.

Appendix Table D.28. ASPIRE: Benefits and costs ($) over the five-year evaluation time period, by accounting perspective

Benefit or cost measure	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Panel 1: Quantitative outcome measures						
Youth outcomes						
Earnings	-591	0	0	0	0	-591
Fringe benefits	-150	0	0	0	0	-150
Income, payroll, and sales taxes	111	-73	0	-94	-17	0
Work-related and child care costs	70	0	0	0	0	70
SSI benefits	362	-362	0	-362	0	0
OASDI benefits	-181	181	0	181	0	0
SSI administrative costs	0	-28	0	-28	0	-28
SSDI administrative costs	0	3	0	3	0	3
Medicaid and Medicare expenditures and administrative costs	-1,310	0	0	813	609	111
Education-related costs	-164	0	0	0	0	-164
Incarceration	0	0	0	0	110	110
Parent outcomes						
Earnings	-2,952	0	0	0	0	-2,952
Fringe benefits	-747	0	0	0	0	-747
Income, payroll, and sales taxes	656	-366	0	-469	-187	0
Work-related and child care costs	511	0	0	0	0	511
SSI benefits	70	-70	0	-70	0	0
OASDI benefits	290	-290	0	-290	0	0
SSI administrative costs	0	-5	0	-5	0	-5
SSDI administrative costs	0	-6	0	-6	0	-6
Medicaid and Medicare expenditures and administrative costs	1,511	0	0	-1,437	-202	-128

Benefit or cost measure	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Household outcomes						
TANF, SNAP, housing assistance, and related administrative costs	1,024	0	0	-974	-175	-125
Total	-1,490	-1,017	0	-2,739	138	-4,090
Panel 2: Costs of program components						
Program administration	0	0	-8,757	-8,757	0	-8,757
Employment services	0	0	-812	-812	-84	-897
Education services	0	0	-546	-546	0	-546
Case management services	0	0	-9,357	-9,357	0	-9,357
Financial and benefits counseling	0	0	-1,311	-1,311	0	-1,311
Parent training and information services	0	0	-516	-516	0	-516
Youth self-determination services	0	0	-1,365	-1,365	0	-1,365
Total	0	0	-22,665	-22,665	-84	-22,749
Panel 3: Benefit-cost statistics						
Net benefits (benefits minus costs)	-1,490	-1,017	-22,665	-25,403	54	-26,839
Net benefit ratio[b]	n.a.	n.a.	0	-0.12	1.64	-0.18

Source: See Appendix Table B.4 for details on the sources and imputation methods for each benefit or cost component.

Note: To construct each component of the benefit-cost analysis, we used the estimated impacts on key outcomes (regardless of whether they were statistically significant), or imputation methods that combined the impact estimates with data from external sources**.** To construct program costs, we used data from program administrative records, financial documents, staff activity logs, and staff interviews. All benefits and costs are dollars per treatment group family over five years and are inflation-adjusted to 2020 dollars and discounted to 2020 present value.

[a] The perspective of the federal government as a whole incorporates the perspectives of SSA, ED, and other federal agencies that might experience benefits or costs because of PROMISE.

[b] Calculated for all key stakeholders as the sum of all quantitative measures in Panel 1, which include benefits and indirect costs, divided by the program costs.

ED = U.S. Department of Education; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; SSDI = Social Security Disability Insurance; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families.

2. Sensitivity analyses

We conducted three analyses to assess the sensitivity of the benefit-cost estimates to changes in the underlying assumptions and methodological choices (see Appendix B for a description of our methods). First, we sampled with replacement from the study population 1,000 times to create 1,000 random samples with an equal size as the true sample. For each sample, we calculated the net benefit for each accounting perspective. In Appendix Table D.29, we show the sampling distribution of our net benefit estimates for ASPIRE. The estimated net benefits for all key stakeholders were negative across the entire sampling distribution, suggesting that our main conclusion (that ASPIRE did not generate net benefits across all key stakeholders) is robust to sampling variability. The confidence interval of the net benefit estimate (-$26,839) is wide, ranging from -$35,544 (the 2.5th percentile) to -$18,941 (the 97.5th percentile), reflecting that many of the impact estimates incorporated into the benefit-cost analyses have wide confidence intervals.

Second, we recalculated the net benefits using only the impact estimates that were significant at the 10 percent level (Appendix Table D.30). From the perspective of all stakeholders, the net benefit was within 5 percent of the estimate from the main analysis and continued to be negative and sizeable.

Third, we considered whether the benefit-cost results were sensitive to the assumptions we used to estimate some of the individual components. In Appendix Table D.30, we show the estimates of net benefits when we applied the alternative assumptions. From the perspective of all key stakeholders, net benefits under the alternative assumptions were always within 5 percent of the net benefits estimated under the main analysis, and net benefits were sizeable and negative under each scenario. However, net benefits for ASPIRE youth and families and for state and local governments were sensitive to the alternative assumptions.

Appendix Table D.29. ASPIRE: Sensitivity of net benefits to sampling variability

Estimate of net benefit	PROMISE youth and families	Federal government			State and local government, including PROMISE partners	All key stakeholders
		SSA	ED	Federal government as a whole[a]		
Original estimate	-1,490	-1,017	-22,665	-25,403	54	-26,839
Min	-17,060	-5,797	-22,793	-37,905	-5,574	-43,063
2.5th percentile	-11,378	-3,716	-22,750	-32,481	-3,028	-35,544
25th percentile	-4,834	-1,843	-22,693	-27,799	-1,068	-29,727
50th percentile	-1,482	-1,029	-22,665	-25,430	25	-26,821
75th percentile	1,878	-95	-22,636	-22,849	1,058	-24,175
97.5th percentile	7,906	1,479	-22,577	-18,650	2,906	-18,941
Max	16,453	3,250	-22,491	-15,103	4,419	-12,829

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: We quantified uncertainty in the estimated net benefits by constructing non-parametric bootstrap confidence intervals. We sampled with replacement from the study population 1,000 times and then re-estimated all cost and benefit parameters for these 1,000 random samples. We then calculated the net benefits for each bootstrap sample. The 2.5th percentile and 97.5th percentile of the resulting values represent the 95 percent confidence interval of the net benefit estimate.

Appendix Table D.30. ASPIRE: Sensitivity of net benefits to different assumptions in the benefit cost analysis

Assumption	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Main benefit-cost analysis model	-1,490	-1,017	-22,665	-25,403	54	-26,839
Excluded fringe benefits	-593	-1,017	-22,665	-25,403	54	-25,942
Excluded education tuition costs	-1,368	-1,017	-22,665	-25,403	54	-26,717
Used higher incarceration costs[b]	-1,490	-1,017	-22,665	-25,403	203	-26,690
Used a fixed work-related cost measure (non-child care)[c]	-1,964	-1,017	-22,665	-25,403	54	-27,313
Used a low discount rate[d]	-1,486	-969	-22,665	-25,232	57	-26,662
Used a high discount rate[d]	-1,493	-1,060	-22,665	-25,556	52	-26,997
Used only statistically significant estimates in the calculation [e]	1,906	0	-22,665	-24,693	-275	-23,062

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: The inputs for the benefit-cost analysis are based on (1) program costs drawn from program administrative records, financial documents, staff activity logs and staff interviews (2) the estimated impacts on key outcomes (regardless of whether they were statistically significant), or (3) imputation methods that combined the impact estimates with data from external sources. All benefits and costs are dollars per treatment group family over five years and are inflation-adjusted to 2020 dollars and discounted to 2020 present value.

[a] The perspective of the federal government as a whole incorporates the perspectives of SSA, ED, and other federal agencies that might experience benefits or costs because of PROMISE.

[b] We changed incarceration costs from the national average ($97/day) to the highest state-specific cost (California, $228/day).

[c] We changed work-related costs from a multiplier of 10.6% to a fixed cost of $51 dollars per week.

[d] The low discount rate is 1 percent, and the high discount rate is 5 percent.

[e] This sensitivity analysis assigns a value of zero to impact estimates to impacts estimates that were not were significant at the .10 level. (The main analysis and all other sensitivity tests include impact estimates regardless of whether they were statistically significant).

ED = U.S. Department of Education; SSA = Social Security Administration.

3. Long-term forecast

We projected the accrual of net benefits over 10 and 20 years after RA to assess how costs and benefits may change after the five-year evaluation period. We projected the net benefits under three scenarios that varied in their potential returns to youth's education: high returns, diminishing returns, and no returns (Appendix Table D.31). Because ASPIRE caused a small and non-significant decrease in youth's years of education (-0.01 years), the scenario assuming "no returns" to education generates the highest net benefit estimate and the scenario assuming "high returns" to education generates the lowest estimate. Across all scenarios, the forecasted net benefits 10 and 20 years after RA are lower than the net benefits estimated at five years after RA. This is largely because treatment group youth had lower earnings than control group youth in the fourth and fifth years after RA, a disadvantage that gets compounded in the forecast as earnings grow by an annual percentage over time.

We also calculated how large the impact on youth earnings would have to be, assuming all other impacts were the same as in the five-year analysis, for ASPIRE's benefits to equal the costs in 10 and 20 years after RA (Appendix Figure D.1). The program would need to generate an average annual impact on youth earnings of $5,259 per year to be cost neutral 10 years after RA and $2,042 per year to be cost neutral 20 years after RA. Generating impacts of these sizes seems implausible because the point estimate of the program's impact on youth earnings in the fifth year after RA was -$403.

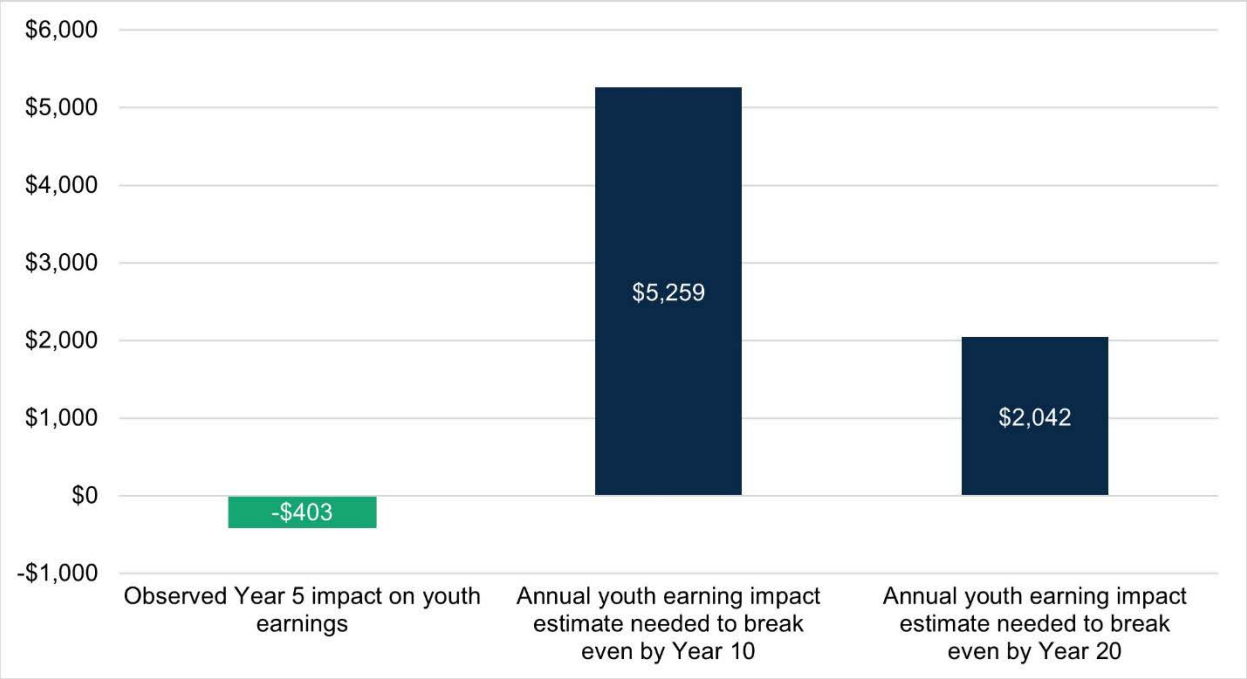
Appendix Table D.31. ASPIRE: Net benefits ($) to all stakeholders forecast over 10 and 20 years after RA, under different assumptions about the returns to education and using the upper and lower bound of the earnings impact

Assumption	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
10-year forecast						
Returns to education						
Persistent high return to education	-5,421	-1,789	-22,665	-26,487	155	-31,753
Diminishing return to education	-5,410	-1,781	-22,665	-26,478	156	-31,733
No return to education	-5,402	-1,777	-22,665	-26,474	156	-31,720
Confidence interval bounds						
Using upper bound of earnings impact	-2,050	-1,175	-22,665	-25,743	261	-27,532
Using lower bound of earnings impact	-10,413	-2,907	-22,665	-27,803	-6	-38,223
20-year forecast						
Returns to education						
Persistent high return to education	-12,729	-3,043	-22,665	-28,285	293	-40,721
Diminishing return to education	-12,659	-3,022	-22,665	-28,262	296	-40,625
No return to education	-12,651	-3,018	-22,665	-28,257	296	-40,612
Confidence interval bounds						
Using upper bound of earnings impact	-1,652	-1,082	-22,665	-25,900	639	-26,913
Using lower bound of earnings impact	-29,260	-6,483	-22,665	-32,375	-235	-61,870

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: To construct each component of the benefit-cost analysis, we used either (1) the impact estimates themselves (regardless of whether they were statistically significant), or (2) imputation methods to combine the impact estimates with data from external sources. To construct program costs, we used data from program administrative records, financial documents, staff activity logs, and staff interviews. All benefits and costs are dollars per treatment group family and are inflation-adjusted to 2020 dollars and discounted to 2020 present value. The 10-year and 20-year projections are based on costs observed from the five-year evaluation period and a forecasting scenario for the five and fifteen following years, respectively, assuming that earnings grow over time. Additionally, the persistent high return to education forecasting scenario assumes a return to education of 10 percent per additional year of schooling; the diminishing returns to education scenario assumes the returns to education are 10 percent in Year 6 and then diminish over time to zero percent in Year 10; and the no return to education scenario assumes no increase over time in the return to education.

Appendix Figure D.1. ASPIRE: Impacts needed for cost-neutrality from the perspective of all key stakeholders



Note: The first bar shows the estimated impact on youth earnings in Year 5 after RA. The second bar shows the impact on youth earnings needed every year between Years 6 and 10 after RA for the program to be cost neutral 10 years after RA, assuming other benefits and costs are held constant between Years 6 and 10 after RA. The third bar shows the impact on youth earnings needed every year between Years 6 and 20 after RA for the program to be cost neutral 20 years after RA, assuming other benefits and costs are held constant between Years 6 and 20 after RA. All values are per treatment group family, inflation-adjusted to 2020 dollars, and discounted to 2020 present value.

ASPIRE = Achieving Success by Promoting Readiness for Education and Employment; RA = random assignment.

Appendix E. CaPROMISE Impacts, Benefits, and Costs

A. Enrollees and analysis samples

The full research sample for the evaluation of CaPROMISE consists of the 3,097 youth who enrolled in the evaluation and were randomly assigned, as well as their families. To assess the extent to which the findings might reflect the baseline characteristics of various samples, we compared differences between (1) the treatment and control groups, (2) survey respondents and nonrespondents, and (3) self-reporting and proxy youth respondents.

1. Differences between the treatment and control groups

We compared 25 baseline characteristics of the treatment and control groups for four samples: all youth survey respondents, all parent survey respondents, all enrollees, and all proxy youth respondents (Appendix Tables E.1–E.4). The similarity of samples across the characteristics examined suggest that RA created treatment and control groups that were equivalent in their baseline characteristics. Although we found statistically significant differences for a few characteristics, they are not concerning for two reasons. First, with a significance level of 10 percent, we expect to reject the null hypothesis that the groups were equivalent for 1 out of every 10 characteristics by chance alone, even when the two groups in fact had no underlying differences. Second, we included characteristics that were significantly different at baseline as covariates in our regression-adjusted impact analyses, allowing us to control for the observed differences.

Appendix Table E.1. CaPROMISE: Baseline characteristics of youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.0	31.9	34.1	-2.1	0.36
Youth age at RA					0.59
14	34.9	36.0	33.9	2.1	
15	31.1	31.1	31.1	0.1	
16	34.0	32.9	35.1	-2.2	
Average age at RA	15.4	15.4	15.5	-0.0	0.32
Youth language preference at SSI application					
Prefers English for written language	64.5	64.1	64.9	-0.8	0.73
Prefers English for spoken language	64.5	64.0	65.1	-1.1	0.65
Youth living arrangement at SSI application					0.58
In parents' household	76.5	75.8	77.1	-1.3	
Own household or alone	20.9	21.9	20.0	1.8	
Another household and receiving support	2.6	2.3	2.8	-0.5	
Youth race and ethnicity				†	0.10
Non-Hispanic White	5.4	6.5	4.3	2.2	
Non-Hispanic Black	14.5	14.0	14.9	-0.9	
Hispanic	54.1	55.3	53.0	2.3	
Non-Hispanic American Indian	0.5	0.5	0.4	0.1	
Non-Hispanic other or mixed race	6.5	7.1	6.0	1.1	
Missing	19.1	16.7	21.5	-4.8	
Enrolling parent age at RA	44.1	44.2	44.1	0.1	0.87
Parent race and ethnicity					0.17
Non-Hispanic White	7.6	8.7	6.5	2.2	
Non-Hispanic Black	16.3	16.6	16.0	0.6	
Hispanic	53.6	54.4	52.7	1.7	
Non-Hispanic American Indian	0.3	0.2	0.4	-0.2	
Non-Hispanic other or mixed race	6.0	6.0	6.0	-0.0	
Missing	16.2	14.0	18.4	-4.3	
Disability					
Youth primary impairment					0.32
Intellectual or developmental disability	48.5	47.0	50.0	-3.1	
Speech, hearing, or visual impairment	3.0	3.0	3.0	0.0	
Physical disability	18.8	17.9	19.8	-1.9	
Other mental impairment	22.7	24.6	20.8	3.9	
Other or unknown disability	7.0	7.5	6.5	1.0	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.1	93.1	95.1	-2.0*	0.10
Received OASDI	6.9	8.3	5.6	2.7**	0.04
Years between youth's earliest SSI eligibility and RA	9.0	8.7	9.3	-0.6***	0.01
Youth age at most recent SSI application	6.8	7.1	6.6	0.5**	0.03
Youth payments in the year before RA ($)					
SSI	7,384	7,270	7,499	-229**	0.03
OASDI	221	283	160	123**	0.01
Total SSI and OASDI	7,606	7,552	7,659	-107	0.29
Household had multiple SSI-eligible children	13.6	13.9	13.4	0.5	0.76
Enrolling parent provided a valid SSN at RA	61.6	61.9	61.4	0.5	0.85
Parents included in the administrative data					0.16
None	14.7	15.0	14.5	0.5	
One parent	50.7	52.7	48.7	4.0	
Two parents	34.6	32.3	36.8	-4.5	
Parent SSA payment status at RA					0.65
Any parent received SSI only	6.3	6.0	6.5	-0.5	
Any parent received OASDI only	6.2	7.0	5.3	1.6	
Any parent received both SSI and OASDI	2.6	2.9	2.4	0.5	
No parent received any SSA payments	70.3	69.2	71.3	-2.1	
No parent was included in the SSA data analyses	14.7	15.0	14.5	0.5	
Earnings					
Youth had earnings in the calendar year before RA	2.7	3.3	2.1	1.2	0.14
Youth earnings in the calendar year before RA ($)	40	69	12	57	0.11
Parent had earnings in the calendar year before RA	75.2	72.8	77.5	-4.7*	0.05
Parent earnings in the calendar year before RA ($)	19,205	18,860	19,546	-686	0.52
Number of youth	1,605	810	795		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who completed the PROMISE five-year youth survey. We weighted the statistics to adjust for survey nonresponse and sample design. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table E.2. CaPROMISE: Baseline characteristics of parent survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.0	32.1	33.9	-1.8	0.44
Youth age at RA					0.80
14	34.7	35.4	34.1	1.3	
15	30.8	30.9	30.8	0.1	
16	34.4	33.7	35.1	-1.4	
Average age at RA	15.4	15.4	15.5	-0.0	0.61
Youth language preference at SSI application					
Prefers English for written language	63.9	63.5	64.3	-0.8	0.74
Prefers English for spoken language	63.9	63.4	64.4	-1.0	0.67
Youth living arrangement at SSI application					0.27
In parents' household	76.3	75.2	77.3	-2.1	
Own household or alone	20.9	22.4	19.5	2.9	
Another household and receiving support	2.8	2.4	3.2	-0.7	
Youth race and ethnicity				†	0.07
Non-Hispanic White	5.3	6.5	4.1	2.4	
Non-Hispanic Black	14.5	14.2	14.8	-0.7	
Hispanic	55.5	56.3	54.8	1.5	
Non-Hispanic American Indian	0.5	0.5	0.4	0.0	
Non-Hispanic other or mixed race	6.4	7.0	5.7	1.4	
Missing	17.9	15.6	20.2	-4.7	
Enrolling parent age at RA	44.2	44.3	44.1	0.2	0.60
Parent race and ethnicity					0.29
Non-Hispanic White	7.3	8.3	6.2	2.1	
Non-Hispanic Black	16.0	16.5	15.5	1.0	
Hispanic	54.4	54.9	53.9	1.0	
Non-Hispanic American Indian	0.3	0.2	0.4	-0.2	
Non-Hispanic other or mixed race	5.8	5.6	5.9	-0.3	
Missing	16.2	14.4	18.0	-3.6	
Disability					
Youth primary impairment					0.33
Intellectual or developmental disability	48.0	46.5	49.5	-3.0	
Speech, hearing, or visual impairment	2.9	3.0	2.7	0.3	
Physical disability	18.5	17.6	19.3	-1.7	
Other mental impairment	23.5	24.6	22.3	2.4	
Other or unknown disability	7.2	8.2	6.2	2.0	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.3	93.4	95.1	-1.8	0.13
Received OASDI	6.7	8.0	5.4	2.5**	0.04
Years between youth's earliest SSI eligibility and RA	9.0	8.7	9.3	-0.6***	0.00
Youth age at most recent SSI application	6.9	7.1	6.6	0.5**	0.03
Youth payments in the year before RA ($)					
SSI	7,398	7,316	7,481	-165	0.12
OASDI	215	274	158	116**	0.01
Total SSI and OASDI	7,614	7,589	7,638	-49	0.62
Household had multiple SSI-eligible children	13.7	13.8	13.6	0.2	0.92
Enrolling parent provided a valid SSN at RA	61.9	61.9	61.8	0.1	0.97
Parents included in the administrative data					0.11
None	14.6	15.2	14.1	1.1	
One parent	50.7	52.6	48.8	3.8	
Two parents	34.7	32.2	37.2	-5.0	
Parent SSA payment status at RA					0.69
Any parent received SSI only	6.4	6.3	6.5	-0.2	
Any parent received OASDI only	6.2	6.9	5.5	1.4	
Any parent received both SSI and OASDI	2.7	2.9	2.5	0.5	
No parent received any SSA payments	70.1	68.7	71.4	-2.7	
No parent was included in the SSA data analyses	14.6	15.2	14.1	1.1	
Earnings					
Youth had earnings in the calendar year before RA	2.5	3.0	2.0	1.0	0.21
Youth earnings in the calendar year before RA ($)	42	71	13	58	0.11
Parent had earnings in the calendar year before RA	75.3	72.8	77.7	-4.9**	0.04
Parent earnings in the calendar year before RA ($)	19,145	18,805	19,478	-673	0.52
Number of youth	1,605	813	792		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth whose parent completed the PROMISE five-year youth survey. We weighted the statistics to adjust for survey nonresponse and sample design. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table E.3. CaPROMISE: Baseline characteristics of all youth enrollees (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.6	32.0	33.3	-1.3	0.43
Youth age at RA					0.36
14	34.6	35.7	33.4	2.3	
15	30.7	30.5	30.9	-0.4	
16	34.7	33.8	35.7	-1.9	
Average age at RA	15.4	15.4	15.5	-0.0	0.23
Youth language preference at SSI application					
Prefers English for written language	64.6	64.1	65.1	-0.9	0.59
Prefers English for spoken language	64.7	64.0	65.3	-1.3	0.44
Youth living arrangement at SSI application					0.70
In parents' household	76.0	75.6	76.4	-0.9	
Own household or alone	21.5	22.0	20.9	1.1	
Another household and receiving support	2.5	2.4	2.6	-0.3	
Youth race and ethnicity					0.51
Non-Hispanic White	3.5	4.0	3.0	1.0	
Non-Hispanic Black	9.3	9.2	9.4	-0.1	
Hispanic	34.7	34.9	34.5	0.4	
Non-Hispanic American Indian	0.4	0.4	0.4	0.0	
Non-Hispanic other or mixed race	4.0	4.4	3.6	0.8	
Missing	48.1	47.1	49.2	-2.1	
Enrolling parent age at RA	44.1	44.2	43.9	0.3	0.27
Parent race and ethnicity					0.77
Non-Hispanic White	4.6	5.0	4.3	0.7	
Non-Hispanic Black	10.3	10.7	10.0	0.7	
Hispanic	34.4	34.3	34.4	-0.1	
Non-Hispanic American Indian	0.2	0.1	0.3	-0.1	
Non-Hispanic other or mixed race	3.7	3.9	3.5	0.4	
Missing	46.8	46.1	47.6	-1.5	
Disability					
Youth primary impairment					0.83
Intellectual or developmental disability	47.8	47.7	47.8	-0.2	
Speech, hearing, or visual impairment	2.8	3.0	2.6	0.4	
Physical disability	18.9	18.2	19.5	-1.3	
Other mental impairment	23.7	24.2	23.1	1.1	
Other or unknown disability	6.9	6.8	6.9	-0.1	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	93.7	93.3	94.0	-0.6	0.46
Received OASDI	7.0	7.4	6.6	0.8	0.39
Years between youth's earliest SSI eligibility and RA	9.0	8.9	9.2	-0.4**	0.02
Youth age at most recent SSI application	6.9	7.0	6.8	0.2	0.18
Youth payments in the year before RA ($)					
SSI	7,404	7,382	7,426	-45	0.56
OASDI	218	234	201	33	0.33
Total SSI and OASDI	7,622	7,616	7,628	-12	0.87
Household had multiple SSI-eligible children	14.3	13.9	14.6	-0.7	0.58
Enrolling parent provided a valid SSN at RA	61.3	60.3	62.4	-2.1	0.23
Parents included in the administrative data					0.47
None	15.1	15.3	14.9	0.4	
One parent	50.4	51.3	49.6	1.7	
Two parents	34.5	33.4	35.5	-2.1	
Parent SSA payment status at RA					0.66
Any parent received SSI only	6.7	6.5	6.8	-0.4	
Any parent received OASDI only	5.8	6.1	5.6	0.5	
Any parent received both SSI and OASDI	2.9	3.3	2.5	0.8	
No parent received any SSA payments	69.5	68.9	70.2	-1.3	
No parent was included in the SSA data analyses	15.1	15.3	14.9	0.4	
Earnings					
Youth had earnings in the calendar year before RA	2.5	2.8	2.1	0.6	0.24
Youth earnings in the calendar year before RA ($)	41	48	34	14	0.60
Parent had earnings in the calendar year before RA	74.4	73.2	75.7	-2.6	0.13
Parent earnings in the calendar year before RA ($)	19,442	18,995	19,887	-892	0.25
Number of youth	3,097	1,548	1,549		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who enrolled in PROMISE. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table E.4. CaPROMISE: Baseline characteristics of proxy youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.6	31.4	35.8	-4.4	0.26
Youth age at RA					0.41
14	38.0	40.5	35.5	5.0	
15	29.4	29.1	29.7	-0.6	
16	32.5	30.4	34.7	-4.4	
Average age at RA	15.4	15.3	15.4	-0.1	0.15
Youth language preference at SSI application					
Prefers English for written language	61.1	61.5	60.7	0.8	0.85
Prefers English for spoken language	60.8	60.6	61.1	-0.5	0.91
Youth living arrangement at SSI application					0.50
In parents' household	76.0	74.5	77.4	-2.9	
Own household or alone	21.1	22.9	19.2	3.7	
Another household and receiving support	3.0	2.6	3.3	-0.7	
Youth race and ethnicity					0.99
Non-Hispanic White	4.3	4.4	4.2	0.2	
Non-Hispanic Black	11.1	10.8	11.5	-0.7	
Hispanic	56.9	57.8	56.0	1.8	
Non-Hispanic American Indian	0.4	0.3	0.4	-0.0	
Non-Hispanic other or mixed race	6.4	5.8	6.9	-1.1	
Missing	21.0	20.9	21.1	-0.2	
Enrolling parent age at RA	44.7	44.3	45.1	-0.8	0.24
Parent race and ethnicity					0.61
Non-Hispanic White	6.2	6.0	6.5	-0.4	
Non-Hispanic Black	12.7	12.1	13.4	-1.3	
Hispanic	55.8	57.9	53.7	4.2	
Non-Hispanic American Indian	0.3	0.6	0.0	0.6	
Non-Hispanic other or mixed race	7.2	6.0	8.3	-2.3	
Missing	17.7	17.3	18.1	-0.8	
Disability					
Youth primary impairment					0.88
Intellectual or developmental disability	48.7	49.0	48.3	0.7	
Speech, hearing, or visual impairment	5.2	4.3	6.2	-1.9	
Physical disability	21.4	21.1	21.7	-0.5	
Other mental impairment	17.6	18.4	16.9	1.5	
Other or unknown disability	7.1	7.2	7.0	0.3	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	95.8	96.1	95.5	0.6	0.72
Received OASDI	7.5	9.4	5.5	3.8*	0.08
Years between youth's earliest SSI eligibility and RA	9.8	9.4	10.2	-0.8**	0.02
Youth age at most recent SSI application	6.2	6.5	5.9	0.6*	0.09
Youth payments in the year before RA ($)					
SSI	7,401	7,337	7,465	-128	0.46
OASDI	246	331	160	171**	0.04
Total SSI and OASDI	7,647	7,669	7,625	43	0.79
Household had multiple SSI-eligible children	12.6	14.1	11.1	3.0	0.27
Enrolling parent provided a valid SSN at RA	60.9	59.4	62.4	-3.0	0.46
Parents included in the administrative data					0.47
None	12.5	14.1	10.9	3.3	
One parent	49.2	48.9	49.5	-0.6	
Two parents	38.3	36.9	39.6	-2.7	
Parent SSA payment status at RA					0.54
Any parent received SSI only	5.7	5.2	6.3	-1.1	
Any parent received OASDI only	6.9	7.3	6.5	0.8	
Any parent received both SSI and OASDI	3.0	3.7	2.3	1.5	
No parent received any SSA payments	71.9	69.7	74.1	-4.4	
No parent was included in the SSA data analyses	12.5	14.1	10.9	3.3	
Earnings					
Youth had earnings in the calendar year before RA	2.0	2.7	1.3	1.4	0.23
Youth earnings in the calendar year before RA ($)	64	124	3	122	0.19
Parent had earnings in the calendar year before RA	77.0	75.2	78.7	-3.5	0.36
Parent earnings in the calendar year before RA ($)	20,572	19,890	21,230	-1,341	0.45
Number of youth	596	299	297		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who completed the PROMISE five-year youth survey by proxy. We weighted the statistics to adjust for survey nonresponse and sample design. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

2. Differences between survey respondents and nonrespondents

We compared youth and parent survey respondents with nonrespondents across 25 baseline characteristics to assess the extent to which survey nonresponse might limit generalizability of the impact findings to all evaluation enrollees (Appendix Tables E.5 and E.6). Youth survey respondents differed from nonrespondents with respect to youth's written and spoken language preferences and the share of households with multiple SSI-eligible children. Parent survey respondents different from nonrespondents with respect to the same characteristics. Overall, even when the differences were statistically significant, they generally were small. The extent and magnitude of the differences suggested that the respondents were not markedly different from the nonrespondents. To account for survey nonresponse, we calculated and used survey weights in all regression models to estimate impacts on the survey-based outcome measures.

Appendix Table E.5. CaPROMISE: Baseline characteristics of youth survey respondents and nonrespondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.6	33.8	31.4	2.3	0.17
Youth age at RA					0.26
14	34.6	35.4	33.7	1.7	
15	30.7	31.2	30.1	1.1	
16	34.7	33.4	36.2	-2.8	
Average age at RA	15.4	15.4	15.5	-0.0	0.21
Youth language preference at SSI application					
Prefers English for written language	64.6	62.6	66.8	-4.3**	0.01
Prefers English for spoken language	64.7	62.6	67.0	-4.4**	0.01
Youth living arrangement at SSI application					0.93
In parents' household	76.0	75.8	76.2	-0.4	
Own household or alone	21.5	21.6	21.4	0.2	
Another household and receiving support	2.5	2.6	2.4	0.2	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	3.5	5.4	1.4	4.0	
Non-Hispanic Black	9.3	14.1	4.1	10.1	
Hispanic	34.7	57.9	9.7	48.2	
Non-Hispanic American Indian	0.4	0.4	0.3	0.1	
Non-Hispanic other or mixed race	4.0	6.5	1.3	5.3	
Missing	48.1	15.6	83.2	-67.6	
Enrolling parent age at RA	44.1	44.2	43.9	0.2	0.43
Parent race and ethnicity				†††	0.00
Non-Hispanic White	4.6	7.5	1.5	6.1	
Non-Hispanic Black	10.3	15.9	4.4	11.5	
Hispanic	34.4	56.9	10.1	46.8	
Non-Hispanic American Indian	0.2	0.3	0.1	0.2	
Non-Hispanic other or mixed race	3.7	6.0	1.2	4.8	
Missing	46.8	13.4	82.8	-69.4	
Disability					
Youth primary impairment					0.39
Intellectual or developmental disability	47.8	48.5	46.9	1.6	
Speech, hearing, or visual impairment	2.8	3.1	2.6	0.4	
Physical disability	18.9	19.3	18.4	0.8	
Other mental impairment	23.7	22.2	25.2	-3.0	
Other or unknown disability	6.9	6.9	6.8	0.1	

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	93.7	94.3	93.0	1.2	0.16
Received OASDI	7.0	6.9	7.0	-0.1	0.89
Years between youth's earliest SSI eligibility and RA	9.0	9.1	9.0	0.0	0.78
Youth age at most recent SSI application	6.9	6.8	6.9	-0.1	0.42
Youth payments in the year before RA ($)					
SSI	7,404	7,381	7,428	-47	0.55
OASDI	218	219	217	2	0.96
Total SSI and OASDI	7,622	7,600	7,645	-45	0.52
Household had multiple SSI-eligible children	14.3	13.2	15.4	-2.3*	0.07
Enrolling parent provided a valid SSN at RA	61.3	61.1	61.5	-0.4	0.82
Parents included in the administrative data					0.23
None	15.1	15.4	14.8	0.6	
One parent	50.4	49.0	52.0	-3.0	
Two parents	34.5	35.6	33.2	2.5	
Parent SSA payment status at RA					0.40
Any parent received SSI only	6.7	6.0	7.4	-1.4	
Any parent received OASDI only	5.8	6.2	5.4	0.9	
Any parent received both SSI and OASDI	2.9	2.7	3.2	-0.5	
No parent received any SSA payments	69.5	69.7	69.3	0.4	
No parent was included in the SSA data analyses	15.1	15.4	14.8	0.6	
Earnings					
Youth had earnings in the calendar year before RA	2.5	2.6	2.3	0.3	0.54
Youth earnings in the calendar year before RA ($)	41	43	38	5	0.85
Parent had earnings in the calendar year before RA	74.4	75.5	73.3	2.2	0.21
Parent earnings in the calendar year before RA ($)	19,442	19,448	19,436	11	0.99
Number of youth	3,097	1,605	1,492		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who enrolled in PROMISE. Nonrespondents include youth ineligible for the survey because they died or withdrew from the study or were not sampled for the survey. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table E.6. CaPROMISE: Baseline characteristics of parent survey respondents and nonrespondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.6	33.3	32.0	1.3	0.44
Youth age at RA				†	0.10
14	34.6	35.6	33.4	2.2	
15	30.7	31.4	29.9	1.5	
16	34.7	33.0	36.7	-3.7	
Average age at RA	15.4	15.4	15.5	-0.1	0.10
Youth language preference at SSI application					
Prefers English for written language	64.6	62.2	67.2	-5.0***	0.00
Prefers English for spoken language	64.7	62.2	67.4	-5.2***	0.00
Youth living arrangement at SSI application					0.52
In parents' household	76.0	75.5	76.6	-1.2	
Own household or alone	21.5	21.7	21.2	0.6	
Another household and receiving support	2.5	2.8	2.2	0.6	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	3.5	5.3	1.5	3.8	
Non-Hispanic Black	9.3	14.6	3.6	11.0	
Hispanic	34.7	58.6	9.0	49.6	
Non-Hispanic American Indian	0.4	0.4	0.3	0.1	
Non-Hispanic other or mixed race	4.0	6.4	1.5	4.9	
Missing	48.1	14.8	84.0	-69.3	
Enrolling parent age at RA	44.1	44.2	43.9	0.3	0.26
Parent race and ethnicity				†††	0.00
Non-Hispanic White	4.6	7.2	1.8	5.4	
Non-Hispanic Black	10.3	16.4	3.8	12.6	
Hispanic	34.4	57.8	9.2	48.6	
Non-Hispanic American Indian	0.2	0.3	0.1	0.2	
Non-Hispanic other or mixed race	3.7	5.8	1.4	4.4	
Missing	46.8	12.5	83.7	-71.2	
Disability					
Youth primary impairment					0.96
Intellectual or developmental disability	47.8	47.8	47.7	0.1	
Speech, hearing, or visual impairment	2.8	2.9	2.7	0.2	
Physical disability	18.9	18.9	18.8	0.2	
Other mental impairment	23.7	23.2	24.1	-0.9	
Other or unknown disability	6.9	7.1	6.6	0.5	

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	93.7	94.3	93.0	1.2	0.16
Received OASDI	7.0	6.7	7.2	-0.5	0.58
Years between youth's earliest SSI eligibility and RA	9.0	9.1	9.0	0.0	0.93
Youth age at most recent SSI application	6.9	6.8	6.9	-0.1	0.55
Youth payments in the year before RA ($)					
SSI	7,404	7,381	7,429	-47	0.54
OASDI	218	214	222	-8	0.82
Total SSI and OASDI	7,622	7,595	7,650	-55	0.43
Household had multiple SSI-eligible children	14.3	13.2	15.4	-2.1*	0.09
Enrolling parent provided a valid SSN at RA	61.3	61.5	61.1	0.4	0.83
Parents included in the administrative data					0.44
None	15.1	15.3	14.9	0.4	
One parent	50.4	49.3	51.6	-2.3	
Two parents	34.5	35.3	33.5	1.8	
Parent SSA payment status at RA					0.48
Any parent received SSI only	6.7	6.1	7.2	-1.1	
Any parent received OASDI only	5.8	6.3	5.3	1.0	
Any parent received both SSI and OASDI	2.9	2.7	3.2	-0.5	
No parent received any SSA payments	69.5	69.6	69.4	0.2	
No parent was included in the SSA data analyses	15.1	15.3	14.9	0.4	
Earnings					
Youth had earnings in the calendar year before RA	2.5	2.4	2.5	-0.2	0.75
Youth earnings in the calendar year before RA ($)	41	43	39	4	0.88
Parent had earnings in the calendar year before RA	74.4	75.7	73.1	2.6	0.12
Parent earnings in the calendar year before RA ($)	19,442	19,374	19,515	-140	0.86
Number of youth	3,097	1,605	1,492		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes the parents who were eligible for the survey. Nonrespondents include parents ineligible for the survey because they died or withdrew from the study or were not sampled for the survey. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

3. Differences between self-reporting and proxy youth respondents

We compared the baseline characteristics of youth who self-responded to the survey to those who responded via proxies to assess whether systematically missing data from different survey modes might affect the estimated impacts on survey-based outcomes (Appendix Table E.7). We found differences in 8 of 25 baseline characteristics by survey response type. Compared with self-respondents, youth who responded by proxy were less likely to prefer English as a spoken or written language and more likely to have received SSI at RA; they were younger at RA and at the time of their most recent SSI application, had older enrolling parents, more years between earliest SSI eligibility and RA, and higher average parent earnings in the year before RA. Because of these differences, findings on survey-based outcomes that are available only for self-respondents might not generalize to all survey respondents.

Appendix Table E.7. CaPROMISE: Baseline characteristics of proxy and self-reporting youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Proxy respondent (B)	Self-reporting respondent (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.0	33.6	32.7	1.0	0.69
Youth age at RA					0.14
14	34.9	38.0	33.1	5.0	
15	31.1	29.4	32.1	-2.6	
16	34.0	32.5	34.9	-2.3	
Average age at RA	15.4	15.4	15.5	-0.1**	0.04
Youth language preference at SSI application					
Prefers English for written language	64.5	61.1	66.5	-5.4**	0.03
Prefers English for spoken language	64.5	60.8	66.7	-5.9**	0.02
Youth living arrangement at SSI application					0.78
In parents' household	76.5	76.0	76.8	-0.8	
Own household or alone	20.9	21.1	20.9	0.2	
Another household and receiving support	2.6	3.0	2.4	0.6	
Youth race and ethnicity				††	0.04
Non-Hispanic White	5.4	4.3	6.0	-1.7	
Non-Hispanic Black	14.5	11.1	16.4	-5.3	
Hispanic	54.1	56.9	52.5	4.3	
Non-Hispanic American Indian	0.5	0.4	0.5	-0.2	
Non-Hispanic other or mixed race	6.5	6.4	6.6	-0.2	
Missing	19.1	21.0	18.0	3.0	
Enrolling parent age at RA	44.1	44.7	43.8	0.9**	0.04
Parent race and ethnicity				††	0.02
Non-Hispanic White	7.6	6.2	8.4	-2.2	
Non-Hispanic Black	16.3	12.7	18.5	-5.7	
Hispanic	53.6	55.8	52.2	3.6	
Non-Hispanic American Indian	0.3	0.3	0.3	-0.0	
Non-Hispanic other or mixed race	6.0	7.2	5.3	1.9	
Missing	16.2	17.7	15.3	2.4	
Disability					
Youth primary impairment				†††	0.00
Intellectual or developmental disability	48.5	48.7	48.4	0.3	
Speech, hearing, or visual impairment	3.0	5.2	1.7	3.6	
Physical disability	18.8	21.4	17.3	4.1	
Other mental impairment	22.7	17.6	25.7	-8.1	
Other or unknown disability	7.0	7.1	6.9	0.2	

Baseline characteristic	All (A)	Proxy respondent (B)	Self-reporting respondent (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.1	95.8	93.1	2.7**	0.02
Received OASDI	6.9	7.5	6.6	0.8	0.53
Years between youth's earliest SSI eligibility and RA	9.0	9.8	8.6	1.2***	0.00
Youth age at most recent SSI application	6.8	6.2	7.2	-1.0***	0.00
Youth payments in the year before RA ($)					
SSI	7,384	7,401	7,375	26	0.81
OASDI	221	246	207	39	0.44
Total SSI and OASDI	7,606	7,647	7,582	65	0.52
Household had multiple SSI-eligible children	13.6	12.6	14.2	-1.6	0.37
Enrolling parent provided a valid SSN at RA	61.6	60.9	62.0	-1.2	0.65
Parents included in the administrative data				††	0.03
None	14.7	12.5	16.0	-3.5	
One parent	50.7	49.2	51.6	-2.3	
Two parents	34.6	38.3	32.4	5.9	
Parent SSA payment status at RA					0.26
Any parent received SSI only	6.3	5.7	6.6	-0.9	
Any parent received OASDI only	6.2	6.9	5.7	1.2	
Any parent received both SSI and OASDI	2.6	3.0	2.4	0.6	
No parent received any SSA payments	70.3	71.9	69.3	2.6	
No parent was included in the SSA data analyses	14.7	12.5	16.0	-3.5	
Earnings					
Youth had earnings in the calendar year before RA	2.7	2.0	3.1	-1.1	0.19
Youth earnings in the calendar year before RA ($)	40	64	27	37	0.43
Parent had earnings in the calendar year before RA	75.2	77.0	74.0	3.0	0.22
Parent earnings in the calendar year before RA ($)	19,205	20,572	18,371	2,201**	0.05
Number of youth	1,605	596	1,009		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all PROMISE five-year youth survey respondents. We weighted the statistics to adjust for survey nonresponse and sample design. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

B. Findings from the impact analysis

In this section, we present findings from the impact analysis of CaPROMISE. First, we present impacts estimated through the main models. Second, we present the results of sensitivity analyses. Third, we present impacts for key subgroups of evaluation enrollees.

1. Impact estimates

Appendix Tables E.8–E.17 provide results and inference statistics for the regression-adjusted impacts estimated through the main models described in Appendix B. For each outcome measure, we report the estimated regression-adjusted impact; the control group mean (weighted, as applicable); and additional inference statistics, such as standard errors, effect sizes, and sample sizes by treatment status.

Appendix Table E.8. CaPROMISE: Impact on the youth's education and training (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group sample size	Control group sample size
Primary outcomes							
Enrolled in an educational or training program	58.1	2.4	0.34	2.5	0.059	798	769
Has a GED, high school diploma, or certificate of completion	80.6	-1.6	0.44	2.1	-0.059	805	788
Supplementary outcomes							
Enrolled in postsecondary education	25.9	-0.3	0.89	2.2	-0.010	793	776
Type of school attending							
High school serving a variety of students	6.2	1.4	0.28	1.3	0.135	793	776
High school serving only students with disabilities	11.3	0.2	0.89	1.6	0.013	793	776
GED program or other adult education program	4.1	0.9	0.40	1.1	0.124	793	776
Postsecondary vocational, trade, or technical school	4.6	-0.2	0.88	1.0	-0.022	793	776
Postsecondary college or advanced degree program	21.3	-0.2	0.94	2.1	-0.006	793	776
Other type of school	4.2	1.1	0.31	1.1	0.148	793	776
Not attending school	48.3	-3.3	0.18	2.5	-0.081	793	776
Highest grade completed							
Lower than 12th grade	12.6	1.7	0.32	1.8	0.091	810	795
12th grade or senior in high school	70.9	-2.8	0.23	2.4	-0.081	810	795
Some or all of college or university	14.0	0.1	0.94	1.8	0.007	810	795
Other or do not know	2.6	0.9	0.28	0.9	0.194	810	795
Enrolled in a training program	12.1	1.4	0.40	1.7	0.078	780	752
Received any training credential in the past year	8.5	0.9	0.55	1.4	0.065	796	785
Any school suspensions or expulsions in the past year	0.8	0.7	0.19	0.6	0.387	782	753

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group sample size	Control group sample size
Accommodations							
Receives educational accommodation	35.7	3.3	0.17	2.4	0.086	791	771
Receives training accommodation	7.3	1.0	0.45	1.3	0.086	778	750
Received supports or services for postsecondary education in the past year	30.6	3.6	0.13	2.4	0.099	801	785

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

GED = General Educational Development.

Appendix Table E.9. CaPROMISE: Impact on the youth's employment and earnings (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Employed in a paid job in the past year[a]	33.3	2.7	0.26	2.4	0.071	810	795
Earnings in the past year ($)	3,648	403	0.36	445	0.047	810	795
Earnings during the five calendar years after RA ($)	9,902	941	0.15	660	0.049	1,548	1,549
Supplementary outcomes							
Employment in the past year							
Any employment	35.6	3.6	0.14	2.4	0.092	810	795
Weekly hours worked	5.2	0.5	0.41	0.6	0.043	810	795
Employed in a paid job offering fringe benefits	20.3	0.1	0.98	2.1	0.002	810	795
Employment settings							
Integrated	27.4	2.3	0.32	2.3	0.067	810	795
Outside of school-sponsored activities	28.1	0.6	0.80	2.3	0.017	810	795
With coaching	7.7	2.4	0.11	1.5	0.176	810	795
Received supports or services in getting or keeping a job	15.6	6.8***	0.00	2.0	0.270	808	788
Employment at the time of the survey							
Any paid employment	19.1	3.1	0.13	2.1	0.116	810	795
Average weekly earnings ($)	69	11	0.23	10	0.062	810	795
Weekly hours worked	5.0	0.9	0.19	0.7	0.069	810	795
Labor force participation	38.8	3.1	0.22	2.5	0.077	810	795
Employment and earnings in calendar years after RA							
Ever employed in Year 1	13.2	20.0***	0.00	1.4	0.717	1,548	1,549
Ever employed in Year 2	23.5	24.4***	0.00	1.6	0.664	1,548	1,549
Ever employed in Year 3	34.7	16.5***	0.00	1.7	0.411	1,548	1,549
Ever employed in Year 4	44.3	6.3***	0.00	1.8	0.152	1,548	1,549
Ever employed in Year 5	45.4	2.0	0.25	1.8	0.049	1,548	1,549
Ever employed during Years 1-5	60.0	21.1***	0.00	1.5	0.639	1,548	1,549
Earnings in Year 1 ($)	167	136***	0.00	25	0.187	1,548	1,549

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Earnings in Year 2 ($)	567	204***	0.00	65	0.109	1,548	1,549
Earnings in Year 3 ($)	1,697	104	0.49	149	0.024	1,548	1,549
Earnings in Year 4 ($)	3,164	105	0.65	235	0.016	1,548	1,549
Earnings in Year 5 ($)	4,306	392	0.20	309	0.045	1,548	1,549
VR services during the 5 years after RA[a]							
Applied for VR services	13.1	57.0***	0.00	1.4	1.663	1,548	1,549
Received VR services	11.0	58.0***	0.00	1.4	1.754	1,548	1,549

Source: PROMISE five-year survey, RSA-911 data (VR service outcomes), and SSA administrative records (employment and earnings in years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] RSA-911 data are available only through 2020. VR services outcomes used only four years of data for youth who enrolled in PROMISE in 2016.

N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration; VR = vocational rehabilitation.

Appendix Table E.10. CaPROMISE: Impact on the youth's self-determination and expectations (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Self-determination score (scale: 0 to 100)[a]	77.9	-1.2	0.21	0.9	-0.081	497	470
Youth expects to be financially independent at age 25	56.9	2.4	0.46	3.2	0.059	500	483
Supplementary outcomes							
Scores on subdomains of self-determination[a]							
Autonomy (scale: 0 to 300)	135.5	-4.6	0.23	3.9	-0.078	498	470
Psychological empowerment (scale: 0 to 100)	87.3	-1.1	0.39	1.2	-0.055	495	471
Self-realization (scale: 0 to 100)	90.4	-0.9	0.42	1.1	-0.052	496	470
Agentic action (scale: 0 to 100)	88.4	-0.9	0.52	1.5	-0.042	496	470
Youth expects to:							
Get postsecondary education (beyond high school/GED)	74.0	-3.6	0.23	3.0	-0.110	490	476
Live independently at age 25	54.1	-3.8	0.24	3.3	-0.093	486	477
Be employed in a paid job at age 25	86.6	1.5	0.49	2.2	0.083	503	492
Parent expects youth to:							
Get postsecondary education (beyond high school/GED)	53.2	4.2	0.11	2.6	0.103	749	734
Live independently at age 25	27.7	-3.4	0.13	2.2	-0.108	759	741
Be financially independent at age 25	41.5	0.5	0.83	2.5	0.013	779	756
Be employed in a paid job at age 25	75.8	2.0	0.36	2.1	0.067	772	765
Parent believes it important that youth be employed eventually	89.4	-0.1	0.93	1.5	-0.008	764	736

Source: PROMISE five-year survey.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] Higher scores on the scales indicate higher levels of self-determination.

GED = General Educational Development; N = sample size.

Appendix Table E.11. CaPROMISE: Impact on the youth's SSA payments and knowledge (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Received SSA payments in Year 5 after RA	65.2	1.5	0.35	1.6	0.041	1,548	1,549
Total SSA payments in Year 5 after RA ($)	6,196	257	0.14	174	0.051	1,548	1,549
Total SSA payments during Years 1–5 after RA ($)	37,122	695	0.19	528	0.042	1,548	1,549
Supplementary outcomes							
Aware of the following SSA policies							
Children receiving SSI are not automatically eligible for SSI as adults	39.1	2.9	0.37	3.2	0.073	497	470
People receiving SSI can work for pay	69.1	-0.1	0.98	3.1	-0.002	497	470
People receiving SSI must report earnings to SSA	78.1	0.5	0.86	2.7	0.017	497	470
Aware of the following work supports							
SSI Student Earned Income Exclusion	6.5	3.2*	0.06	1.7	0.263	497	470
SSI earned income exclusion	4.8	2.0	0.17	1.4	0.222	497	470
SSI PASS plan	7.1	0.5	0.75	1.7	0.048	497	470
ABLE account	6.3	0.8	0.61	1.6	0.079	496	470
SSA payments in years after RA							
Received any in Year 1	97.2	-0.5	0.30	0.4	-0.093	1,548	1,549
Received any in Year 2	91.5	-0.7	0.42	0.9	-0.056	1,548	1,549
Received any in Year 3	84.1	0.4	0.75	1.2	0.018	1,548	1,549
Received any in Year 4	72.8	2.4	0.11	1.5	0.076	1,548	1,549
Received any in Years 1–5	98.0	-0.4	0.37	0.4	-0.109	1,548	1,549
Amount in Year 1 ($)	8,820	-42	0.57	74	-0.015	1,548	1,549
Amount in Year 2 ($)	8,113	55	0.61	108	0.016	1,548	1,549
Amount in Year 3 ($)	7,359	152	0.27	139	0.037	1,548	1,549
Amount in Year 4 ($)	6,635	273*	0.09	163	0.058	1,548	1,549

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
SSI payments in years after RA							
Received any in Year 1	96.7	-0.6	0.15	0.4	-0.110	1,548	1,549
Received any in Year 2	90.6	-0.9	0.35	1.0	-0.061	1,548	1,549
Received any in Year 3	82.6	1.0	0.42	1.3	0.044	1,548	1,549
Received any in Year 4	71.7	2.5*	0.10	1.5	0.077	1,548	1,549
Received any in Year 5	64.1	2.0	0.21	1.6	0.054	1,548	1,549
Received any in Years 1–5	97.7	-0.5	0.25	0.4	-0.125	1,548	1,549
Amount in Year 1 ($)	8,510	-9	0.90	71	-0.003	1,548	1,549
Amount in Year 2 ($)	7,800	69	0.52	108	0.019	1,548	1,549
Amount in Year 3 ($)	7,089	159	0.25	139	0.038	1,548	1,549
Amount in Year 4 ($)	6,350	323**	0.05	161	0.068	1,548	1,549
Amount in Year 5 ($)	5,891	327*	0.06	171	0.065	1,548	1,549
Total amount during Years 1–5 ($)	35,641	869*	0.10	522	0.052	1,548	1,549
OASDI benefits in years after RA							
Received any in Year 1	7.5	-0.3	0.42	0.4	-0.026	1,548	1,549
Received any in Year 2	8.1	-0.7	0.15	0.5	-0.056	1,548	1,549
Received any in Year 3	7.2	-0.7	0.29	0.6	-0.062	1,548	1,549
Received any in Year 4	6.4	-1.2*	0.09	0.7	-0.133	1,548	1,549
Received any in Year 5	5.6	-0.8	0.23	0.7	-0.105	1,548	1,549
Received any in Years 1–5	10.1	-0.9	0.16	0.6	-0.063	1,548	1,549
Amount in Year 1 ($)	310	-33	0.20	26	-0.024	1,548	1,549
Amount in Year 2 ($)	313	-14	0.65	30	-0.010	1,548	1,549
Amount in Year 3 ($)	269	-7	0.84	36	-0.005	1,548	1,549
Amount in Year 4 ($)	284	-50	0.24	42	-0.037	1,548	1,549
Amount in Year 5 ($)	304	-70	0.13	46	-0.049	1,548	1,549
Total amount during Years 1–5 ($)	1,481	-174	0.22	143	-0.029	1,548	1,549

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Age-18 redetermination status five years after RA							
Final decision: benefits ceased	23.2	-0.7	0.65	1.5	-0.023	1,548	1,549
Final decision: benefits continued	46.9	1.0	0.54	1.7	0.025	1,548	1,549
Final decision is pending	6.6	0.5	0.59	0.9	0.046	1,548	1,549
Did not have an age-18 redetermination	23.2	-0.9	0.54	1.4	-0.030	1,548	1,549

Source: SSA administrative records and PROMISE five-year survey (awareness of work supports and SSA policies).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

ABLE = Achieving a Better Life Experience; OASDI = Old-Age, Survivors, and Disability Insurance; PASS = Plan for Achieving Self Support; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table E.12. CaPROMISE: Impact on the youth's health insurance coverage and expenditures (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Covered by any health insurance	90.8	1.6	0.27	1.4	0.126	783	786
Average monthly Medicaid and Medicare expenditures in the five years after RA ($)	1,630	-6	0.85	30	-0.004	1,548	1,549
Supplementary outcomes							
Covered by private health insurance	6.5	2.1	0.12	1.4	0.183	783	786
Covered by private health insurance purchased through an ACA health exchange	0.1	0.1	0.48	0.2	0.469	783	786
Medicaid and Medicare participation in years after RA							
Ever enrolled in Year 1	99.9	0.0	0.79	0.1	0.174	1,548	1,549
Ever enrolled in Year 2	99.5	0.1	0.66	0.2	0.144	1,548	1,549
Ever enrolled in Year 3	98.8	-0.0	0.96	0.4	-0.009	1,548	1,549
Ever enrolled in Year 4	97.0	0.1	0.81	0.6	0.031	1,548	1,549
Ever enrolled in Year 5	93.4	0.6	0.53	0.9	0.057	1,548	1,549
Percentage of months enrolled in Years 1–5	95.8	0.3	0.50	0.4	0.024	1,548	1,549
Average monthly Medicaid and Medicare expenditures in years after RA							
Year 1 ($)	1,347	12	0.66	27	0.009	1,548	1,549
Year 2 ($)	1,776	-2	0.96	30	-0.001	1,548	1,549
Year 3 ($)	1,699	8	0.83	35	0.006	1,548	1,549
Year 4 ($)	1,656	-6	0.88	41	-0.004	1,548	1,549
Year 5 ($)	1,671	-40	0.43	51	-0.022	1,548	1,549
Medicaid participation in years after RA							
Ever enrolled in Year 1	99.9	0.0	0.79	0.1	0.174	1,548	1,549
Ever enrolled in Year 2	99.5	0.1	0.66	0.2	0.144	1,548	1,549
Ever enrolled in Year 3	98.8	-0.0	0.96	0.4	-0.009	1,548	1,549
Ever enrolled in Year 4	97.0	0.1	0.89	0.6	0.017	1,548	1,549
Ever enrolled in Year 5	93.4	0.6	0.48	0.9	0.063	1,548	1,549
Percentage of months enrolled in Years 1–5	95.8	0.3	0.48	0.4	0.025	1,548	1,549

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Average monthly Medicaid expenditures in years after RA							
Year 1 ($)	1,346	2	0.94	26	0.002	1,548	1,549
Year 2 ($)	1,775	-6	0.83	30	-0.005	1,548	1,549
Year 3 ($)	1,698	6	0.86	35	0.005	1,548	1,549
Year 4 ($)	1,649	-4	0.93	41	-0.002	1,548	1,549
Year 5 ($)	1,635	-8	0.86	48	-0.005	1,548	1,549
Years 1–5 ($)	1,621	-2	0.95	30	-0.002	1,548	1,549
Medicare participation in years after RA							
Ever enrolled in Year 1	0.1	-0.1	0.51	0.1	-0.560	1,548	1,549
Ever enrolled in Year 2	0.1	-0.1	0.51	0.1	-0.560	1,548	1,549
Ever enrolled in Year 3	0.5	-0.5**	0.02	0.2	-1.308	1,548	1,549
Ever enrolled in Year 4	2.2	-0.8*	0.08	0.4	-0.262	1,548	1,549
Ever enrolled in Year 5	4.3	-1.0	0.11	0.6	-0.165	1,548	1,549
Percentage of months enrolled in Years 1–5	1.0	-0.4**	0.05	0.2	-0.065	1,548	1,549
Average monthly Medicare expenditures in years after RA							
Year 1 ($)	0	10	0.34	10	0.035	1,548	1,549
Year 2 ($)	0	5	0.37	5	0.033	1,548	1,549
Year 3 ($)	1	1	0.66	3	0.016	1,548	1,549
Year 4 ($)	7	-3	0.48	4	-0.025	1,548	1,549
Year 5 ($)	36	-32*	0.07	17	-0.069	1,548	1,549
Years 1–5 ($)	9	-4	0.50	6	-0.025	1,548	1,549

Source: CMS administrative records and PROMISE five-year survey (non-Medicare/Medicaid outcomes).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

ACA = Affordable Care Act; CMS = Centers for Medicare & Medicaid Services; N = sample size; RA = random assignment.

Appendix Table E.13. CaPROMISE: Impact on the youth's economic and social well-being (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Total income in the past year ($)	10,093	701*	0.09	414	0.088	810	795
Total income during the five calendar years after RA ($)	48,967	1,703**	0.01	689	0.083	1,548	1,549
Supplementary outcomes							
Engaging in productive market activities[a]	79.7	2.5	0.22	2.0	0.098	803	777
Income in calendar years after RA							
Year 1 ($)	9,319	127	0.22	103	0.036	1,548	1,549
Year 2 ($)	9,032	264*	0.05	135	0.063	1,548	1,549
Year 3 ($)	9,329	379**	0.04	180	0.072	1,548	1,549
Year 4 ($)	10,275	362	0.12	230	0.055	1,548	1,549
Year 5 ($)	11,013	571**	0.04	282	0.072	1,548	1,549
Household income in the past year ($)[b]	35,350	1,721	0.13	1,132	0.080	730	710
Household receives TANF, SNAP, or housing assistance[b]	39.0	-1.1	0.67	2.5	-0.028	745	728
Amount of public assistance in the past month							
TANF ($)[b]	53	8	0.45	10	0.041	747	731
SNAP benefits ($)[b]	100	-5	0.60	10	-0.028	751	734
Housing assistance ($)[b]	154	9	0.70	24	0.019	747	733
Family structure and living arrangements							
Living independently	7.8	-1.6	0.22	1.3	-0.149	809	794
Married or in a marriage-like relationship	3.5	-1.3	0.15	0.9	-0.276	781	754
Responsible for a child or children	5.0	-0.2	0.87	1.1	-0.023	781	754
Engagement with the criminal justice system							
Ever arrested	5.2	1.9	0.12	1.2	0.201	778	753
Number of times arrested	0.1	0.1*	0.07	0.0	0.100	778	753
Arrested in the past year	1.6	0.6	0.39	0.7	0.200	777	753
Ever incarcerated	1.9	0.5	0.52	0.8	0.148	774	752
Length of incarceration (days)	6.4	-1.6	0.68	3.8	-0.025	774	752

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Self-reported health status							
Poor	6.8	-0.8	0.51	1.3	-0.086	777	752
Fair	13.0	1.8	0.33	1.8	0.090	777	752
Good	40.3	-1.3	0.61	2.6	-0.033	777	752
Very good or excellent	40.0	0.4	0.89	2.6	0.009	777	752
Received help in getting accommodations for school, work, or living independently in past year	15.1	3.8**	0.05	1.9	0.163	803	789

Source: PROMISE five-year surveys and SSA administrative records (SSA payments and income in calendar years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] Productive market activities include engaging in any of the following at the time of the five-year survey: employment in paid or unpaid work, looking for work, or enrollment in school or a training program.

[b] This outcome is based on data from the parent survey about the parent's household if the youth lived with the parent at interview.

N = sample size; RA = random assignment; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; TANF = Temporary Assistance for Needy Families.

Appendix Table E.14. CaPROMISE: Impact on the parents' employment and earnings (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent worked for pay in the past year	72.7	0.2	0.92	2.1	0.006	811	789
Parents' earnings in the past year ($)	25,520	71	0.95	1,247	0.003	812	790
Parents' earnings during the five calendar years after RA ($)	128,128	2,857	0.35	3,041	0.024	1,311	1,318
Supplementary outcomes							
Highest educational attainment achieved by either parent							
Not a high school graduate	34.6	-0.2	0.92	2.2	-0.006	811	792
High school diploma or GED	31.6	-3.1	0.18	2.3	-0.091	811	792
Some postsecondary education or more	32.5	2.3	0.32	2.3	0.062	811	792
Other or do not know	1.2	1.1*	0.10	0.7	0.400	811	792
Employment in the past year							
Number of parents that worked for pay	0.9	-0.0	0.67	0.0	-0.020	808	788
Number of weeks worked	42.4	-1.2	0.45	1.6	-0.036	808	788
Weekly hours worked	32.3	0.8	0.51	1.3	0.031	812	790
Either parent was offered fringe benefits through a job	48.7	1.9	0.44	2.4	0.045	808	789
Employment at the time of survey							
Either parent is in the labor force	75.5	-1.7	0.42	2.1	-0.054	786	760
Either parent is working for pay	65.0	-0.6	0.80	2.3	-0.016	787	761
Employment and earnings in calendar years after RA							
Ever employed in Year 1	78.3	0.5	0.67	1.1	0.018	1,311	1,318
Ever employed in Year 2	79.5	-0.9	0.47	1.2	-0.032	1,311	1,318
Ever employed in Year 3	79.1	-1.8	0.17	1.3	-0.064	1,311	1,318
Ever employed in Year 4	79.1	-2.1	0.13	1.4	-0.073	1,311	1,318
Ever employed in Year 5	76.9	-1.7	0.24	1.5	-0.057	1,311	1,318
Ever employed in Years 1-5	88.2	-1.4	0.19	1.1	-0.077	1,311	1,318
Earnings in Year 1 ($)	23,898	757	0.17	546	0.032	1,311	1,318
Earnings in Year 2 ($)	24,572	507	0.42	635	0.021	1,311	1,318
Earnings in Year 3 ($)	25,914	167	0.82	719	0.007	1,311	1,318

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Earnings in Year 4 ($)	27,222	263	0.74	803	0.010	1,311	1,318
Earnings in Year 5 ($)	26,522	1,163	0.19	885	0.042	1,311	1,318

Source: PROMISE five-year survey and SSA administrative records (employment and earnings in years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

GED = General Educational Development; N = sample size; RA = random assignment.

Appendix Table E.15. CaPROMISE: Impact on the parents' SSA payments (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent received SSA payments in Year 5	21.8	-0.3	0.81	1.1	-0.009	1,311	1,318
Total SSA payments received in Year 5 ($)	2,688	-105	0.50	158	-0.019	1,311	1,318
Total SSA payments during the five years after RA ($)	12,299	-528	0.32	529	-0.021	1,311	1,318
Supplementary outcomes							
SSA payments in years after RA							
Received any in Year 1	18.2	0.1	0.75	0.4	0.006	1,311	1,318
Received any in Year 2	19.5	-0.5	0.44	0.7	-0.020	1,311	1,318
Received any in Year 3	20.5	-1.0	0.21	0.8	-0.039	1,311	1,318
Received any in Year 4	21.2	-1.0	0.31	0.9	-0.036	1,311	1,318
Received any in Years 1–5	24.0	-0.1	0.93	1.0	-0.003	1,311	1,318
Amount in Year 1 ($)	2,291	-23	0.81	98	-0.004	1,311	1,318
Amount in Year 2 ($)	2,302	-37	0.73	106	-0.007	1,311	1,318
Amount in Year 3 ($)	2,462	-173	0.17	126	-0.032	1,311	1,318
Amount in Year 4 ($)	2,556	-190	0.17	140	-0.035	1,311	1,318
SSI payments in years after RA							
Received any in Year 1	12.1	-0.2	0.69	0.5	-0.011	1,311	1,318
Received any in Year 2	12.4	-0.6	0.33	0.6	-0.034	1,311	1,318
Received any in Year 3	12.7	-0.9	0.22	0.7	-0.048	1,311	1,318
Received any in Year 4	12.8	-0.9	0.26	0.8	-0.049	1,311	1,318
Received any in Year 5	12.7	-0.8	0.35	0.8	-0.044	1,311	1,318
Received any in Years 1–5	14.9	0.2	0.79	0.8	0.010	1,311	1,318
Amount in Year 1 ($)	1,097	31	0.60	58	0.009	1,311	1,318
Amount in Year 2 ($)	1,116	-67	0.33	68	-0.020	1,311	1,318
Amount in Year 3 ($)	1,105	-80	0.28	74	-0.024	1,311	1,318
Amount in Year 4 ($)	1,137	-158*	0.06	83	-0.048	1,311	1,318
Amount in Year 5 ($)	1,160	-131	0.16	94	-0.039	1,311	1,318
Total amount during Years 1–5 ($)	5,615	-405	0.21	323	-0.026	1,311	1,318

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
OASDI benefits in years after RA							
Received any in Year 1	10.3	0.3	0.59	0.5	0.016	1,311	1,318
Received any in Year 2	11.5	-0.3	0.57	0.6	-0.021	1,311	1,318
Received any in Year 3	12.0	-0.0	0.95	0.7	-0.002	1,311	1,318
Received any in Year 4	12.7	0.0	0.98	0.9	0.001	1,311	1,318
Received any in Year 5	13.4	0.2	0.81	1.0	0.012	1,311	1,318
Received any in Years 1–5	15.1	0.1	0.90	0.9	0.005	1,311	1,318
Amount in Year 1 ($)	1,194	-54	0.50	80	-0.013	1,311	1,318
Amount in Year 2 ($)	1,186	30	0.73	85	0.007	1,311	1,318
Amount in Year 3 ($)	1,358	-93	0.36	103	-0.022	1,311	1,318
Amount in Year 4 ($)	1,419	-32	0.79	118	-0.007	1,311	1,318
Amount in Year 5 ($)	1,528	26	0.84	127	0.006	1,311	1,318
Total amount during Years 1–5 ($)	6,685	-123	0.78	436	-0.006	1,311	1,318

Source: SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

N = sample size; OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table E.16. CaPROMISE: Impact on the parents' health insurance coverage and expenditures (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent is covered by health insurance	85.8	-0.2	0.91	1.7	-0.009	801	790
Average monthly Medicaid and Medicare expenditures in the five years after RA ($)	521	17	0.28	15	0.025	1,311	1,318
Supplementary outcomes							
Covered by private health insurance	23.0	0.5	0.82	2.1	0.016	803	790
Medicaid and Medicare participation in years after RA							
Ever enrolled in Year 1	83.8	0.2	0.89	1.4	0.009	1,311	1,318
Ever enrolled in Year 2	83.5	-0.0	1.00	1.4	-0.000	1,311	1,318
Ever enrolled in Year 3	81.6	-0.6	0.70	1.4	-0.022	1,311	1,318
Ever enrolled in Year 4	78.8	0.7	0.62	1.5	0.027	1,311	1,318
Ever enrolled in Year 5	77.9	-0.2	0.91	1.5	-0.006	1,311	1,318
Percentage of months enrolled in Years 1–5	76.5	-0.2	0.88	1.3	-0.005	1,311	1,318
Average monthly Medicaid and Medicare expenditures in years after RA							
Year 1 ($)	388	-3	0.79	13	-0.006	1,311	1,318
Year 2 ($)	542	23	0.23	19	0.028	1,311	1,318
Year 3 ($)	571	21	0.33	21	0.027	1,311	1,318
Year 4 ($)	551	26	0.23	21	0.035	1,311	1,318
Year 5 ($)	555	17	0.45	22	0.023	1,311	1,318
Medicaid participation in years after RA							
Ever enrolled in Year 1	82.6	-0.3	0.82	1.4	-0.013	1,311	1,318
Ever enrolled in Year 2	82.1	-0.5	0.75	1.4	-0.019	1,311	1,318
Ever enrolled in Year 3	80.0	-1.0	0.52	1.5	-0.036	1,311	1,318
Ever enrolled in Year 4	76.8	0.4	0.82	1.6	0.013	1,311	1,318
Ever enrolled in Year 5	75.7	-0.6	0.72	1.6	-0.019	1,311	1,318
Percentage of months enrolled in Years 1–5	74.7	-0.6	0.65	1.3	-0.017	1,311	1,318

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Average monthly Medicaid expenditures in years after RA							
Year 1 ($)	323	-7	0.49	11	-0.019	1,311	1,318
Year 2 ($)	456	9	0.54	14	0.016	1,311	1,318
Year 3 ($)	499	4	0.81	16	0.007	1,311	1,318
Year 4 ($)	481	8	0.64	17	0.014	1,311	1,318
Year 5 ($)	475	8	0.66	17	0.014	1,311	1,318
Years 1–5 ($)	447	4	0.74	12	0.009	1,311	1,318
Medicare participation in years after RA							
Ever enrolled in Year 1	10.1	0.4	0.54	0.6	0.024	1,311	1,318
Ever enrolled in Year 2	10.6	0.7	0.26	0.6	0.044	1,311	1,318
Ever enrolled in Year 3	11.5	0.1	0.86	0.7	0.007	1,311	1,318
Ever enrolled in Year 4	12.4	0.3	0.67	0.8	0.019	1,311	1,318
Ever enrolled in Year 5	13.4	-0.3	0.71	0.9	-0.018	1,311	1,318
Percentage of months enrolled in Years 1–5	11.0	0.2	0.77	0.6	0.005	1,311	1,318
Average monthly Medicare expenditures in years after RA							
Year 1 ($)	66	4	0.71	10	0.010	1,311	1,318
Year 2 ($)	85	14	0.35	15	0.028	1,311	1,318
Year 3 ($)	72	17	0.21	13	0.041	1,311	1,318
Year 4 ($)	70	18	0.16	13	0.046	1,311	1,318
Year 5 ($)	80	10	0.49	14	0.023	1,311	1,318
Years 1–5 ($)	75	12	0.22	10	0.034	1,311	1,318

Source: CMS administrative records and PROMISE five-year survey (non-Medicare/Medicaid outcomes).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

CMS = Centers for Medicare & Medicaid Services; N = sample size.

Appendix Table E.17. CaPROMISE: Impact on the parents' economic well-being (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Parents' total income in the past year ($)	29,231	149	0.92	1,396	0.006	682	675
Parents' total income during the five calendar years after RA ($)	141,645	2,331	0.44	3,006	0.021	1,311	1,318
Supplementary outcomes							
Parents' income in calendar years after RA							
Year 1 ($)	26,376	751	0.18	554	0.033	1,311	1,318
Year 2 ($)	27,179	356	0.58	638	0.015	1,311	1,318
Year 3 ($)	28,590	20	0.98	714	0.001	1,311	1,318
Year 4 ($)	30,056	166	0.83	792	0.007	1,311	1,318
Year 5 ($)	29,445	1,038	0.23	868	0.039	1,311	1,318
Household receives TANF, SNAP, or housing assistance	40.7	-0.2	0.93	2.4	-0.005	796	783
Household income in the past year ($)	36,254	1,591	0.13	1,048	0.077	776	761

Source: PROMISE five-year survey and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

N = sample size; RA = random assignment; SSA = Social Security Administration.

2. Sensitivity analyses

We assessed the sensitivity of the estimated impacts on primary outcomes to methodological choices we incorporated in the main impact estimates. In Appendix Table E.18, we show the impact estimated by the main regression model for each outcome, as well as by alternative models that do not (1) use weights to adjust for nonresponse (but use weights to adjust for survey sampling), (2) include covariate adjustment, and (3) use imputed data for outcomes that underwent multiple imputation. The alternative models produced broadly similar results, suggesting that the main model's estimates of program impacts were not sensitive to the choice of estimation method.

We also assessed the extent to which the lack of survey data for some enrollees would influence the estimates of program impacts. For CaPROMISE, survey data may be missing not only due to nonresponse but also due to survey sampling; we sampled only 2,000 of the approximately 3,000 enrollees for the follow-up surveys. In Appendix Table E.19, we compare how the estimated impacts on primary outcomes varied when nonrespondents were included and excluded from analyses of outcomes measured using administrative data. For all outcomes, the impact estimated using the weighted survey respondent sample did not significantly differ from the impact estimated using the administrative analysis sample. The findings suggest that use of the analysis weights minimized the potential for nonresponse bias because the estimated impacts for the survey respondent sample were comparable to those for the full research sample.

Appendix Table E.18. CaPROMISE: Impact on primary outcomes, by estimation approach (values measured at the time of the survey and shown in in percentages, unless otherwise noted)

Outcome	Main model	No weighting for non-response	No covariate adjustment	No imputation
Enrolled in an educational or training program	2.4	1.7	0.9	n.a.
Has a GED, high school diploma, or certificate of completion	-1.6	-1.5	-1.7	n.a.
Youth employed in a paid job in the past year	2.7	2.8	3.4	2.9
Youth earnings in the past year ($)	403	452	510	396
Youth earnings during the five calendar years after RA ($)	941	n.a.	913	n.a.
Youth self-determination score (scale: 0 to 100)[a]	-1.2	-1.3	-1.0	n.a.
Youth expects to be financially independent at age 25	2.4	2.4	3.1	n.a.
Youth received SSA payments in Year 5 after RA	1.5	n.a.	1.3	n.a.
Youth total SSA payments in Year 5 after RA ($)	257	n.a.	215	n.a.
Youth total SSA payments during Years 1–5 after RA ($)	695	n.a.	575	n.a.
Youth covered by any health insurance	1.6	1.8	1.7	n.a.
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	-6	n.a.	-6	n.a.
Youth total income in the past year ($)	701*	773*	683*	542
Youth total income during the five calendar years after RA ($)	1,703**	n.a.	1,524**	n.a.
Either parent worked for pay in the past year	0.2	0.2	-1.7	n.a.
Parents' earnings in the past year ($)	71	58	-570	-37
Parents' earnings during the five calendar years after RA ($)	2,857	n.a.	-1,763	n.a.
Either parent received SSA payments in Year 5 after RA	-0.3	n.a.	0.9	n.a.
Parents' total SSA payments received in Year 5 after RA ($)	-105	n.a.	58	n.a.
Parents' total SSA payments during the five years after RA ($)	-528	n.a.	318	n.a.
Parents' total income in the past year ($)	149	86	-182	-65
Parents' income during the five calendar years after RA ($)	2,331	n.a.	-1,385	n.a.
Either parent is covered by health insurance	-0.2	-0.2	0.1	n.a.
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	17	n.a.	17	n.a.

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the impact estimates of CaPROMISE, using different modeling approaches. In the main model, we used covariate adjustment and, for outcomes derived from survey data, we weighted statistics to adjust for survey nonresponse and sample design and used multiple imputation when an

outcome had a missing value conditional on the value of another variable. In the model with "No weighting for non-response", we followed the main model but did not apply weights to adjust for non-response (we applied weights to adjust for sample design). In the model with "No covariate adjustment", we followed the main model but did not include covariates except for region fixed effects. For the model with "No multiple imputation", we followed the main model except that we excluded cases with outcomes that had a missing value conditional on the value of another variable.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; n.a.= not applicable; RA = random assignment; SSA = Social Security Administration.

Appendix Table E.19. CaPROMISE: Impact on primary outcomes measured using administrative data, including and excluding five-year survey nonrespondents (percentage, unless otherwise noted)

Outcome	Administrative analysis samples			Five-year survey respondents (weighted)			*p*-value for difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth earnings during the five calendar years after RA ($)	9,902	941	0.15	8,354	1,705*	0.06	0.31
Youth received SSA payments in Year 5 after RA	65.2	1.5	0.35	67.9	2.6	0.24	0.55
Youth total SSA payments in Year 5 after RA ($)	6,196	257	0.14	6,517	307	0.21	0.80
Youth total SSA payments during Years 1–5 after RA ($)	37,122	695	0.19	38,290	529	0.47	0.78
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,630	-6	0.85	1,666	-15	0.73	0.79
Youth total income during the five calendar years after RA ($)	48,967	1,703**	0.01	48,740	2,247**	0.02	0.49
Parents' earnings during the five calendar years after RA ($)	128,128	2,857	0.35	127,556	4,987	0.25	0.55
Either parent received SSA payments in Year 5 after RA	21.8	-0.3	0.81	21.8	-0.8	0.62	0.69
Parents' total SSA payments received in Year 5 after RA ($)	2,688	-105	0.50	2,679	-230	0.28	0.49
Parents' total SSA payments during the five years after RA ($)	12,299	-528	0.32	12,465	-1,445*	0.05	0.13
Parents' total income during the five calendar years after RA ($)	141,645	2,331	0.44	141,260	3,517	0.41	0.73
Parents' average monthly Medicaid and Medicare expenditures in years after RA in Years 1-5 after RA ($)	521	17	0.28	499	6	0.79	0.52

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE for administrative analysis samples and five-year survey respondents. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For the sample of five-year survey respondents, we weighted the statistics to adjust for survey nonresponse and sample design, applying youth weights for youths' outcomes and parent weights for parents' outcomes.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for the two samples are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; N = sample size; RA = random assignment. SSA = Social Security Administration.

3. Subgroup impact estimates

We estimated the five-year impacts for key subgroups of evaluation enrollees to understand whether the impacts of CaPROMISE differed by enrollee characteristics. We focused on subgroups defined by the following baseline characteristics of youth: age (ages 14 and 15, and age 16); sex (females and males); whether a youth's parent received SSA payments at the time of RA (yes or no); primary impairment (intellectual or developmental disabilities, other mental impairments, and other disabilities); and whether the survey respondent completed the five-year survey before or after the onset of the COVID-19 pandemic (yes or no). Appendix Tables E.20–E.25 present the subgroup impact estimates.

Appendix Table E.20. CaPROMISE: Impacts on primary outcomes, by youth's age (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Age 14 and 15					Age 16					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	63.7	-1.3	0.66	539	508	47.6	9.6**	0.03	259	261	0.03††
Youth has a GED, high school diploma, or certificate of completion	81.4	-3.3	0.19	544	519	79.0	1.8	0.62	261	269	0.24
Youth employed in a paid job in the past year	31.5	3.5	0.23	547	522	36.6	0.9	0.83	263	273	0.61
Youth earnings in the past year ($)	3,311	369	0.45	547	522	4,272	432	0.62	263	273	0.95
Youth earnings during the five calendar years after RA ($)	7,895	867	0.22	1,025	996	13,516	936	0.50	523	553	0.96
Youth self-determination score (scale: 0 to 100)	78.7	-2.0*	0.08	329	307	76.4	0.2	0.88	168	163	0.26
Youth expects to be financially independent at age 25	60.7	-3.3	0.40	330	318	49.9	12.9**	0.02	170	165	0.01††
Youth received SSA payments in Year 5 after RA	68.4	-0.2	0.90	1,025	996	59.5	5.1*	0.07	523	553	0.12
Youth total SSA payments in Year 5 after RA ($)	6,272	184	0.38	1,025	996	6,058	409	0.19	523	553	0.55
Youth total SSA payments during Years 1–5 after RA ($)	37,121	4	0.99	1,025	996	37,124	1,989**	0.03	523	553	0.08†
Youth covered by any health insurance	92.1	1.5	0.37	528	516	88.3	1.9	0.50	255	270	0.89
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,652	-22	0.54	1,025	996	1,589	26	0.63	523	553	0.45
Youth total income in the past year ($)	9,755	652	0.16	547	522	10,718	758	0.36	263	273	0.91
Youth total income during the five calendar years after RA ($)	46,817	913	0.27	1,025	996	52,841	3,045**	0.01	523	553	0.15

Outcome	Age 14 and 15					Age 16					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Either parent worked for pay in the past year	75.0	-0.2	0.93	549	522	68.4	1.0	0.78	262	267	0.78
Parents' earnings in the past year ($)	26,990	-1,111	0.46	550	523	22,817	2,310	0.29	262	267	0.19
Parents' earnings during the five calendar years after RA ($)	131,228	1,519	0.70	855	839	122,699	5,350	0.25	456	479	0.53
Either parent received SSA payments in Year 5 after RA	19.8	0.7	0.57	855	839	25.3	-2.1	0.25	456	479	0.21
Parents' total SSA payments received in Year 5 after RA ($)	2,403	8	0.96	855	839	3,187	-314	0.28	456	479	0.35
Parents' total SSA payments during the five years after RA ($)	10,867	137	0.83	855	839	14,808	-1,742*	0.07	456	479	0.10
Parents' total income in the past year ($)	30,613	-1,458	0.39	453	442	26,774	3,058	0.19	229	233	0.11
Parents' total income during the five calendar years after RA ($)	143,177	1,737	0.66	855	839	138,961	3,465	0.45	456	479	0.77
Either parent is covered by health insurance	85.3	-0.0	1.00	540	524	86.6	-0.5	0.86	261	266	0.88
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	504	24	0.21	855	839	552	3	0.90	456	479	0.52

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; RA = random assignment; SSA = Social Security Administration.

Appendix Table E.21. CaPROMISE: Impacts on primary outcomes, by youth's sex (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Male					Female					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	53.4	5.1*	0.09	537	496	67.0	-3.1	0.45	261	273	0.10
Youth has a GED, high school diploma, or certificate of completion	79.6	-1.7	0.51	543	513	82.5	-1.3	0.70	262	275	0.93
Youth employed in a paid job in the past year	35.4	3.7	0.22	547	516	29.3	0.6	0.88	263	279	0.53
Youth earnings in the past year ($)	4,161	306	0.59	547	516	2,655	600	0.40	263	279	0.74
Youth earnings during the five calendar years after RA ($)	11,325	127	0.88	1,053	1,033	7,053	2,616**	0.01	495	516	0.06†
Youth self-determination score (scale: 0 to 100)	77.0	-0.2	0.90	334	308	79.6	-3.3**	0.03	163	162	0.10
Youth expects to be financially independent at age 25	57.9	0.3	0.93	337	319	54.8	6.5	0.24	163	164	0.35
Youth received SSA payments in Year 5 after RA	63.5	-0.9	0.65	1,053	1,033	68.6	6.5**	0.02	495	516	0.03††
Youth total SSA payments in Year 5 after RA ($)	5,959	85	0.69	1,053	1,033	6,669	609**	0.04	495	516	0.15
Youth total SSA payments during Years 1–5 after RA ($)	36,336	481	0.46	1,053	1,033	38,695	1,135	0.21	495	516	0.55
Youth covered by any health insurance	88.6	2.3	0.23	526	509	94.9	0.3	0.90	257	277	0.45
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,548	-21	0.57	1,053	1,033	1,793	25	0.65	495	516	0.48
Youth income in the past year ($)	10,545	255	0.62	547	516	9,217	1,602**	0.02	263	279	0.11
Youth total income during the five calendar years after RA ($)	49,433	697	0.43	1,053	1,033	48,036	3,775***	0.00	495	516	0.03††
Either parent worked for pay in the past year	72.0	1.8	0.48	551	516	74.0	-3.1	0.40	260	273	0.27

Outcome	Male					Female					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Parents' earnings in the past year ($)	25,455	56	0.97	552	517	25,647	102	0.96	260	273	0.99
Parents' earnings during the five calendar years after RA ($)	129,477	719	0.85	894	881	125,409	7,290	0.16	417	437	0.30
Either parent received SSA payments in Year 5 after RA	23.5	-1.5	0.26	894	881	18.3	2.3	0.18	417	437	0.08†
Parents' total SSA payments received in Year 5 after RA ($)	2,894	-276	0.16	894	881	2,273	247	0.34	417	437	0.11
Parents' total SSA payments during the five years after RA ($)	13,021	-1,188*	0.06	894	881	10,843	840	0.37	417	437	0.07†
Parents' income in the past year ($)	29,732	-177	0.92	466	437	28,278	811	0.73	216	238	0.73
Parents' income during the five calendar years after RA ($)	143,789	-591	0.87	894	881	137,322	8,389	0.10	417	437	0.15
Either parent is covered by health insurance	84.9	-0.0	0.99	544	516	87.4	-0.5	0.86	257	274	0.89
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	548	-2	0.92	894	881	468	55**	0.04	417	437	0.08†

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table E.22. CaPROMISE: Impacts on primary outcomes, by whether parent received SSA payments before RA (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	No parent received SSA payments					At least one parent received SSA payments					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	58.6	4.0	0.17	543	549	47.8	0.0	1.00	127	103	0.57
Youth has a GED, high school diploma, or certificate of completion	81.6	-2.2	0.37	551	560	77.5	3.5	0.51	127	110	0.32
Youth employed in a paid job in the past year	35.1	0.2	0.95	555	564	32.6	12.0*	0.06	127	112	0.09†
Youth earnings in the past year ($)	3,754	-36	0.95	555	564	3,289	2,184*	0.06	127	112	0.08†
Youth earnings during the five calendar years after RA ($)	9,225	737	0.33	1,066	1,087	11,816	2,653	0.14	245	231	0.32
Youth self-determination score (scale: 0 to 100)	79.0	-0.9	0.39	334	328	77.6	-1.1	0.65	80	61	0.93
Youth expects to be financially independent at age 25	60.6	-2.9	0.44	342	333	51.8	17.6**	0.04	77	64	0.02††
Youth received SSA payments in Year 5 after RA	65.6	1.9	0.32	1,066	1,087	59.3	1.6	0.71	245	231	0.94
Youth total SSA payments in Year 5 after RA ($)	6,183	302	0.14	1,066	1,087	5,666	155	0.74	245	231	0.77
Youth total SSA payments during Years 1–5 after RA ($)	35,925	1,137*	0.07	1,066	1,087	38,102	592	0.66	245	231	0.71
Youth covered by any health insurance	90.8	1.7	0.32	533	560	91.8	0.5	0.88	124	108	0.76
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,663	-7	0.84	1,066	1,087	1,531	-27	0.71	245	231	0.80
Youth income in the past year ($)	10,048	406	0.41	555	564	9,816	1,976*	0.07	127	112	0.19
Youth total income during the five calendar years after RA ($)	47,090	1,992**	0.01	1,066	1,087	51,652	3,234*	0.07	245	231	0.53

Outcome	No parent received SSA payments					At least one parent received SSA payments					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Either parent worked for pay in the past year	80.5	0.6	0.82	552	562	40.1	-4.1	0.50	129	112	0.47
Parents' earnings in the past year ($)	29,622	717	0.66	553	562	11,311	-1,201	0.64	129	113	0.52
Parents' earnings during the five calendar years after RA ($)	144,895	3,463	0.33	1,066	1,087	49,232	479	0.92	245	231	0.61
Either parent received SSA payments in Year 5 after RA	7.6	-0.5	0.65	1,066	1,087	88.3	1.1	0.71	245	231	0.61
Parents' total SSA payments received in Year 5 after RA ($)	913	-45	0.77	1,066	1,087	11,038	-339	0.53	245	231	0.59
Parents' total SSA payments during the five years after RA ($)	2,537	-303	0.48	1,066	1,087	58,238	-1,194	0.59	245	231	0.69
Parents' income in the past year ($)	30,505	663	0.68	553	562	22,978	-2,252	0.36	129	113	0.32
Parents' income during the five calendar years after RA ($)	148,002	3,207	0.36	1,066	1,087	111,731	-911	0.85	245	231	0.50
Either parent is covered by health insurance	87.7	2.0	0.29	546	562	94.2	-1.2	0.73	127	112	0.40
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	339	17	0.21	1,066	1,087	1,378	22	0.71	245	231	0.94

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table E.23. CaPROMISE: Impacts on primary outcomes, by youth's primary impairment (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Intellectual or developmental disabilities			Other mental impairments			Other impairments			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth enrolled in an educational or training program	63.2	0.6	0.86	38.2	3.5	0.50	63.3	4.4	0.33	0.77
Youth has a GED, high school diploma, or certificate of completion	82.7	-3.2	0.27	73.3	0.4	0.94	82.2	-0.4	0.91	0.74
Youth employed in a paid job in the past year	30.4	-1.1	0.74	46.3	5.9	0.26	29.1	6.6	0.12	0.28
Youth earnings in the past year ($)	2,797	662	0.28	5,709	564	0.59	3,639	-148	0.85	0.70
Youth earnings during the five calendar years after RA ($)	8,825	547	0.56	13,953	1,680	0.26	8,452	921	0.42	0.81
Youth self-determination score (scale: 0 to 100)	76.4	-1.3	0.34	78.1	-1.4	0.46	80.4	-0.8	0.64	0.96
Youth expects to be financially independent at age 25	55.3	1.0	0.82	61.8	2.4	0.70	55.6	5.2	0.40	0.86
Youth received SSA payments in Year 5 after RA	70.0	2.8	0.23	46.9	0.6	0.87	71.8	0.5	0.87	0.78
Youth total SSA payments in Year 5 after RA ($)	6,753	357	0.16	4,058	343	0.35	6,978	59	0.85	0.74
Youth total SSA payments during Years 1–5 after RA ($)	38,410	1,467*	0.05	32,063	509	0.66	39,025	-330	0.74	0.34
Youth covered by any health insurance	90.7	1.5	0.45	87.3	0.9	0.80	93.4	2.2	0.33	0.95
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,613	34	0.41	1,227	-47	0.42	1,978	-42	0.51	0.42
Youth income in the past year ($)	9,594	1,225**	0.03	10,283	625	0.53	10,812	-111	0.87	0.33
Youth total income during the five calendar years after RA ($)	49,450	2,198**	0.02	46,801	2,394	0.14	49,897	361	0.76	0.42
Either parent worked for pay in the past year	73.3	-2.8	0.35	64.3	8.4*	0.08	78.1	-1.7	0.65	0.12

Outcome	Intellectual or developmental disabilities			Other mental impairments			Other impairments			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Parents' earnings in the past year ($)	25,209	-2,495	0.16	25,174	3,857	0.18	26,343	1,360	0.55	0.12
Parents' earnings during the five calendar years after RA ($)	129,744	-372	0.93	103,640	4,231	0.45	146,778	7,033	0.26	0.59
Either parent received SSA payments in Year 5 after RA	21.3	-0.5	0.76	28.8	-0.8	0.74	16.5	0.6	0.74	0.87
Parents' total SSA payments received in Year 5 after RA ($)	2,664	-112	0.63	3,491	-235	0.50	2,028	28	0.91	0.82
Parents' total SSA payments during the five years after RA ($)	11,841	-502	0.51	16,973	-1,737	0.14	8,992	559	0.53	0.29
Parents' income in the past year ($)	28,949	-2,022	0.31	29,346	2,993	0.32	29,641	1,494	0.57	0.30
Parents' income during the five calendar years after RA ($)	142,774	-842	0.85	122,347	2,418	0.66	156,584	7,618	0.22	0.53
Either parent is covered by health insurance	82.8	3.6	0.17	93.6	-7.1**	0.02	84.8	-0.4	0.89	0.03††
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	517	-8	0.68	620	1	0.97	442	74***	0.01	0.05†

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table E.24. CaPROMISE: Sample sizes for primary outcomes, by youth's primary impairment

Outcome	Intellectual or developmental disabilities		Other mental impairments		Other impairments	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Youth enrolled in an educational or training program	376	386	191	154	231	229
Youth has a GED, high school diploma, or certificate of completion	377	393	196	160	232	235
Youth employed in a paid job in the past year	380	399	197	160	233	236
Youth earnings in the past year ($)	380	399	197	160	233	236
Youth earnings during the five calendar years after RA ($)	738	741	375	358	435	450
Youth self-determination score (scale: 0 to 100)	229	238	137	106	131	126
Youth expects to be financially independent at age 25	229	243	138	109	133	131
Youth received SSA payments in Year 5 after RA	738	741	375	358	435	450
Youth total SSA payments in Year 5 after RA ($)	738	741	375	358	435	450
Youth total SSA payments during Years 1–5 after RA ($)	738	741	375	358	435	450
Youth covered by any health insurance	369	395	184	156	230	235
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	738	741	375	358	435	450
Youth income in the past year ($)	380	399	197	160	233	236
Youth total income during the five calendar years after RA ($)	738	741	375	358	435	450
Either parent worked for pay in the past year	374	390	200	172	237	227
Parents' earnings in the past year ($)	375	390	200	173	237	227
Parents' earnings during the five calendar years after RA ($)	615	625	345	323	351	370
Either parent received SSA payments in Year 5 after RA	615	625	345	323	351	370

Outcome	Intellectual or developmental disabilities		Other mental impairments		Other impairments	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Parents' total SSA payments received in Year 5 after RA ($)	615	625	345	323	351	370
Parents' total SSA payments during the five years after RA ($)	615	625	345	323	351	370
Parents' income in the past year ($)	309	331	182	154	191	190
Parents' income during the five calendar years after RA ($)	615	625	345	323	351	370
Either parent is covered by health insurance	370	390	197	172	234	228
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	615	625	345	323	351	370

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the sample size by subgroup for the estimates reported in Appendix Table E.23.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table E.25. CaPROMISE: Impacts on primary outcomes, by whether the survey respondent completed the five-year survey before or during the pandemic (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Before pandemic					During pandemic					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	55.7	3.2	0.52	196	184	58.8	2.1	0.46	600	585	0.84
Youth has a GED, high school diploma, or certificate of completion	80.8	-0.8	0.84	195	184	80.5	-1.8	0.45	608	604	0.84
Youth employed in a paid job in the past year	38.2	8.0	0.11	196	185	31.8	1.0	0.71	612	610	0.21
Youth earnings in the past year ($)	3,845	996	0.30	196	185	3,589	225	0.65	612	610	0.47
Youth self-determination score (scale: 0 to 100)	78.3	-1.3	0.46	138	131	77.7	-1.1	0.31	359	339	0.92
Youth expects to be financially independent at age 25	56.7	3.2	0.60	136	130	56.9	2.0	0.59	364	353	0.86
Youth covered by any health insurance	94.6	-1.7	0.51	189	181	89.6	2.6	0.13	594	605	0.16
Youth income in the past year ($)	10,520	1,161	0.18	196	185	9,964	566	0.23	612	610	0.54
Either parent worked for pay in the past year	70.3	-1.3	0.73	210	198	73.5	0.7	0.77	601	591	0.65
Parents' earnings in the past year ($)	23,438	3,406	0.19	210	198	26,216	-1,048	0.46	602	592	0.12
Parents' income in the past year ($)	27,121	3,440	0.21	193	180	29,999	-1,073	0.50	489	495	0.15
Either parent is covered by health insurance	87.7	1.5	0.62	205	198	85.1	-0.7	0.72	596	592	0.54

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE on outcomes derived from survey data. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We weighted statistics to adjust for survey nonresponse and sample design. We defined before the pandemic as before March 13, 2020.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size.

C. Findings from the benefit-cost analysis

In this section, we present findings from the benefit-cost analysis of CaPROMISE. First, we present benefits and costs estimated through the main model. Second, we present the results of sensitivity analyses. Third, we present the projected accrual of net benefits beyond the five-year evaluation period.

1. Benefit-cost estimates

Appendix Table E.26 provides estimates of the program's benefits and indirect costs, the costs of program components, and benefit-cost statistics estimated using the main model as described in Appendix B.

Appendix Table E.26. CaPROMISE: Benefits and costs ($) over the five-year evaluation time period, by accounting perspective

Benefit or cost measure	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Panel 1: Quantitative outcome measures						
Youth outcomes						
Earnings	982	0	0	0	0	982
Fringe benefits	249	0	0	0	0	249
Income, payroll, and sales taxes	-189	122	0	156	33	0
Work-related and child care costs	-116	0	0	0	0	-116
SSI benefits	891	-891	0	-891	0	0
OASDI benefits	-181	181	0	181	0	0
SSI administrative costs	0	-70	0	-70	0	-70
SSDI administrative costs	0	3	0	3	0	3
Medicaid and Medicare expenditures and administrative costs	-329	0	0	290	67	28
Education-related costs	4	0	0	0	0	4
Incarceration	0	0	0	0	152	152
Parent outcomes						
Earnings	3,001	0	0	0	0	3,001
Fringe benefits	760	0	0	0	0	760
Income, payroll, and sales taxes	-598	372	0	477	121	0
Work-related and child care costs	-519	0	0	0	0	-519
SSI benefits	-416	416	0	416	0	0
OASDI benefits	-133	133	0	133	0	0
SSI administrative costs	0	32	0	32	0	32
SSDI administrative costs	0	3	0	3	0	3
Medicaid and Medicare expenditures and administrative costs	1,034	0	0	-984	-137	-88

Benefit or cost measure	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Household outcomes						
TANF, SNAP, housing assistance, and related administrative costs	-255	0	0	496	-202	38
Total	4,183	301	0	242	33	4,458
Panel 2: Costs of program components						
Program administration	0	0	-11,367	-11,367	0	-11,367
Employment services	0	0	-5,633	-5,633	-461	-6,093
Education services	0	0	-1,928	-1,928	0	-1,928
Case management services	0	0	-6,761	-6,761	0	-6,761
Financial and benefits counseling	0	0	-1,133	-1,133	0	-1,133
Parent training and information services	0	0	-2,275	-2,275	0	-2,275
Youth self-determination services	0	0	-2,040	-2,040	0	-2,040
Total	0	0	-31,138	-31,138	-461	-31,598
Panel 3: Benefit-cost statistics						
Net benefits (benefits minus costs)	4,183	301	-31,138	-30,896	-427	-27,140
Net benefit ratio[b]	n.a.	n.a.	0	0.01	0.07	0.14

Source: See Appendix Table B.4 for details on the sources and imputation methods for each benefit or cost component.

Note: To construct each component of the benefit-cost analysis, we used the estimated impacts on key outcomes (regardless of whether they were statistically significant), or imputation methods that combined the impact estimates with data from external sources**.** To construct program costs, we used data from program administrative records, financial documents, staff activity logs, and staff interviews. All benefits and costs are dollars per treatment group family over five years and are inflation-adjusted to 2020 dollars and discounted to 2020 present value.

[a] The perspective of the federal government as a whole incorporates the perspectives of SSA, ED, and other federal agencies that might experience benefits or costs because of PROMISE.

[b] Calculated for all key stakeholders as the sum of all quantitative measures in Panel 1, which include benefits and indirect costs, divided by the program costs.

ED = U.S. Department of Education; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; SSDI = Social Security Disability Insurance; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families.

2. Sensitivity analyses

As noted in Appendix B, we conducted three analyses to assess the sensitivity of the benefit-cost estimates to changes in the underlying assumptions and methodological choices. First, we sampled with replacement from the study population 1,000 times to create 1,000 random samples with an equal size as the true sample. For each sample, we calculated the net benefit for each accounting perspective. In Appendix Table E.27, we show the sampling distribution of the net benefit estimates from the perspective of the different stakeholders. The estimated net benefits for all key stakeholders were negative across the entire distribution, suggesting that the main conclusion (that CaPROMISE did not generate net benefits across all key stakeholders) is robust to sampling variability. The confidence interval of the net benefit estimate from the perspective of all stakeholders (-$27,140) ranged from -$34,162 (the 2.5th percentile) to -$19,509 (the 97.5th percentile).

Second, we recalculated the net benefits using only the impact estimates that were significant at the 10 percent level (Appendix Table E.28). From the perspective of all stakeholders, the net benefit was within 15 percent of the estimate from the main analysis and continued to be negative and sizeable.

Third, we considered whether the benefit-cost results were sensitive to the assumptions we used to estimate some of the individual components. In Appendix Table E.28, we show the estimates of net benefits when we applied the alternative assumptions. From the perspective of all key stakeholders, net benefits under the alternative assumptions were always within 5 percent of the net benefits estimated under the main analysis, and net benefits were sizeable and negative under each scenario. However, net benefits for CaPROMISE youth and families and for state and local governments were sensitive to the alternative assumptions. Notably, net benefits for CaPROMISE youth and families ranged from $2,852 to $4,366 across alternative assumption scenarios. Net benefits for state and local governments do not vary when using alternative assumptions except when assuming higher incarceration costs.

Appendix Table E.27. CaPROMISE: Sensitivity of net benefits to sampling variability

Estimate	PROMISE youth and families	Federal government			State and local government, including PROMISE partners	All key stakeholders
		SSA	ED	Federal government as a whole[a]		
Original estimate	4,183	301	-31,138	-30,896	-427	-27,140
Min	-7,774	-3,608	-31,257	-39,060	-4,531	-39,224
2.5th percentile	-3,845	-1,614	-31,218	-36,012	-2,771	-34,162
25th percentile	1,412	-401	-31,164	-32,617	-1,200	-29,375
50th percentile	4,045	330	-31,136	-30,803	-337	-27,190
75th percentile	6,526	1,032	-31,109	-28,928	526	-24,862
97.5th percentile	11,258	2,335	-31,053	-25,122	1,960	-19,509
Max	16,738	3,484	-30,996	-22,932	3,426	-16,792

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: We quantified uncertainty in the estimated net benefits by constructing non-parametric bootstrap confidence intervals. We sampled with replacement from the study population 1,000 times and then re-estimated all cost and benefit parameters for these 1,000 random samples. We then calculated the net benefits for each bootstrap sample. The 2.5th percentile and 97.5th percentile of the resulting values represent the 95 percent confidence interval of the net benefit estimate.

Appendix Table E.28. CaPROMISE: Sensitivity of net benefits to different assumptions in the benefit cost analysis

Assumption	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Main benefit-cost analysis model	4,183	301	-31,138	-30,896	-427	-27,140
Excluded fringe benefits	3,175	301	-31,138	-30,896	-427	-28,148
Excluded education tuition costs	4,181	301	-31,138	-30,896	-427	-27,142
Used higher incarceration costs[b]	4,183	301	-31,138	-30,896	-222	-26,935
Used a fixed work-related cost measure (non-child care)[c]	2,852	301	-31,138	-30,896	-427	-28,471
Used a low discount rate[d]	3,980	274	-31,138	-30,895	-422	-27,338
Used a high discount rate[d]	4,366	326	-31,138	-30,896	-432	-26,961
Used only statistically significant estimates in the calculation [e]	103	-489	-31,138	-30,799	-448	-31,144

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: The inputs for the benefit-cost analysis are based on (1) program costs drawn from program administrative records, financial documents, staff activity logs and staff interviews (2) the estimated impacts on key outcomes (regardless of whether they were statistically significant), or (3) imputation methods that combined the impact estimates with data from external sources. All benefits and costs are dollars per treatment group family over five years and are inflation-adjusted to 2020 dollars and discounted to 2020 present value.

[a] The perspective of the federal government as a whole incorporates the perspectives of SSA, ED, and other federal agencies that might experience benefits or costs because of PROMISE.

[b] We changed incarceration costs from the national average ($97/day) to the highest state-specific cost (California, $228/day).

[c] We changed work-related costs from a multiplier of 10.6% to a fixed cost of $51 dollars per week.

[d] The low discount rate is 1 percent, and the high discount rate is 5 percent.

[e] This sensitivity analysis assigns a value of zero to impact estimates to impacts estimates that were not were significant at the .10 level. (The main analysis and all other sensitivity tests include impact estimates regardless of whether they were statistically significant).

ED = U.S. Department of Education; SSA = Social Security Administration.

3. Long-term forecast

We projected the accrual of net benefits over 10 and 20 years after RA to assess how costs and benefits may change after the five-year evaluation period. We projected the net benefits under three scenarios that varied in their potential returns to youth's education: high returns, diminishing returns, and no returns (Appendix Table E.29). Because CaPROMISE caused a small and non-significant decrease in youth's years of education (-0.06 years), the scenario assuming "no returns" to education generates the highest net benefit estimate and the scenario assuming "high returns" to education generates the lowest estimate. Across all scenarios, the forecasted net benefits 10 and 20 years after RA are higher than the net benefits estimated at five years after RA. This is because treatment group youth had higher earnings than control group youth in the fourth and fifth years after RA, an advantage that gets compounded in the forecast as earnings grow by an annual percentage over time.

We also calculated how large the impact on youth earnings would have to be, assuming all other impacts were the same as in the five-year analysis, for CaPROMISE's benefits to equal the costs in 10 and 20 years after RA (Appendix Figure E.1). The program would need to generate an average annual impact on youth earnings of $4,271 per year to be cost neutral 10 years after RA and $1,140 per year to be cost neutral 20 years after RA. The point estimate of the program's impact on youth earnings in the fifth year after RA was $392, so it would need to generate an annual impact about three times as large to achieve cost neutrality 20 years after RA.

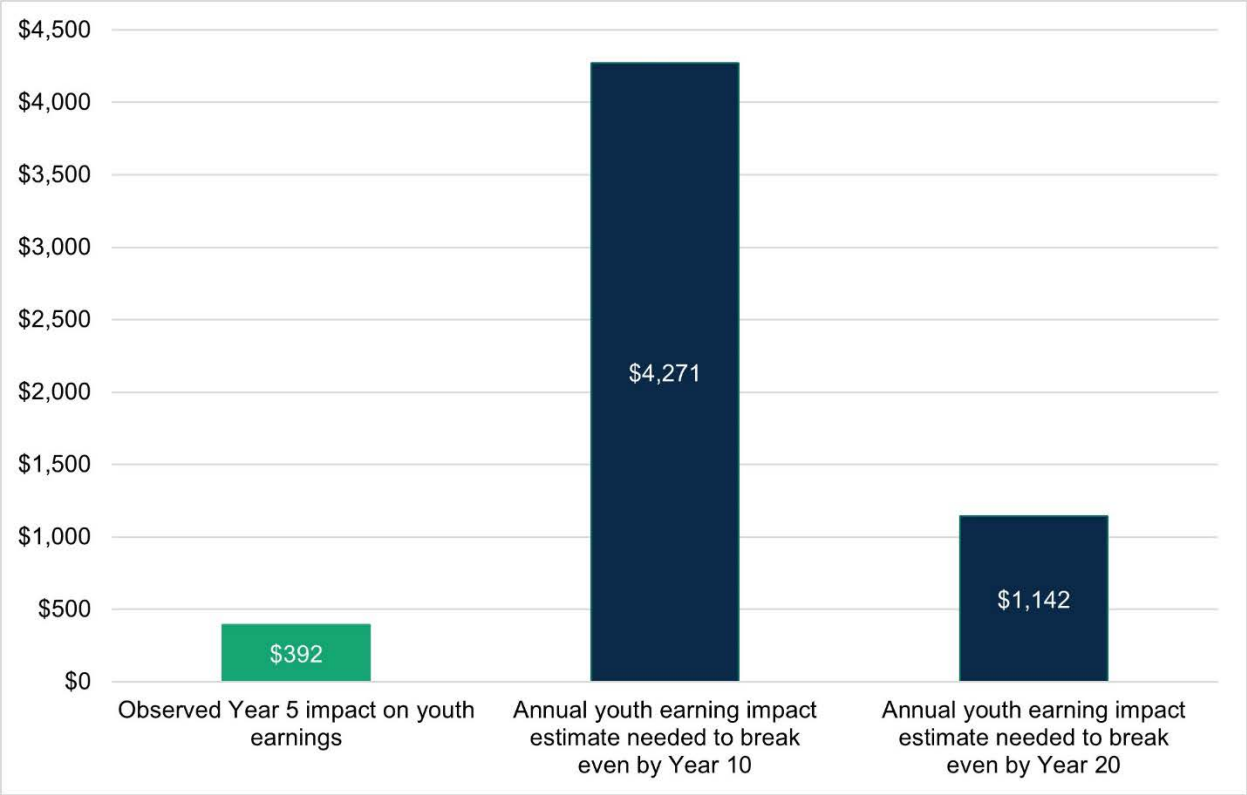
Appendix Table E.29. CaPROMISE: Net benefits ($) to all stakeholders forecast over 10 and 20 years after RA, under different assumptions about the returns to education and using the upper and lower bound of the earnings impact

Assumption	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
10-year forecast						
Returns to education						
Persistent high return to education	8,492	434	-31,138	-30,003	-475	-21,985
Diminishing return to education	8,558	460	-31,138	-29,974	-472	-21,887
No return to education	8,600	476	-31,138	-29,956	-470	-21,826
Confidence interval bounds						
Using upper bound of earnings impact	12,719	1,311	-31,138	-28,959	-313	-16,552
Using lower bound of earnings impact	6,098	-87	-31,138	-30,619	-567	-25,087
20-year forecast						
Returns to education						
Persistent high return to education	15,771	1,397	-31,138	-27,761	-523	-12,514
Diminishing return to education	16,108	1,490	-31,138	-27,654	-509	-12,056
No return to education	16,150	1,506	-31,138	-27,637	-508	-11,994
Confidence interval bounds						
Using upper bound of earnings impact	29,885	3,963	-31,138	-24,649	6	5,241
Using lower bound of earnings impact	7,968	-334	-31,138	-29,804	-824	-22,661

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: To construct each component of the benefit-cost analysis, we used either (1) the impact estimates themselves (regardless of whether they were statistically significant), or (2) imputation methods to combine the impact estimates with data from external sources. To construct program costs, we used data from program administrative records, financial documents, staff activity logs, and staff interviews. All benefits and costs are dollars per treatment group family and are inflation-adjusted to 2020 dollars and discounted to 2020 present value. The 10-year and 20-year projections are based on costs observed from the five-year evaluation period and a forecasting scenario for the five and fifteen following years, respectively, assuming that earnings grow over time. Additionally, the persistent high return to education forecasting scenario assumes a return to education of 10 percent per additional year of schooling; the diminishing returns to education scenario assumes the returns to education are 10 percent in Year 6 and then diminish over time to zero percent in Year 10; and the no return to education scenario assumes no increase over time in the return to education.

Appendix Figure E.1. CaPROMISE: Impacts needed for cost-neutrality from the perspective of all key stakeholders



Note: The first bar shows the estimated impact on youth earnings in Year 5 after RA. The second bar shows the impact on youth earnings needed every year between Years 6 and 10 after RA for the program to be cost neutral 10 years after RA, assuming other benefits and costs are held constant between Years 6 and 10 after RA. The third bar shows the impact on youth earnings needed every year between Years 6 and 20 after RA for the program to be cost neutral 20 years after RA, assuming other benefits and costs are held constant between Years 6 and 20 after RA. All values are per treatment group family, inflation-adjusted to 2020 dollars, and discounted to 2020 present value.

CaPROMISE = California PROMISE; RA = random assignment.

Appendix F. MD PROMISE Impacts, Benefits, and Costs

A. Enrollees and analysis samples

The full research sample for the evaluation of MD PROMISE consists of the 1,866 youth who enrolled in the evaluation and were randomly assigned, as well as their families. To assess the extent to which the findings might reflect the baseline characteristics of various samples, we compared differences between (1) the treatment and control groups, (2) survey respondents and nonrespondents, and (3) self-reporting and proxy youth respondents.

1. Differences between the treatment and control groups

We compared 25 baseline characteristics of the treatment and control groups for four samples: all youth survey respondents, all parent survey respondents, all enrollees, and all proxy youth respondents (Appendix Tables F.1–F.4). The similarity of samples across the characteristics examined suggest that RA created treatment and control groups that were equivalent in their baseline characteristics. Although we found statistically significant differences for a few characteristics, they are not concerning for two reasons. First, with a significance level of 10 percent, we expect to reject the null hypothesis that the groups were equivalent for 1 out of every 10 characteristics by chance alone, even when the two groups in fact had no underlying differences. Second, we included characteristics that were significantly different at baseline as covariates in our regression-adjusted impact analyses, allowing us to control for the observed differences.

Appendix Table F.1. MD PROMISE: Baseline characteristics of youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	35.0	33.2	36.8	-3.5	0.16
Youth age at RA					0.52
14	26.1	24.8	27.4	-2.6	
15	26.4	27.1	25.7	1.4	
16	47.5	48.1	46.9	1.3	
Average age at RA	15.8	15.8	15.7	0.0	0.38
Youth language preference at SSI application					
Prefers English for written language	97.1	97.1	97.0	0.1	0.88
Prefers English for spoken language	96.8	96.9	96.7	0.1	0.90
Youth living arrangement at SSI application					0.91
In parents' household	86.6	86.8	86.3	0.5	
Own household or alone	10.0	9.7	10.4	-0.6	
Another household and receiving support	3.4	3.5	3.3	0.1	
Youth race and ethnicity					0.83
Non-Hispanic White	15.1	15.4	14.8	0.6	
Non-Hispanic Black	49.8	48.3	51.3	-3.0	
Hispanic	6.7	7.3	6.1	1.2	
Non-Hispanic American Indian	1.5	1.6	1.5	0.1	
Non-Hispanic other or mixed race	6.3	6.8	5.8	1.0	
Missing	20.6	20.7	20.5	0.2	
Enrolling parent age at RA	43.3	43.2	43.4	-0.2	0.66
Parent race and ethnicity					0.58
Non-Hispanic White	19.6	19.5	19.8	-0.3	
Non-Hispanic Black	52.6	51.0	54.2	-3.2	
Hispanic	5.8	6.2	5.3	0.9	
Non-Hispanic American Indian	1.0	1.0	0.9	0.1	
Non-Hispanic other or mixed race	5.0	5.9	4.1	1.8	
Missing	16.1	16.4	15.8	0.6	
Disability					
Youth primary impairment					0.90
Intellectual or developmental disability	37.3	37.8	36.7	1.1	
Speech, hearing, or visual impairment	1.7	1.8	1.6	0.2	
Physical disability	11.1	11.2	11.0	0.1	
Other mental impairment	47.1	46.8	47.5	-0.7	
Other or unknown disability	2.8	2.4	3.2	-0.8	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.6	94.9	94.3	0.6	0.60
Received OASDI	11.1	11.8	10.5	1.4	0.41
Years between youth's earliest SSI eligibility and RA	8.3	8.3	8.4	-0.1	0.81
Youth age at most recent SSI application	7.9	8.0	7.8	0.2	0.28
Youth payments in the year before RA ($)					
SSI	7,238	7,359	7,116	243*	0.05
OASDI	336	324	348	-24	0.70
Total SSI and OASDI	7,573	7,683	7,464	219*	0.05
Household had multiple SSI-eligible children	17.7	16.9	18.4	-1.5	0.46
Enrolling parent provided a valid SSN at RA	58.8	60.1	57.4	2.7	0.30
Parents included in the administrative data				†	0.07
None	6.0	5.1	6.9	-1.8	
One parent	69.0	67.7	70.3	-2.6	
Two parents	25.0	27.3	22.8	4.5	
Parent SSA payment status at RA					0.11
Any parent received SSI only	7.4	8.0	6.7	1.3	
Any parent received OASDI only	8.2	9.6	6.8	2.8	
Any parent received both SSI and OASDI	4.7	5.1	4.3	0.8	
No parent received any SSA payments	73.7	72.1	75.2	-3.1	
No parent was included in the SSA data analyses	6.0	5.1	6.9	-1.8	
Earnings					
Youth had earnings in the calendar year before RA	4.3	4.4	4.1	0.3	0.81
Youth earnings in the calendar year before RA ($)	38	46	31	15	0.20
Parent had earnings in the calendar year before RA	68.1	69.1	67.0	2.2	0.39
Parent earnings in the calendar year before RA ($)	16,265	15,686	16,852	-1,165	0.25
Number of youth	1,486	738	748		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who completed the PROMISE five-year youth survey. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table F.2. MD PROMISE: Baseline characteristics of parent survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	35.1	33.2	37.1	-3.9	0.13
Youth age at RA					0.45
14	26.2	24.7	27.7	-3.0	
15	26.6	27.0	26.2	0.9	
16	47.2	48.2	46.2	2.1	
Average age at RA	15.8	15.8	15.7	0.1	0.25
Youth language preference at SSI application					
Prefers English for written language	96.7	97.0	96.4	0.6	0.54
Prefers English for spoken language	96.4	96.7	96.0	0.7	0.45
Youth living arrangement at SSI application					0.79
In parents' household	86.8	87.4	86.2	1.2	
Own household or alone	9.8	9.4	10.2	-0.7	
Another household and receiving support	3.4	3.2	3.6	-0.5	
Youth race and ethnicity					0.83
Non-Hispanic White	14.6	14.4	14.7	-0.3	
Non-Hispanic Black	51.1	49.5	52.6	-3.1	
Hispanic	7.1	7.4	6.8	0.5	
Non-Hispanic American Indian	1.5	1.5	1.6	-0.1	
Non-Hispanic other or mixed race	6.2	6.6	5.8	0.8	
Missing	19.6	20.7	18.5	2.2	
Enrolling parent age at RA	43.2	43.0	43.4	-0.4	0.43
Parent race and ethnicity					0.55
Non-Hispanic White	19.3	18.6	19.9	-1.3	
Non-Hispanic Black	52.2	51.0	53.5	-2.5	
Hispanic	6.0	6.1	5.8	0.2	
Non-Hispanic American Indian	0.8	0.8	0.9	-0.2	
Non-Hispanic other or mixed race	4.8	5.7	3.9	1.8	
Missing	16.9	17.8	15.9	1.9	
Disability					
Youth primary impairment					0.83
Intellectual or developmental disability	36.7	37.2	36.3	0.9	
Speech, hearing, or visual impairment	1.6	1.6	1.6	0.0	
Physical disability	11.6	11.4	11.7	-0.4	
Other mental impairment	47.3	47.6	47.1	0.5	
Other or unknown disability	2.8	2.2	3.3	-1.0	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.5	94.9	94.1	0.7	0.56
Received OASDI	10.7	11.0	10.3	0.7	0.66
Years between youth's earliest SSI eligibility and RA	8.4	8.3	8.4	-0.1	0.61
Youth age at most recent SSI application	7.9	8.0	7.8	0.2	0.35
Youth payments in the year before RA ($)					
SSI	7,217	7,349	7,086	263**	0.04
OASDI	315	297	333	-35	0.56
Total SSI and OASDI	7,532	7,646	7,419	227*	0.05
Household had multiple SSI-eligible children	17.4	16.9	18.0	-1.1	0.61
Enrolling parent provided a valid SSN at RA	58.2	59.8	56.7	3.1	0.24
Parents included in the administrative data				†	0.07
None	6.1	4.8	7.4	-2.6	
One parent	68.6	68.1	69.0	-0.9	
Two parents	25.3	27.0	23.6	3.5	
Parent SSA payment status at RA				†	0.06
Any parent received SSI only	6.8	7.5	6.1	1.5	
Any parent received OASDI only	8.0	9.5	6.6	2.9	
Any parent received both SSI and OASDI	4.7	5.0	4.5	0.5	
No parent received any SSA payments	74.3	73.1	75.4	-2.3	
No parent was included in the SSA data analyses	6.1	4.8	7.4	-2.6	
Earnings					
Youth had earnings in the calendar year before RA	4.5	4.7	4.3	0.4	0.72
Youth earnings in the calendar year before RA ($)	41	46	35	11	0.38
Parent had earnings in the calendar year before RA	69.7	70.6	68.7	1.9	0.44
Parent earnings in the calendar year before RA ($)	16,771	16,298	17,255	-957	0.36
Number of youth	1,452	730	722		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth whose parent completed the PROMISE five-year youth survey. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table F.3. MD PROMISE: Baseline characteristics of all youth enrollees (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	34.7	32.8	36.6	-3.8*	0.09
Youth age at RA					0.44
14	26.0	24.8	27.2	-2.4	
15	25.9	25.9	25.9	-0.1	
16	48.1	49.4	46.9	2.5	
Average age at RA	15.8	15.8	15.7	0.1	0.19
Youth language preference at SSI application					
Prefers English for written language	96.8	96.8	96.9	-0.1	0.91
Prefers English for spoken language	96.6	96.6	96.6	0.0	0.98
Youth living arrangement at SSI application					0.96
In parents' household	86.7	86.4	86.9	-0.5	
Own household or alone	10.2	10.4	10.0	0.4	
Another household and receiving support	3.2	3.2	3.1	0.1	
Youth race and ethnicity					0.56
Non-Hispanic White	15.1	15.2	14.9	0.2	
Non-Hispanic Black	49.0	48.3	49.8	-1.5	
Hispanic	6.9	7.9	5.9	2.0	
Non-Hispanic American Indian	1.4	1.3	1.6	-0.3	
Non-Hispanic other or mixed race	6.2	6.5	5.8	0.7	
Missing	21.4	20.8	21.9	-1.1	
Enrolling parent age at RA	43.0	43.0	43.1	-0.1	0.78
Parent race and ethnicity					0.79
Non-Hispanic White	19.6	19.0	20.1	-1.1	
Non-Hispanic Black	51.2	50.7	51.6	-0.9	
Hispanic	5.8	6.4	5.3	1.1	
Non-Hispanic American Indian	1.0	1.1	1.0	0.1	
Non-Hispanic other or mixed race	4.3	4.8	3.9	0.9	
Missing	18.1	17.9	18.2	-0.2	
Disability					
Youth primary impairment					0.90
Intellectual or developmental disability	36.5	36.5	36.6	-0.0	
Speech, hearing, or visual impairment	1.4	1.5	1.4	0.1	
Physical disability	11.3	11.3	11.3	0.0	
Other mental impairment	48.0	48.3	47.6	0.7	
Other or unknown disability	2.7	2.4	3.1	-0.8	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.6	95.0	94.3	0.7	0.52
Received OASDI	11.0	11.8	10.2	1.5	0.29
Years between youth's earliest SSI eligibility and RA	8.3	8.2	8.4	-0.1	0.56
Youth age at most recent SSI application	8.0	8.1	7.8	0.3	0.17
Youth payments in the year before RA ($)					
SSI	7,248	7,316	7,178	138	0.20
OASDI	339	347	330	18	0.75
Total SSI and OASDI	7,586	7,664	7,508	156	0.11
Household had multiple SSI-eligible children	17.3	17.2	17.4	-0.2	0.92
Enrolling parent provided a valid SSN at RA	58.5	59.2	57.8	1.3	0.56
Parents included in the administrative data					0.25
None	6.1	5.7	6.5	-0.8	
One parent	69.2	68.1	70.4	-2.4	
Two parents	24.7	26.3	23.1	3.2	
Parent SSA payment status at RA				†	0.09
Any parent received SSI only	7.6	8.4	6.7	1.8	
Any parent received OASDI only	8.0	9.2	6.9	2.3	
Any parent received both SSI and OASDI	4.4	5.0	3.9	1.2	
No parent received any SSA payments	73.9	71.7	76.1	-4.4	
No parent was included in the SSA data analyses	6.1	5.7	6.5	-0.8	
Earnings					
Youth had earnings in the calendar year before RA	4.4	4.5	4.3	0.2	0.84
Youth earnings in the calendar year before RA ($)	41	44	37	7	0.50
Parent had earnings in the calendar year before RA	68.0	69.0	67.0	2.0	0.38
Parent earnings in the calendar year before RA ($)	16,222	15,797	16,653	-856	0.34
Number of youth	1,866	936	930		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who enrolled in PROMISE. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table F.4. MD PROMISE: Baseline characteristics of proxy youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	26.9	26.7	27.2	-0.5	0.90
Youth age at RA					0.83
14	29.0	28.7	29.2	-0.5	
15	28.3	29.5	27.1	2.4	
16	42.7	41.7	43.7	-1.9	
Average age at RA	15.7	15.7	15.7	-0.0	0.64
Youth language preference at SSI application					
Prefers English for written language	95.8	96.7	94.9	1.9	0.28
Prefers English for spoken language	95.6	96.7	94.5	2.2	0.20
Youth living arrangement at SSI application					0.18
In parents' household	88.4	91.0	85.9	5.1	
Own household or alone	9.2	7.6	10.9	-3.3	
Another household and receiving support	2.4	1.4	3.2	-1.8	
Youth race and ethnicity					0.49
Non-Hispanic White	17.5	17.6	17.3	0.3	
Non-Hispanic Black	43.7	41.3	45.9	-4.6	
Hispanic	6.4	8.1	4.8	3.2	
Non-Hispanic American Indian	1.8	1.1	2.5	-1.3	
Non-Hispanic other or mixed race	5.5	6.1	4.9	1.2	
Missing	25.2	25.8	24.6	1.2	
Enrolling parent age at RA	43.1	42.9	43.3	-0.4	0.58
Parent race and ethnicity					0.21
Non-Hispanic White	21.3	21.6	21.1	0.5	
Non-Hispanic Black	47.2	43.6	50.7	-7.1	
Hispanic	5.8	7.1	4.5	2.6	
Non-Hispanic American Indian	0.7	0.4	1.0	-0.7	
Non-Hispanic other or mixed race	5.4	7.4	3.6	3.8	
Missing	19.5	19.9	19.1	0.9	
Disability					
Youth primary impairment					0.90
Intellectual or developmental disability	39.3	41.2	37.5	3.8	
Speech, hearing, or visual impairment	1.0	0.7	1.2	-0.5	
Physical disability	10.2	9.7	10.6	-1.0	
Other mental impairment	46.3	45.3	47.3	-2.0	
Other or unknown disability	3.2	3.1	3.4	-0.3	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.8	95.9	93.8	2.1	0.29
Received OASDI	9.5	9.5	9.4	0.1	0.97
Years between youth's earliest SSI eligibility and RA	8.3	8.0	8.6	-0.6	0.13
Youth age at most recent SSI application	7.7	8.0	7.4	0.5	0.16
Youth payments in the year before RA ($)					
SSI	7,162	7,313	7,016	297	0.16
OASDI	254	213	294	-81	0.37
Total SSI and OASDI	7,416	7,526	7,310	216	0.28
Household had multiple SSI-eligible children	16.3	16.9	15.7	1.2	0.73
Enrolling parent provided a valid SSN at RA	54.6	59.1	50.2	8.9**	0.05
Parents included in the administrative data				†	0.08
None	7.0	4.5	9.4	-4.9	
One parent	63.1	63.2	63.1	0.1	
Two parents	29.8	32.2	27.5	4.7	
Parent SSA payment status at RA					0.11
Any parent received SSI only	6.1	6.8	5.5	1.4	
Any parent received OASDI only	7.8	9.7	6.0	3.7	
Any parent received both SSI and OASDI	3.6	4.4	2.9	1.5	
No parent received any SSA payments	75.4	74.5	76.3	-1.7	
No parent was included in the SSA data analyses	7.0	4.5	9.4	-4.9	
Earnings					
Youth had earnings in the calendar year before RA	3.8	3.3	4.2	-0.9	0.60
Youth earnings in the calendar year before RA ($)	32	36	27	9	0.62
Parent had earnings in the calendar year before RA	70.9	69.3	72.6	-3.3	0.43
Parent earnings in the calendar year before RA ($)	18,386	17,257	19,529	-2,272	0.24
Number of youth	513	250	263		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who completed the PROMISE five-year youth survey by proxy. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

2. Differences between survey respondents and nonrespondents

We compared youth and parent survey respondents with nonrespondents across 25 baseline characteristics to assess the extent to which survey nonresponse might limit generalizability of the impact findings to all evaluation enrollees (Appendix Tables F.5 and F.6). Youth survey respondents differed from nonrespondents with respect to parent race and ethnicity, the years between youth's earliest SSI eligibility and RA, youth age at most recent SSI application, and the share of enrolling parents who provided a valid SSN at RA. Parent survey respondents different from nonrespondents with respect to youth's spoken language preference, enrolling parent age at RA, youth age at most recent SSI application, the share of enrolling parents who provided a valid SSN at RA, the share of parents who had earnings in the year before RA, and parents' earnings in the year before RA. Overall, even when the differences were statistically significant, they generally were small. The extent and magnitude of the differences suggested that the respondents were not markedly different from the nonrespondents. To account for survey nonresponse, we calculated and used survey weights in all regression models to estimate impacts on the survey-based outcome measures.

Appendix Table F.5. MD PROMISE: Baseline characteristics of youth survey respondents and nonrespondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	34.7	35.3	32.1	3.2	0.23
Youth age at RA					0.17
14	26.0	26.6	23.4	3.2	
15	25.9	26.3	24.2	2.1	
16	48.1	47.0	52.4	-5.3	
Average age at RA	15.8	15.8	15.8	-0.1	0.20
Youth language preference at SSI application					
Prefers English for written language	96.8	96.9	96.6	0.3	0.75
Prefers English for spoken language	96.6	96.6	96.3	0.3	0.77
Youth living arrangement at SSI application					0.24
In parents' household	86.7	86.2	88.4	-2.2	
Own household or alone	10.2	10.3	9.7	0.6	
Another household and receiving support	3.2	3.5	1.8	1.7	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	15.1	15.5	13.4	2.1	
Non-Hispanic Black	49.0	53.2	32.6	20.6	
Hispanic	6.9	7.2	5.8	1.4	
Non-Hispanic American Indian	1.4	1.6	0.8	0.8	
Non-Hispanic other or mixed race	6.2	6.4	5.3	1.1	
Missing	21.4	16.1	42.1	-26.0	
Enrolling parent age at RA	43.0	43.4	41.8	1.6***	0.00
Parent race and ethnicity				†††	0.00
Non-Hispanic White	19.6	19.9	18.2	1.8	
Non-Hispanic Black	51.2	55.1	35.8	19.3	
Hispanic	5.8	6.0	5.3	0.7	
Non-Hispanic American Indian	1.0	1.0	1.1	-0.0	
Non-Hispanic other or mixed race	4.3	5.1	1.3	3.8	
Missing	18.1	12.9	38.4	-25.6	
Disability					
Youth primary impairment				††	0.04
Intellectual or developmental disability	36.5	37.6	32.4	5.2	
Speech, hearing, or visual impairment	1.4	1.7	0.3	1.5	
Physical disability	11.3	11.0	12.6	-1.7	
Other mental impairment	48.0	46.8	52.4	-5.5	
Other or unknown disability	2.7	2.8	2.4	0.5	

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.6	94.6	94.7	-0.1	0.93
Received OASDI	11.0	11.2	10.3	0.9	0.61
Years between youth's earliest SSI eligibility and RA	8.3	8.4	7.9	0.5*	0.06
Youth age at most recent SSI application	8.0	7.8	8.6	-0.8***	0.00
Youth payments in the year before RA ($)					
SSI	7,248	7,236	7,294	-58	0.66
OASDI	339	339	336	3	0.96
Total SSI and OASDI	7,586	7,575	7,630	-54	0.65
Household had multiple SSI-eligible children	17.3	17.1	17.9	-0.8	0.73
Enrolling parent provided a valid SSN at RA	58.5	59.8	53.7	6.1**	0.03
Parents included in the administrative data					0.62
None	6.1	5.9	6.6	-0.7	
One parent	69.2	68.9	70.5	-1.6	
Two parents	24.7	25.2	22.9	2.3	
Parent SSA payment status at RA					0.67
Any parent received SSI only	7.6	7.5	7.6	-0.1	
Any parent received OASDI only	8.0	8.3	6.8	1.5	
Any parent received both SSI and OASDI	4.4	4.7	3.4	1.3	
No parent received any SSA payments	73.9	73.5	75.5	-2.0	
No parent was included in the SSA data analyses	6.1	5.9	6.6	-0.7	
Earnings					
Youth had earnings in the calendar year before RA	4.4	4.2	5.0	-0.8	0.54
Youth earnings in the calendar year before RA ($)	41	38	51	-13	0.39
Parent had earnings in the calendar year before RA	68.0	68.2	67.0	1.2	0.67
Parent earnings in the calendar year before RA ($)	16,222	16,321	15,832	489	0.66
Number of youth	1,866	1,486	380		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who enrolled in PROMISE. Nonrespondents include youth ineligible for the survey because they died or withdrew from the study. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table F.6. MD PROMISE: Baseline characteristics of parent survey respondents and nonrespondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	34.7	34.4	35.5	-1.1	0.69
Youth age at RA					0.26
14	26.0	26.5	24.2	2.4	
15	25.9	26.4	24.2	2.2	
16	48.1	47.1	51.7	-4.6	
Average age at RA	15.8	15.8	15.8	-0.1	0.23
Youth language preference at SSI application					
Prefers English for written language	96.8	96.6	97.8	-1.3	0.14
Prefers English for spoken language	96.6	96.2	97.8	-1.6*	0.07
Youth living arrangement at SSI application					0.50
In parents' household	86.7	86.7	86.5	0.2	
Own household or alone	10.2	9.9	11.1	-1.2	
Another household and receiving support	3.2	3.4	2.4	1.0	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	15.1	14.8	15.9	-1.1	
Non-Hispanic Black	49.0	54.5	29.7	24.8	
Hispanic	6.9	7.6	4.6	3.0	
Non-Hispanic American Indian	1.4	1.6	1.0	0.6	
Non-Hispanic other or mixed race	6.2	6.4	5.3	1.1	
Missing	21.4	15.1	43.5	-28.4	
Enrolling parent age at RA	43.0	43.3	42.2	1.1**	0.03
Parent race and ethnicity				†††	0.00
Non-Hispanic White	19.6	19.6	19.3	0.3	
Non-Hispanic Black	51.2	56.3	33.1	23.2	
Hispanic	5.8	6.4	3.9	2.5	
Non-Hispanic American Indian	1.0	0.9	1.4	-0.6	
Non-Hispanic other or mixed race	4.3	5.0	2.2	2.8	
Missing	18.1	11.8	40.1	-28.3	
Disability					
Youth primary impairment					0.50
Intellectual or developmental disability	36.5	37.3	33.8	3.5	
Speech, hearing, or visual impairment	1.4	1.6	1.0	0.6	
Physical disability	11.3	11.2	11.6	-0.4	
Other mental impairment	48.0	47.0	51.2	-4.2	
Other or unknown disability	2.7	2.8	2.4	0.4	

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.6	94.6	94.7	-0.1	0.96
Received OASDI	11.0	10.6	12.3	-1.7	0.34
Years between youth's earliest SSI eligibility and RA	8.3	8.4	8.0	0.3	0.17
Youth age at most recent SSI application	8.0	7.9	8.4	-0.6**	0.02
Youth payments in the year before RA ($)					
SSI	7,248	7,240	7,275	-35	0.78
OASDI	339	318	411	-93	0.20
Total SSI and OASDI	7,586	7,558	7,686	-128	0.25
Household had multiple SSI-eligible children	17.3	16.8	18.8	-2.0	0.35
Enrolling parent provided a valid SSN at RA	58.5	59.8	53.9	6.0**	0.03
Parents included in the administrative data					0.75
None	6.1	5.9	6.8	-0.9	
One parent	69.2	69.2	69.3	-0.1	
Two parents	24.7	24.9	23.9	1.0	
Parent SSA payment status at RA					0.27
Any parent received SSI only	7.6	7.0	9.7	-2.7	
Any parent received OASDI only	8.0	8.1	7.7	0.4	
Any parent received both SSI and OASDI	4.4	4.8	3.4	1.4	
No parent received any SSA payments	73.9	74.3	72.5	1.8	
No parent was included in the SSA data analyses	6.1	5.9	6.8	-0.9	
Earnings					
Youth had earnings in the calendar year before RA	4.4	4.5	3.9	0.7	0.53
Youth earnings in the calendar year before RA ($)	41	42	37	5	0.67
Parent had earnings in the calendar year before RA	68.0	69.3	63.5	5.8**	0.04
Parent earnings in the calendar year before RA ($)	16,222	16,610	14,849	1,761*	0.10
Number of youth	1,866	1,452	414		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes the parents who were eligible for the survey. Nonrespondents include parents ineligible for the survey because they died or withdrew from the study. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

3. Differences between self-reporting and proxy youth respondents

We compared the baseline characteristics of youth who self-responded to the survey to those who responded via proxies to assess whether systematically missing data from different survey modes might affect the estimated impacts on survey-based outcomes (Appendix Table F.7). We found differences in 9 of 25 baseline characteristics by survey response type. Compared with self-respondents, youth who responded by proxy were less likely to be female, prefer English as a spoken or written language; they were younger at RA and had lower average OASDI and SSA payments in the year before RA; their enrolling parent was less likely to have provided a valid SSN at RA, but the employment rates and earnings were higher for those that did. Because of these differences, findings on survey-based outcomes that are available only for self-respondents might not generalize to all survey respondents.

Appendix Table F.7. MD PROMISE: Baseline characteristics of proxy and self-reporting youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Proxy respondent (B)	Self-reporting respondent (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	35.0	26.9	39.4	-12.4***	0.00
Youth age at RA				††	0.03
14	26.1	29.0	24.6	4.4	
15	26.4	28.3	25.4	2.9	
16	47.5	42.7	50.1	-7.3	
Average age at RA	15.8	15.7	15.8	-0.1**	0.03
Youth language preference at SSI application					
Prefers English for written language	97.1	95.8	97.7	-1.9*	0.05
Prefers English for spoken language	96.8	95.6	97.4	-1.8*	0.07
Youth living arrangement at SSI application					0.20
In parents' household	86.6	88.4	85.6	2.8	
Own household or alone	10.0	9.2	10.5	-1.2	
Another household and receiving support	3.4	2.4	3.9	-1.6	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	15.1	17.5	13.8	3.6	
Non-Hispanic Black	49.8	43.7	53.1	-9.4	
Hispanic	6.7	6.4	6.9	-0.5	
Non-Hispanic American Indian	1.5	1.8	1.4	0.4	
Non-Hispanic other or mixed race	6.3	5.5	6.7	-1.2	
Missing	20.6	25.2	18.1	7.0	
Enrolling parent age at RA	43.3	43.1	43.4	-0.3	0.57
Parent race and ethnicity				††	0.04
Non-Hispanic White	19.6	21.3	18.7	2.6	
Non-Hispanic Black	52.6	47.2	55.5	-8.2	
Hispanic	5.8	5.8	5.7	0.0	
Non-Hispanic American Indian	1.0	0.7	1.1	-0.4	
Non-Hispanic other or mixed race	5.0	5.4	4.7	0.7	
Missing	16.1	19.5	14.3	5.2	
Disability					
Youth primary impairment					0.31
Intellectual or developmental disability	37.3	39.3	36.1	3.2	
Speech, hearing, or visual impairment	1.7	1.0	2.1	-1.2	
Physical disability	11.1	10.2	11.6	-1.5	
Other mental impairment	47.1	46.3	47.6	-1.3	
Other or unknown disability	2.8	3.2	2.5	0.7	

Baseline characteristic	All (A)	Proxy respondent (B)	Self-reporting respondent (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.6	94.8	94.4	0.4	0.74
Received OASDI	11.1	9.5	12.0	-2.6	0.13
Years between youth's earliest SSI eligibility and RA	8.3	8.3	8.3	0.0	0.98
Youth age at most recent SSI application	7.9	7.7	8.0	-0.3	0.16
Youth payments in the year before RA ($)					
SSI	7,238	7,162	7,278	-116	0.38
OASDI	336	254	380	-126**	0.04
Total SSI and OASDI	7,573	7,416	7,658	-242**	0.05
Household had multiple SSI-eligible children	17.7	16.3	18.4	-2.1	0.32
Enrolling parent provided a valid SSN at RA	58.8	54.6	61.0	-6.4**	0.02
Parents included in the administrative data				†††	0.00
None	6.0	7.0	5.4	1.6	
One parent	69.0	63.1	72.2	-9.0	
Two parents	25.0	29.8	22.4	7.4	
Parent SSA payment status at RA					0.24
Any parent received SSI only	7.4	6.1	8.0	-1.9	
Any parent received OASDI only	8.2	7.8	8.4	-0.6	
Any parent received both SSI and OASDI	4.7	3.6	5.3	-1.7	
No parent received any SSA payments	73.7	75.4	72.8	2.6	
No parent was included in the SSA data analyses	6.0	7.0	5.4	1.6	
Earnings					
Youth had earnings in the calendar year before RA	4.3	3.8	4.5	-0.8	0.48
Youth earnings in the calendar year before RA ($)	38	32	41	-10	0.41
Parent had earnings in the calendar year before RA	68.1	70.9	66.6	4.4*	0.10
Parent earnings in the calendar year before RA ($)	16,265	18,386	15,145	3,242***	0.00
Number of youth	1,486	513	973		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all PROMISE five-year youth survey respondents. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

B. Findings from the impact analysis

In this section, we present findings from the impact analysis of MD PROMISE. First, we present impacts estimated through the main models. Second, we present the results of sensitivity analyses. Third, we present impacts for key subgroups of evaluation enrollees.

1. Impact estimates

Appendix Tables F.8–F.17 provide results and inference statistics for the regression-adjusted impacts estimated through the main models described in Appendix B. For each outcome measure, we report the estimated regression-adjusted impact; the control group mean (weighted, as applicable); and additional inference statistics, such as standard errors, effect sizes, and sample sizes by treatment status.

Appendix Table F.8. MD PROMISE: Impact on the youth's education and training (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group sample size	Control group sample size
Primary outcomes							
Enrolled in an educational or training program	38.8	-2.4	0.33	2.5	-0.062	710	721
Has a GED, high school diploma, or certificate of completion	71.8	-3.8	0.11	2.4	-0.110	734	744
Supplementary outcomes							
Enrolled in postsecondary education	12.8	-0.2	0.89	1.7	-0.013	723	739
Type of school attending							
High school serving a variety of students	10.8	-2.2	0.13	1.5	-0.155	723	739
High school serving only students with disabilities	4.9	0.4	0.71	1.1	0.052	723	739
GED program or other adult education program	2.4	-0.2	0.79	0.8	-0.060	723	739
Postsecondary vocational, trade, or technical school	1.7	1.4*	0.07	0.8	0.374	723	739
Postsecondary college or advanced degree program	11.0	-1.7	0.29	1.6	-0.111	723	739
Other type of school	1.2	-0.3	0.57	0.5	-0.177	723	739
Not attending school	67.9	2.6	0.26	2.3	0.073	723	739
Highest grade completed							
Lower than 12th grade	24.3	3.5	0.12	2.3	0.110	738	748
12th grade or senior in high school	64.4	-4.1	0.11	2.5	-0.105	738	748
Some or all of college or university	8.7	0.9	0.55	1.5	0.068	738	748
Other or do not know	2.7	-0.4	0.65	0.8	-0.089	738	748
Enrolled in a training program	9.8	0.4	0.83	1.6	0.024	698	717
Received any training credential in the past year	9.4	-0.9	0.55	1.5	-0.067	734	744
Any school suspensions or expulsions in the past year	2.0	0.7	0.35	0.8	0.194	698	717

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group sample size	Control group sample size
Accommodations							
Receives educational accommodation	22.5	-1.1	0.57	2.0	-0.040	721	738
Receives training accommodation	5.9	-0.2	0.88	1.3	-0.021	698	716
Received supports or services for postsecondary education in the past year	20.9	2.4	0.26	2.2	0.086	730	743

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

GED = General Educational Development.

Appendix Table F.9. MD PROMISE: Impact on the youth's employment and earnings (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Employed in a paid job in the past year[a]	44.9	1.5	0.57	2.6	0.036	738	748
Earnings in the past year ($)	4,987	326	0.52	503	0.035	738	748
Earnings during the five calendar years after RA ($)	12,458	1,393	0.14	943	0.066	936	930
Supplementary outcomes							
Employment in the past year							
Any employment	51.1	-0.0	0.99	2.6	-0.001	738	748
Weekly hours worked	7.5	0.7	0.30	0.7	0.055	738	748
Employed in a paid job offering fringe benefits	25.5	1.8	0.44	2.4	0.057	738	748
Employment settings							
Integrated	37.3	1.4	0.59	2.7	0.037	738	748
Outside of school-sponsored activities	40.4	1.5	0.56	2.6	0.039	738	748
With coaching	6.2	2.4*	0.09	1.4	0.213	738	748
Received supports or services in getting or keeping a job	20.0	0.5	0.82	2.1	0.018	730	743
Employment at the time of the survey							
Any paid employment	26.1	1.7	0.47	2.3	0.052	738	748
Average weekly earnings ($)	92	15	0.15	11	0.077	738	748
Weekly hours worked	7.4	1.3	0.12	0.8	0.083	738	748
Labor force participation	53.4	5.6**	0.03	2.6	0.138	738	748
Employment and earnings in calendar years after RA							
Ever employed in Year 1	21.3	12.4***	0.00	2.0	0.382	936	930
Ever employed in Year 2	33.3	10.3***	0.00	2.2	0.265	936	930
Ever employed in Year 3	43.7	4.5**	0.05	2.2	0.109	936	930
Ever employed in Year 4	49.2	2.1	0.36	2.3	0.050	936	930
Ever employed in Year 5	51.0	0.2	0.93	2.3	0.005	936	930
Ever employed during Years 1-5	65.3	12.7***	0.00	2.0	0.383	936	930
Earnings in Year 1 ($)	426	238***	0.00	66	0.163	936	930

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Earnings in Year 2 ($)	1,174	193	0.16	136	0.064	936	930
Earnings in Year 3 ($)	2,454	230	0.31	226	0.045	936	930
Earnings in Year 4 ($)	3,742	300	0.34	315	0.043	936	930
Earnings in Year 5 ($)	4,662	431	0.26	380	0.052	936	930
VR services during the 5 years after RA[a]							
Applied for VR services	21.0	2.9	0.13	1.9	0.101	936	930
Received VR services	17.4	-0.2	0.90	1.7	-0.009	936	930

Source: PROMISE five-year survey, RSA-911 data (VR service outcomes), and SSA administrative records (employment and earnings in years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] RSA-911 data are available only through 2020. VR services outcomes used only four years of data for youth who enrolled in PROMISE in 2016.

N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration; VR = vocational rehabilitation.

Appendix Table F.10. MD PROMISE: Impact on the youth's self-determination and expectations (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Self-determination score (scale: 0 to 100)[a]	78.5	0.5	0.58	0.9	0.037	460	457
Youth expects to be financially independent at age 25	64.2	2.9	0.35	3.1	0.078	475	468
Supplementary outcomes							
Scores on subdomains of self-determination[a]							
Autonomy (scale: 0 to 300)	136.3	1.9	0.60	3.7	0.035	461	460
Psychological empowerment (scale: 0 to 100)	86.8	2.0	0.11	1.3	0.108	458	457
Self-realization (scale: 0 to 100)	92.2	-0.5	0.63	1.0	-0.032	460	456
Agentic action (scale: 0 to 100)	89.7	-0.3	0.84	1.4	-0.013	460	455
Youth expects to:							
Get postsecondary education (beyond high school/GED)	59.3	0.8	0.79	3.2	0.021	470	459
Live independently at age 25	66.1	-0.2	0.94	3.1	-0.007	476	464
Be employed in a paid job at age 25	89.0	3.2*	0.10	2.0	0.233	479	470
Parent expects youth to:							
Get postsecondary education (beyond high school/GED)	40.2	0.9	0.72	2.6	0.024	693	688
Live independently at age 25	41.4	-3.0	0.26	2.6	-0.075	679	678
Be financially independent at age 25	46.4	-3.4	0.20	2.7	-0.084	700	692
Be employed in a paid job at age 25	82.8	0.8	0.67	2.0	0.037	697	693
Parent believes it important that youth be employed eventually	91.7	1.4	0.32	1.4	0.123	680	679

Source: PROMISE five-year survey.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] Higher scores on the scales indicate higher levels of self-determination.

GED = General Educational Development; N = sample size.

Appendix Table F.11. MD PROMISE: Impact on the youth's SSA payments and knowledge (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Received SSA payments in Year 5 after RA	60.5	7.2***	0.00	2.1	0.190	936	930
Total SSA payments in Year 5 after RA ($)	4,857	330*	0.09	195	0.076	936	930
Total SSA payments during Years 1–5 after RA ($)	31,768	1,598***	0.01	576	0.115	936	930
Supplementary outcomes							
Aware of the following SSA policies							
Children receiving SSI are not automatically eligible for SSI as adults	39.5	4.8	0.15	3.3	0.120	459	454
People receiving SSI can work for pay	72.8	-1.2	0.69	3.0	-0.036	459	454
People receiving SSI must report earnings to SSA	81.8	-5.2*	0.06	2.7	-0.193	459	454
Aware of the following work supports							
SSI Student Earned Income Exclusion	7.6	3.5*	0.08	2.0	0.250	460	454
SSI earned income exclusion	5.7	3.0*	0.09	1.8	0.274	459	454
SSI PASS plan	6.3	3.4*	0.07	1.8	0.282	460	454
ABLE account	6.4	5.3***	0.01	1.9	0.400	459	454
SSA payments in years after RA							
Received any in Year 1	96.6	1.3*	0.06	0.7	0.297	936	930
Received any in Year 2	91.7	1.8	0.11	1.1	0.164	936	930
Received any in Year 3	84.5	3.5**	0.02	1.5	0.182	936	930
Received any in Year 4	69.1	9.2***	0.00	1.9	0.289	936	930
Received any in Years 1–5	97.4	0.7	0.30	0.6	0.181	936	930
Amount in Year 1 ($)	7,830	80	0.37	90	0.030	936	930
Amount in Year 2 ($)	7,398	107	0.38	120	0.036	936	930
Amount in Year 3 ($)	6,299	518***	0.00	157	0.144	936	930
Amount in Year 4 ($)	5,383	562***	0.00	180	0.138	936	930

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
SSI payments in years after RA							
Received any in Year 1	95.5	0.8	0.36	0.9	0.120	936	930
Received any in Year 2	89.8	1.7	0.19	1.3	0.121	936	930
Received any in Year 3	82.4	3.1*	0.06	1.6	0.138	936	930
Received any in Year 4	67.3	8.6***	0.00	2.0	0.256	936	930
Received any in Year 5	58.9	6.7***	0.00	2.2	0.173	936	930
Received any in Years 1–5	96.5	0.7	0.37	0.8	0.134	936	930
Amount in Year 1 ($)	7,384	-2	0.98	91	-0.001	936	930
Amount in Year 2 ($)	6,926	69	0.57	121	0.022	936	930
Amount in Year 3 ($)	5,906	415***	0.01	155	0.115	936	930
Amount in Year 4 ($)	4,995	533***	0.00	173	0.134	936	930
Amount in Year 5 ($)	4,477	305*	0.10	185	0.073	936	930
Total amount during Years 1–5 ($)	29,687	1,320**	0.02	567	0.093	936	930
OASDI benefits in years after RA							
Received any in Year 1	11.2	0.8	0.38	0.9	0.048	936	930
Received any in Year 2	12.0	0.8	0.41	1.0	0.047	936	930
Received any in Year 3	9.6	1.1	0.33	1.1	0.071	936	930
Received any in Year 4	7.5	1.7	0.12	1.1	0.135	936	930
Received any in Year 5	6.6	1.2	0.29	1.1	0.107	936	930
Received any in Years 1–5	14.2	1.7	0.16	1.2	0.080	936	930
Amount in Year 1 ($)	446	82**	0.04	40	0.047	936	930
Amount in Year 2 ($)	472	38	0.50	55	0.021	936	930
Amount in Year 3 ($)	393	103	0.15	72	0.055	936	930
Amount in Year 4 ($)	388	30	0.70	77	0.016	936	930
Amount in Year 5 ($)	381	25	0.76	84	0.013	936	930
Total amount during Years 1–5 ($)	2,080	277	0.30	270	0.035	936	930

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Age-18 redetermination status five years after RA							
Final decision: benefits ceased	26.1	-0.6	0.78	2.0	-0.018	936	930
Final decision: benefits continued	45.5	-1.5	0.50	2.2	-0.036	936	930
Final decision is pending	4.3	1.1	0.26	1.0	0.144	936	930
Did not have an age-18 redetermination	24.1	0.9	0.62	1.9	0.031	936	930

Source: SSA administrative records and PROMISE five-year survey (awareness of work supports and SSA policies).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

ABLE = Achieving a Better Life Experience; OASDI = Old-Age, Survivors, and Disability Insurance; PASS = Plan for Achieving Self Support; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table F.12. MD PROMISE: Impact on the youth's health insurance coverage and expenditures (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Covered by any health insurance	91.4	-1.0	0.51	1.5	-0.073	712	719
Average monthly Medicaid and Medicare expenditures in the five years after RA ($)	1,066	-18	0.53	28	-0.021	936	930
Supplementary outcomes							
Covered by private health insurance	9.9	0.5	0.75	1.6	0.034	712	719
Covered by private health insurance purchased through an ACA health exchange	0.4	0.2	0.52	0.4	0.265	712	719
Medicaid and Medicare participation in years after RA							
Ever enrolled in Year 1	99.7	0.1	0.63	0.3	0.284	936	930
Ever enrolled in Year 2	98.6	0.3	0.55	0.5	0.150	936	930
Ever enrolled in Year 3	97.6	0.0	0.97	0.7	0.007	936	930
Ever enrolled in Year 4	93.7	1.2	0.27	1.1	0.132	936	930
Ever enrolled in Year 5	89.8	0.8	0.56	1.4	0.055	936	930
Percentage of months enrolled in Years 1–5	92.3	0.8	0.27	0.7	0.050	936	930
Average monthly Medicaid and Medicare expenditures in years after RA							
Year 1 ($)	1,182	47	0.11	30	0.044	936	930
Year 2 ($)	1,167	-18	0.60	34	-0.018	936	930
Year 3 ($)	1,088	-36	0.34	37	-0.035	936	930
Year 4 ($)	954	-25	0.50	37	-0.026	936	930
Year 5 ($)	937	-58	0.19	45	-0.053	936	930
Medicaid participation in years after RA							
Ever enrolled in Year 1	99.7	0.1	0.63	0.3	0.284	936	930
Ever enrolled in Year 2	98.6	0.3	0.55	0.5	0.150	936	930
Ever enrolled in Year 3	97.6	0.0	0.97	0.7	0.007	936	930
Ever enrolled in Year 4	93.7	1.1	0.32	1.1	0.119	936	930
Ever enrolled in Year 5	89.7	0.6	0.68	1.4	0.039	936	930
Percentage of months enrolled in Years 1–5	92.2	0.7	0.32	0.7	0.045	936	930

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Average monthly Medicaid expenditures in years after RA							
Year 1 ($)	1,182	46	0.12	30	0.044	936	930
Year 2 ($)	1,167	-18	0.60	34	-0.018	936	930
Year 3 ($)	1,088	-36	0.34	37	-0.035	936	930
Year 4 ($)	945	-21	0.57	37	-0.022	936	930
Year 5 ($)	902	-31	0.44	40	-0.031	936	930
Years 1–5 ($)	1,057	-12	0.67	28	-0.014	936	930
Medicare participation in years after RA							
Ever enrolled in Year 1	0.0	0.1	0.32	0.1	n.a.	936	930
Ever enrolled in Year 2	0.0	0.0	n.a.	0.0	n.a.	936	930
Ever enrolled in Year 3	0.2	0.0	0.87	0.2	0.098	936	930
Ever enrolled in Year 4	2.2	0.4	0.55	0.7	0.109	936	930
Ever enrolled in Year 5	4.0	0.1	0.89	0.9	0.020	936	930
Percentage of months enrolled in Years 1–5	1.0	0.1	0.79	0.2	0.012	936	930
Average monthly Medicare expenditures in years after RA							
Year 1 ($)	0	1	0.32	1	0.046	936	930
Year 2 ($)	0	0	n.a.	0	n.a.	936	930
Year 3 ($)	0	0	0.32	0	0.043	936	930
Year 4 ($)	9	-4	0.48	6	-0.033	936	930
Year 5 ($)	35	-27	0.18	20	-0.063	936	930
Years 1–5 ($)	9	-6	0.23	5	-0.056	936	930

Source: CMS administrative records and PROMISE five-year survey (non-Medicare/Medicaid outcomes).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

ACA = Affordable Care Act; CMS = Centers for Medicare & Medicaid Services; N = sample size; RA = random assignment.

Appendix Table F.13. MD PROMISE: Impact on the youth's economic and social well-being (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Total income in the past year ($)	10,096	633	0.19	478	0.072	738	748
Total income during the five calendar years after RA ($)	45,632	3,083***	0.00	955	0.143	936	930
Supplementary outcomes							
Engaging in productive market activities[a]	76.9	2.3	0.31	2.2	0.080	722	732
Income in calendar years after RA							
Year 1 ($)	8,680	335***	0.01	129	0.100	936	930
Year 2 ($)	8,651	472***	0.01	177	0.116	936	930
Year 3 ($)	8,887	837***	0.00	242	0.156	936	930
Year 4 ($)	9,506	706**	0.02	310	0.104	936	930
Year 5 ($)	9,909	733**	0.05	369	0.092	936	930
Household income in the past year ($)[b]	30,880	1,538	0.16	1,101	0.078	623	651
Household receives TANF, SNAP, or housing assistance[b]	57.0	3.6	0.17	2.6	0.091	649	676
Amount of public assistance in the past month							
TANF ($)[b]	26	-5	0.45	6	-0.040	650	681
SNAP benefits ($)[b]	179	15	0.26	14	0.062	652	680
Housing assistance ($)[b]	249	18	0.50	27	0.037	653	679
Family structure and living arrangements							
Living independently	11.3	-0.1	0.94	1.6	-0.007	736	746
Married or in a marriage-like relationship	4.8	-0.7	0.52	1.1	-0.103	697	717
Responsible for a child or children	11.6	1.0	0.58	1.7	0.055	693	709
Engagement with the criminal justice system							
Ever arrested	13.4	3.0	0.11	1.9	0.144	691	707
Number of times arrested	0.3	0.0	0.58	0.1	0.029	691	707
Arrested in the past year	4.8	1.1	0.35	1.2	0.134	689	704
Ever incarcerated	4.1	-0.1	0.96	1.1	-0.009	685	705
Length of incarceration (days)	22.9	-0.4	0.96	9.0	-0.003	685	705

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Self-reported health status							
Poor	2.0	1.8**	0.04	0.9	0.410	691	708
Fair	15.3	-0.6	0.75	1.9	-0.028	691	708
Good	37.3	-0.9	0.74	2.6	-0.023	691	708
Very good or excellent	45.5	-0.4	0.89	2.7	-0.009	691	708
Received help in getting accommodations for school, work, or living independently in past year	16.5	2.1	0.28	2.0	0.090	729	740

Source: PROMISE five-year surveys and SSA administrative records (SSA payments and income in calendar years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] Productive market activities include engaging in any of the following at the time of the five-year survey: employment in paid or unpaid work, looking for work, or enrollment in school or a training program.

[b] This outcome is based on data from the parent survey about the parent's household if the youth lived with the parent at interview.

N = sample size; RA = random assignment; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; TANF = Temporary Assistance for Needy Families.

Appendix Table F.14. MD PROMISE: Impact on the parents' employment and earnings (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent worked for pay in the past year	66.9	0.3	0.89	2.3	0.009	730	721
Parents' earnings in the past year ($)	23,028	1,247	0.39	1,461	0.046	730	722
Parents' earnings during the five calendar years after RA ($)	106,730	-1,847	0.54	3,039	-0.016	883	870
Supplementary outcomes							
Highest educational attainment achieved by either parent							
Not a high school graduate	18.9	-2.0	0.32	2.0	-0.082	730	722
High school diploma or GED	44.8	1.7	0.52	2.7	0.042	730	722
Some postsecondary education or more	35.5	-0.2	0.94	2.5	-0.005	730	722
Other or do not know	0.8	0.5	0.44	0.6	0.276	730	722
Employment in the past year							
Number of parents that worked for pay	0.8	0.0	0.66	0.0	0.022	729	720
Number of weeks worked	35.5	0.6	0.70	1.5	0.019	729	720
Weekly hours worked	28.0	0.9	0.45	1.3	0.037	730	722
Either parent was offered fringe benefits through a job	53.3	-1.1	0.67	2.6	-0.026	730	720
Employment at the time of survey							
Either parent is in the labor force	65.6	4.2*	0.08	2.4	0.118	693	695
Either parent is working for pay	53.9	0.9	0.74	2.6	0.021	695	698
Employment and earnings in calendar years after RA							
Ever employed in Year 1	70.0	2.3	0.20	1.8	0.067	883	870
Ever employed in Year 2	69.4	4.6**	0.01	1.8	0.137	883	870
Ever employed in Year 3	70.5	3.0	0.10	1.8	0.090	883	870
Ever employed in Year 4	71.5	2.7	0.14	1.8	0.082	883	870
Ever employed in Year 5	69.8	3.1	0.10	1.9	0.091	883	870
Ever employed in Years 1-5	80.9	2.8*	0.08	1.6	0.115	883	870
Earnings in Year 1 ($)	19,659	-903*	0.09	531	-0.041	883	870
Earnings in Year 2 ($)	20,198	-162	0.80	627	-0.007	883	870
Earnings in Year 3 ($)	21,333	71	0.92	709	0.003	883	870

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Earnings in Year 4 ($)	22,616	-251	0.74	765	-0.010	883	870
Earnings in Year 5 ($)	22,924	-601	0.49	875	-0.023	883	870

Source: PROMISE five-year survey and SSA administrative records (employment and earnings in years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

GED = General Educational Development; N = sample size; RA = random assignment.

Appendix Table F.15. MD PROMISE: Impact on the parents' SSA payments (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent received SSA payments in Year 5	24.6	-0.4	0.77	1.4	-0.014	883	870
Total SSA payments received in Year 5 ($)	2,689	83	0.69	207	0.015	883	870
Total SSA payments during the five years after RA ($)	12,500	-193	0.78	684	-0.008	883	870
Supplementary outcomes							
SSA payments in years after RA							
Received any in Year 1	20.3	-0.9	0.13	0.6	-0.034	883	870
Received any in Year 2	22.1	-1.0	0.29	0.9	-0.035	883	870
Received any in Year 3	22.8	-0.8	0.47	1.0	-0.027	883	870
Received any in Year 4	23.8	-1.2	0.34	1.2	-0.040	883	870
Received any in Years 1–5	26.2	0.3	0.79	1.3	0.011	883	870
Amount in Year 1 ($)	2,293	-117	0.35	124	-0.023	883	870
Amount in Year 2 ($)	2,503	-92	0.60	176	-0.017	883	870
Amount in Year 3 ($)	2,527	-121	0.45	161	-0.023	883	870
Amount in Year 4 ($)	2,488	54	0.76	174	0.010	883	870
SSI payments in years after RA							
Received any in Year 1	12.0	-1.4**	0.02	0.6	-0.088	883	870
Received any in Year 2	12.6	-1.5*	0.09	0.9	-0.084	883	870
Received any in Year 3	13.1	-1.7*	0.09	1.0	-0.095	883	870
Received any in Year 4	13.3	-1.9*	0.07	1.0	-0.107	883	870
Received any in Year 5	13.6	-1.7	0.15	1.2	-0.094	883	870
Received any in Years 1–5	16.7	-0.8	0.50	1.2	-0.036	883	870
Amount in Year 1 ($)	933	-170**	0.03	76	-0.057	883	870
Amount in Year 2 ($)	960	-128	0.20	99	-0.042	883	870
Amount in Year 3 ($)	933	-143	0.12	91	-0.050	883	870
Amount in Year 4 ($)	897	-80	0.36	87	-0.029	883	870
Amount in Year 5 ($)	965	-26	0.81	108	-0.009	883	870
Total amount during Years 1–5 ($)	4,689	-547	0.13	360	-0.041	883	870

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
OASDI benefits in years after RA							
Received any in Year 1	13.1	-0.4	0.46	0.6	-0.024	883	870
Received any in Year 2	14.3	-0.4	0.63	0.8	-0.020	883	870
Received any in Year 3	14.7	-0.6	0.52	0.9	-0.028	883	870
Received any in Year 4	15.3	-0.3	0.77	1.0	-0.014	883	870
Received any in Year 5	15.7	0.4	0.72	1.2	0.019	883	870
Received any in Years 1–5	16.8	0.6	0.62	1.1	0.024	883	870
Amount in Year 1 ($)	1,360	53	0.59	97	0.013	883	870
Amount in Year 2 ($)	1,543	36	0.78	132	0.008	883	870
Amount in Year 3 ($)	1,593	22	0.87	138	0.005	883	870
Amount in Year 4 ($)	1,591	134	0.38	152	0.029	883	870
Amount in Year 5 ($)	1,724	109	0.52	170	0.023	883	870
Total amount during Years 1–5 ($)	7,811	354	0.55	589	0.017	883	870

Source: SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

N = sample size; OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table F.16. MD PROMISE: Impact on the parents' health insurance coverage and expenditures (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent is covered by health insurance	94.4	0.3	0.81	1.2	0.033	725	719
Average monthly Medicaid and Medicare expenditures in the five years after RA ($)	778	17	0.57	30	0.018	883	870
Supplementary outcomes							
Covered by private health insurance	24.9	-0.1	0.96	2.2	-0.003	725	719
Medicaid and Medicare participation in years after RA							
Ever enrolled in Year 1	83.7	3.4**	0.03	1.5	0.164	883	870
Ever enrolled in Year 2	83.6	2.5	0.11	1.6	0.117	883	870
Ever enrolled in Year 3	82.8	2.4	0.14	1.6	0.109	883	870
Ever enrolled in Year 4	81.6	0.7	0.67	1.7	0.030	883	870
Ever enrolled in Year 5	80.1	1.2	0.50	1.8	0.047	883	870
Percentage of months enrolled in Years 1–5	78.4	2.0	0.17	1.5	0.060	883	870
Average monthly Medicaid and Medicare expenditures in years after RA							
Year 1 ($)	704	-5	0.86	30	-0.005	883	870
Year 2 ($)	726	25	0.46	34	0.025	883	870
Year 3 ($)	784	22	0.57	39	0.021	883	870
Year 4 ($)	814	24	0.56	42	0.022	883	870
Year 5 ($)	864	20	0.68	49	0.016	883	870
Medicaid participation in years after RA							
Ever enrolled in Year 1	82.0	4.0**	0.02	1.6	0.179	883	870
Ever enrolled in Year 2	81.5	3.1*	0.07	1.7	0.132	883	870
Ever enrolled in Year 3	80.9	2.4	0.16	1.7	0.101	883	870
Ever enrolled in Year 4	79.7	0.4	0.83	1.8	0.015	883	870
Ever enrolled in Year 5	77.8	0.4	0.84	1.9	0.014	883	870
Percentage of months enrolled in Years 1–5	76.0	1.8	0.25	1.6	0.051	883	870

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Average monthly Medicaid expenditures in years after RA							
Year 1 ($)	535	-2	0.90	20	-0.004	883	870
Year 2 ($)	563	-3	0.89	22	-0.005	883	870
Year 3 ($)	603	3	0.92	26	0.004	883	870
Year 4 ($)	625	-1	0.97	28	-0.001	883	870
Year 5 ($)	670	11	0.76	34	0.013	883	870
Years 1–5 ($)	599	1	0.95	22	0.002	883	870
Medicare participation in years after RA							
Ever enrolled in Year 1	12.1	0.3	0.71	0.8	0.017	883	870
Ever enrolled in Year 2	13.7	0.1	0.89	0.9	0.006	883	870
Ever enrolled in Year 3	14.4	0.2	0.82	0.9	0.011	883	870
Ever enrolled in Year 4	14.6	0.4	0.65	1.0	0.021	883	870
Ever enrolled in Year 5	15.3	0.2	0.87	1.1	0.008	883	870
Percentage of months enrolled in Years 1–5	13.4	0.1	0.89	0.8	0.003	883	870
Average monthly Medicare expenditures in years after RA							
Year 1 ($)	169	-3	0.91	27	-0.004	883	870
Year 2 ($)	163	28	0.33	29	0.035	883	870
Year 3 ($)	181	19	0.51	30	0.024	883	870
Year 4 ($)	189	25	0.41	31	0.031	883	870
Year 5 ($)	194	10	0.78	34	0.011	883	870
Years 1–5 ($)	179	16	0.50	24	0.022	883	870

Source: CMS administrative records and PROMISE five-year survey (non-Medicare/Medicaid outcomes).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

CMS = Centers for Medicare & Medicaid Services; N = sample size.

Appendix Table F.17. MD PROMISE: Impact on the parents' economic well-being (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Parents' total income in the past year ($)	26,271	1,154	0.43	1,469	0.044	695	672
Parents' total income during the five calendar years after RA ($)	120,597	-2,056	0.49	2,980	-0.019	883	870
Supplementary outcomes							
Parents' income in calendar years after RA							
Year 1 ($)	22,257	-1,013*	0.06	542	-0.049	883	870
Year 2 ($)	22,986	-346	0.58	632	-0.016	883	870
Year 3 ($)	24,019	84	0.91	703	0.004	883	870
Year 4 ($)	25,372	-169	0.82	747	-0.007	883	870
Year 5 ($)	25,963	-613	0.47	849	-0.024	883	870
Household receives TANF, SNAP, or housing assistance	58.4	1.8	0.47	2.5	0.046	715	712
Household income in the past year ($)	32,425	763	0.48	1,069	0.039	697	693

Source: PROMISE five-year survey and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

N = sample size; RA = random assignment; SSA = Social Security Administration.

2. Sensitivity analyses

We assessed the sensitivity of the estimated impacts on primary outcomes to methodological choices we incorporated in the main impact estimates. In Appendix Table F.18, we show the impact estimated by the main regression model for each outcome, as well as by alternative models that do not (1) use the survey weights, (2) include covariate adjustment, and (3) use imputed data for outcomes that underwent multiple imputation. The alternative models produced broadly similar results, suggesting that the main model's estimates of program impacts were not sensitive to the choice of estimation method.

We also assessed the extent to which the lack of survey data for some enrollees would influence the estimates of program impacts. In Appendix Table F.19, we compare how the estimated impacts on primary outcomes varied when nonrespondents were included and excluded from analyses of outcomes measured using administrative data. For all outcomes, the impact estimated using the weighted survey respondent sample did not significantly differ from the impact estimated using the administrative analysis sample. The findings suggest that use of the analysis weights minimized the potential for nonresponse bias because the estimated impacts for the survey respondent sample were comparable to those for the full research sample.

Appendix Table F.18. MD PROMISE: Impact on primary outcomes, by estimation approach (values measured at the time of the survey and shown in in percentages, unless otherwise noted)

Outcome	Main model	No weighting for non-response	No covariate adjustment	No imputation
Enrolled in an educational or training program	-2.4	-2.3	-3.6	n.a.
Has a GED, high school diploma, or certificate of completion	-3.8	-4.1*	-3.8	n.a.
Youth employed in a paid job in the past year	1.5	1.6	1.3	2.6
Youth earnings in the past year ($)	326	431	307	380
Youth earnings during the five calendar years after RA ($)	1,393	n.a.	1,768*	n.a.
Youth self-determination score (scale: 0 to 100)[a]	0.5	0.4	0.5	n.a.
Youth expects to be financially independent at age 25	2.9	2.6	2.5	n.a.
Youth received SSA payments in Year 5 after RA	7.2***	n.a.	6.9***	n.a.
Youth total SSA payments in Year 5 after RA ($)	330*	n.a.	329	n.a.
Youth total SSA payments during Years 1–5 after RA ($)	1,598***	n.a.	1,970***	n.a.
Youth covered by any health insurance	-1.0	-0.7	-1.2	n.a.
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	-18	n.a.	-18	n.a.
Youth total income in the past year ($)	633	745	649	540
Youth total income during the five calendar years after RA ($)	3,083***	n.a.	3,802***	n.a.
Either parent worked for pay in the past year	0.3	0.3	-1.8	n.a.
Parents' earnings in the past year ($)	1,247	1,446	188	1,332
Parents' earnings during the five calendar years after RA ($)	-1,847	n.a.	-6,362	n.a.
Either parent received SSA payments in Year 5 after RA	-0.4	n.a.	4.4**	n.a.
Parents' total SSA payments received in Year 5 after RA ($)	83	n.a.	603**	n.a.
Parents' total SSA payments during the five years after RA ($)	-193	n.a.	2,615**	n.a.
Parents' total income in the past year ($)	1,154	1,296	363	1,104
Parents' income during the five calendar years after RA ($)	-2,056	n.a.	-3,570	n.a.
Either parent is covered by health insurance	0.3	0.3	0.2	n.a.
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	17	n.a.	17	n.a.

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the impact estimates of MD PROMISE, using different modeling approaches. In the main model, we used covariate adjustment and, for outcomes derived from survey data, we weighted statistics to adjust for survey nonresponse and used multiple imputation when an outcome had a

missing value conditional on the value of another variable. In the model with "No weighting for non-response", we followed the main model but did not apply weights to adjust for non-response. In the model with "No covariate adjustment", we followed the main model but did not include covariates. For the model with "No multiple imputation", we followed the main model except that we excluded cases with outcomes that had a missing value conditional on the value of another variable.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; n.a.= not applicable; RA = random assignment; SSA = Social Security Administration.

Appendix Table F.19. MD PROMISE: Impact on primary outcomes measured using administrative data, including and excluding five-year survey nonrespondents (percentage, unless otherwise noted)

Outcome	Administrative analysis samples			Five-year survey respondents (weighted)			*p*-value for difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth earnings during the five calendar years after RA ($)	12,458	1,393	0.14	12,151	1,572	0.15	0.86
Youth received SSA payments in Year 5 after RA	60.5	7.2***	0.00	64.4	7.3***	0.00	0.96
Youth total SSA payments in Year 5 after RA ($)	4,857	330*	0.09	5,210	301	0.17	0.89
Youth total SSA payments during Years 1–5 after RA ($)	31,768	1,598***	0.01	32,571	1,359**	0.04	0.69
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,066	-18	0.53	1,096	-16	0.62	0.95
Youth total income during the five calendar years after RA ($)	45,632	3,083***	0.00	46,243	3,099***	0.01	0.99
Parents' earnings during the five calendar years after RA ($)	106,730	-1,847	0.54	110,971	-3,467	0.34	0.63
Either parent received SSA payments in Year 5 after RA	24.6	-0.4	0.77	24.8	0.9	0.56	0.37
Parents' total SSA payments received in Year 5 after RA ($)	2,689	83	0.69	2,762	173	0.46	0.68
Parents' total SSA payments during the five years after RA ($)	12,500	-193	0.78	12,370	401	0.58	0.40
Parents' total income during the five calendar years after RA ($)	120,597	-2,056	0.49	124,738	-3,023	0.40	0.77
Parents' average monthly Medicaid and Medicare expenditures in years after RA in Years 1-5 after RA ($)	778	17	0.57	771	22	0.52	0.88

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE for administrative analysis samples and five-year survey respondents. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For the sample of five-year survey respondents, we weighted the statistics to adjust for survey nonresponse, applying youth weights for youths' outcomes and parent weights for parents' outcomes.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for the two samples are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; N = sample size; RA = random assignment. SSA = Social Security Administration.

3. Subgroup impact estimates

We estimated the five-year impacts for key subgroups of evaluation enrollees to understand whether the impacts of MD PROMISE differed by enrollee characteristics. We focused on subgroups defined by the following baseline characteristics of youth: age (ages 14 and 15, and age 16); sex (females and males); whether a youth's parent received SSA payments at the time of RA (yes or no); primary impairment (intellectual or developmental disabilities, other mental impairments, and other disabilities); and whether the survey respondent completed the five-year survey before or after the onset of the COVID-19 pandemic (yes or no). Appendix Tables F.20–F.25 present the subgroup impact estimates.

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Appendix Table F.20. MD PROMISE: Impacts on primary outcomes, by youth's age (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Age 14 and 15					Age 16					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	49.6	-1.5	0.68	374	391	26.2	-3.5	0.31	336	330	0.68
Youth has a GED, high school diploma, or certificate of completion	62.7	-2.1	0.55	383	398	82.1	-5.6*	0.07	351	346	0.45
Youth employed in a paid job in the past year	42.6	2.6	0.46	386	401	47.5	0.2	0.96	352	347	0.64
Youth earnings in the past year ($)	4,583	-478	0.44	386	401	5,445	1,204	0.13	352	347	0.09†
Youth earnings during the five calendar years after RA ($)	8,980	390	0.69	474	494	16,399	2,587	0.12	462	436	0.25
Youth self-determination score (scale: 0 to 100)	78.3	0.2	0.85	225	244	78.7	0.8	0.56	235	213	0.77
Youth expects to be financially independent at age 25	62.6	3.5	0.43	237	245	65.9	2.4	0.59	238	223	0.86
Youth received SSA payments in Year 5 after RA	67.0	4.5	0.11	474	494	53.2	10.1***	0.00	462	436	0.19
Youth total SSA payments in Year 5 after RA ($)	5,148	237	0.37	474	494	4,528	430	0.13	462	436	0.62
Youth total SSA payments during Years 1–5 after RA ($)	32,958	1,180	0.12	474	494	30,419	2,045**	0.02	462	436	0.45
Youth covered by any health insurance	91.7	0.6	0.75	376	386	91.0	-2.8	0.24	336	333	0.26
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,184	-17	0.68	474	494	932	-19	0.62	462	436	0.96
Youth total income in the past year ($)	9,966	-234	0.69	386	401	10,244	1,579**	0.04	352	347	0.06†
Youth total income during the five calendar years after RA ($)	43,518	1,550	0.15	474	494	48,029	4,826***	0.00	462	436	0.08†

Outcome	Age 14 and 15					Age 16					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Either parent worked for pay in the past year	68.4	-1.8	0.57	378	390	65.2	2.7	0.42	352	331	0.32
Parents' earnings in the past year ($)	23,433	532	0.79	378	390	22,556	2,043	0.34	352	332	0.60
Parents' earnings during the five calendar years after RA ($)	111,122	871	0.84	449	466	101,664	-4,673	0.29	434	404	0.36
Either parent received SSA payments in Year 5 after RA	23.0	-1.6	0.39	449	466	26.5	0.9	0.67	434	404	0.37
Parents' total SSA payments received in Year 5 after RA ($)	2,606	-242	0.40	449	466	2,785	437	0.15	434	404	0.10
Parents' total SSA payments during the five years after RA ($)	11,666	-710	0.46	449	466	13,461	369	0.71	434	404	0.43
Parents' total income in the past year ($)	26,485	505	0.80	360	369	26,012	1,888	0.38	335	303	0.63
Parents' total income during the five calendar years after RA ($)	124,123	-10	1.00	449	466	116,529	-4,149	0.33	434	404	0.48
Either parent is covered by health insurance	93.6	1.9	0.24	373	388	95.3	-1.5	0.38	352	331	0.14
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	771	0	0.99	449	466	786	36	0.44	434	404	0.56

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; RA = random assignment; SSA = Social Security Administration.

Appendix Table F.21. MD PROMISE: Impacts on primary outcomes, by youth's sex (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Male					Female					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	36.6	-1.9	0.52	474	453	42.6	-3.3	0.43	236	268	0.79
Youth has a GED, high school diploma, or certificate of completion	70.6	-4.1	0.16	488	469	74.0	-3.2	0.41	246	275	0.85
Youth employed in a paid job in the past year	44.1	2.6	0.44	490	471	46.4	-0.5	0.90	248	277	0.57
Youth earnings in the past year ($)	5,253	279	0.66	490	471	4,530	414	0.62	248	277	0.90
Youth earnings during the five calendar years after RA ($)	12,601	1,534	0.21	629	590	12,211	1,127	0.45	307	340	0.83
Youth self-determination score (scale: 0 to 100)	78.7	0.3	0.76	295	263	78.3	0.8	0.63	165	194	0.81
Youth expects to be financially independent at age 25	62.1	5.4	0.18	302	268	67.1	-1.0	0.84	173	200	0.31
Youth received SSA payments in Year 5 after RA	58.6	7.9***	0.00	629	590	63.8	5.9	0.10	307	340	0.65
Youth total SSA payments in Year 5 after RA ($)	4,714	381	0.11	629	590	5,106	234	0.48	307	340	0.72
Youth total SSA payments during Years 1–5 after RA ($)	31,642	1,571**	0.03	629	590	31,986	1,649*	0.09	307	340	0.95
Youth covered by any health insurance	89.3	-0.6	0.76	469	454	95.0	-1.7	0.45	243	265	0.73
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,023	-26	0.45	629	590	1,140	-3	0.95	307	340	0.71
Youth income in the past year ($)	10,239	645	0.28	490	471	9,850	610	0.43	248	277	0.97
Youth total income during the five calendar years after RA ($)	45,497	3,295***	0.01	629	590	45,868	2,680*	0.08	307	340	0.75
Either parent worked for pay in the past year	65.9	-1.3	0.67	490	461	68.7	3.3	0.37	240	260	0.33

Outcome	Male					Female					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Parents' earnings in the past year ($)	22,603	599	0.74	490	462	23,750	2,457	0.31	240	260	0.54
Parents' earnings during the five calendar years after RA ($)	105,549	-579	0.87	594	551	108,770	-4,244	0.44	289	319	0.58
Either parent received SSA payments in Year 5 after RA	24.9	0.1	0.96	594	551	24.1	-1.4	0.56	289	319	0.61
Parents' total SSA payments received in Year 5 after RA ($)	2,506	357	0.14	594	551	3,005	-436	0.25	289	319	0.07†
Parents' total SSA payments during the five years after RA ($)	12,091	438	0.59	594	551	13,205	-1,387	0.26	289	319	0.21
Parents' income in the past year ($)	25,420	790	0.66	466	430	27,725	1,833	0.46	229	242	0.73
Parents' income during the five calendar years after RA ($)	119,071	-333	0.93	594	551	123,233	-5,314	0.33	289	319	0.44
Either parent is covered by health insurance	93.9	0.1	0.97	487	461	95.2	0.7	0.71	238	258	0.80
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	784	37	0.33	594	551	768	-20	0.70	289	319	0.37

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table F.22. MD PROMISE: Impacts on primary outcomes, by whether parent received SSA payments before RA (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	No parent received SSA payments					At least one parent received SSA payments					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	41.1	-3.2	0.27	509	541	33.3	-1.5	0.78	164	132	0.78
Youth has a GED, high school diploma, or certificate of completion	71.6	-1.9	0.49	529	559	73.3	-8.9*	0.08	168	136	0.23
Youth employed in a paid job in the past year	44.3	1.2	0.70	531	561	47.1	2.4	0.68	170	136	0.85
Youth earnings in the past year ($)	4,904	258	0.65	531	561	5,291	554	0.65	170	136	0.83
Youth earnings during the five calendar years after RA ($)	12,393	1,066	0.33	671	708	13,182	2,295	0.29	212	162	0.61
Youth self-determination score (scale: 0 to 100)	78.7	1.0	0.33	323	337	80.1	-3.1*	0.08	111	95	0.04††
Youth expects to be financially independent at age 25	63.9	4.0	0.27	337	350	61.6	0.1	0.99	113	93	0.61
Youth received SSA payments in Year 5 after RA	59.9	7.4***	0.00	671	708	61.7	8.4*	0.08	212	162	0.86
Youth total SSA payments in Year 5 after RA ($)	4,700	452**	0.04	671	708	5,293	152	0.73	212	162	0.54
Youth total SSA payments during Years 1–5 after RA ($)	30,556	2,114***	0.00	671	708	35,868	150	0.91	212	162	0.17
Youth covered by any health insurance	91.3	-0.2	0.93	510	537	93.2	-4.5	0.18	166	132	0.24
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,053	-17	0.60	671	708	1,058	35	0.57	212	162	0.45
Youth income in the past year ($)	9,924	608	0.27	531	561	10,758	702	0.55	170	136	0.94
Youth total income during the five calendar years after RA ($)	44,325	3,255***	0.00	671	708	50,427	2,898	0.19	212	162	0.88
Either parent worked for pay in the past year	77.8	-2.1	0.42	532	547	25.7	11.2**	0.05	163	124	0.03††

Outcome	No parent received SSA payments					At least one parent received SSA payments					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Parents' earnings in the past year ($)	27,395	338	0.85	532	547	6,298	3,580	0.10	163	125	0.24
Parents' earnings during the five calendar years after RA ($)	124,613	-2,402	0.51	671	708	28,573	93	0.98	212	162	0.68
Either parent received SSA payments in Year 5 after RA	9.0	0.5	0.74	671	708	92.6	-3.9	0.19	212	162	0.19
Parents' total SSA payments received in Year 5 after RA ($)	1,089	118	0.60	671	708	9,683	-7	0.99	212	162	0.83
Parents' total SSA payments during the five years after RA ($)	3,581	-104	0.88	671	708	51,478	-365	0.85	212	162	0.90
Parents' income in the past year ($)	28,510	558	0.75	532	547	16,423	3,437	0.10	163	125	0.28
Parents' income during the five calendar years after RA ($)	129,048	-2,530	0.48	671	708	83,661	-227	0.96	212	162	0.69
Either parent is covered by health insurance	93.4	1.9	0.19	528	544	98.6	-5.4**	0.02	162	125	0.01†††
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	596	-6	0.82	671	708	1,574	100	0.35	212	162	0.34

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table F.23. MD PROMISE: Impacts on primary outcomes, by youth's primary impairment (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Intellectual or developmental disabilities			Other mental impairments			Other impairments			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth enrolled in an educational or training program	43.6	0.3	0.93	30.6	-2.5	0.48	51.9	-9.2	0.15	0.45
Youth has a GED, high school diploma, or certificate of completion	71.5	-0.6	0.87	68.2	-2.8	0.43	83.2	-14.4***	0.01	0.10†
Youth employed in a paid job in the past year	33.3	8.6**	0.04	53.5	-1.9	0.63	46.2	-5.3	0.43	0.10†
Youth earnings in the past year ($)	3,155	704	0.28	6,395	425	0.61	5,009	-942	0.40	0.43
Youth earnings during the five calendar years after RA ($)	8,749	2,895**	0.03	16,141	296	0.85	9,942	1,371	0.52	0.43
Youth self-determination score (scale: 0 to 100)	79.7	-1.4	0.31	76.0	2.3	0.13	82.8	-0.7	0.67	0.17
Youth expects to be financially independent at age 25	61.7	3.8	0.48	65.3	4.0	0.37	66.9	-2.6	0.73	0.73
Youth received SSA payments in Year 5 after RA	70.9	8.9***	0.01	50.3	7.9**	0.01	67.3	1.4	0.80	0.48
Youth total SSA payments in Year 5 after RA ($)	5,890	571*	0.07	3,849	356	0.21	5,507	-297	0.55	0.33
Youth total SSA payments during Years 1–5 after RA ($)	34,315	1,803**	0.04	30,238	1,275	0.14	30,486	2,218	0.13	0.83
Youth covered by any health insurance	93.7	-1.1	0.62	88.2	-0.8	0.77	95.7	-1.8	0.57	0.97
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	992	-7	0.87	1,021	-38	0.29	1,368	23	0.82	0.77
Youth income in the past year ($)	9,372	1,104*	0.07	10,499	693	0.39	10,566	-698	0.49	0.30
Youth total income during the five calendar years after RA ($)	45,278	4,770***	0.00	47,114	1,727	0.26	41,986	3,549	0.10	0.33
Either parent worked for pay in the past year	67.6	-0.1	0.98	62.7	3.9	0.28	77.3	-9.8*	0.08	0.12

Outcome	Intellectual or developmental disabilities			Other mental impairments			Other impairments			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Parents' earnings in the past year ($)	22,146	4,197*	0.10	20,670	1,712	0.37	31,653	-7,189*	0.06	0.04††
Parents' earnings during the five calendar years after RA ($)	114,294	-5,570	0.26	92,166	5,897	0.16	133,793	-17,536**	0.04	0.02††
Either parent received SSA payments in Year 5 after RA	23.6	-0.8	0.74	29.6	-2.8	0.17	11.6	8.1**	0.01	0.02††
Parents' total SSA payments received in Year 5 after RA ($)	2,452	93	0.77	3,285	-311	0.30	1,418	1,304**	0.03	0.05†
Parents' total SSA payments during the five years after RA ($)	11,197	542	0.62	15,297	-1,579	0.12	6,961	2,637	0.15	0.09†
Parents' income in the past year ($)	26,221	3,326	0.20	23,930	1,635	0.39	32,934	-5,406	0.15	0.14
Parents' income during the five calendar years after RA ($)	126,662	-4,757	0.33	109,212	3,911	0.34	141,408	-14,376*	0.09	0.10†
Either parent is covered by health insurance	92.1	1.2	0.58	95.8	1.0	0.52	95.4	-3.9	0.23	0.37
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	776	27	0.63	860	-7	0.88	538	70	0.18	0.54

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table F.24. MD PROMISE: Sample sizes for primary outcomes, by youth's primary impairment

Outcome	Intellectual or developmental disabilities		Other mental impairments		Other impairments	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Youth enrolled in an educational or training program	269	271	334	335	107	115
Youth has a GED, high school diploma, or certificate of completion	277	276	345	349	112	119
Youth employed in a paid job in the past year	281	278	345	351	112	119
Youth earnings in the past year ($)	281	278	345	351	112	119
Youth earnings during the five calendar years after RA ($)	342	340	452	443	142	147
Youth self-determination score (scale: 0 to 100)	168	172	218	211	74	74
Youth expects to be financially independent at age 25	172	171	224	222	79	75
Youth received SSA payments in Year 5 after RA	342	340	452	443	142	147
Youth total SSA payments in Year 5 after RA ($)	342	340	452	443	142	147
Youth total SSA payments during Years 1–5 after RA ($)	342	340	452	443	142	147
Youth covered by any health insurance	275	270	330	336	107	113
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	342	340	452	443	142	147
Youth income in the past year ($)	281	278	345	351	112	119
Youth total income during the five calendar years after RA ($)	342	340	452	443	142	147
Either parent worked for pay in the past year	276	265	346	337	108	119
Parents' earnings in the past year ($)	276	266	346	337	108	119
Parents' earnings during the five calendar years after RA ($)	323	313	424	419	136	138
Either parent received SSA payments in Year 5 after RA	323	313	424	419	136	138

Outcome	Intellectual or developmental disabilities		Other mental impairments		Other impairments	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Parents' total SSA payments received in Year 5 after RA ($)	323	313	424	419	136	138
Parents' total SSA payments during the five years after RA ($)	323	313	424	419	136	138
Parents' income in the past year ($)	261	243	329	316	105	113
Parents' income during the five calendar years after RA ($)	323	313	424	419	136	138
Either parent is covered by health insurance	273	266	345	336	107	117
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	323	313	424	419	136	138

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the sample size by subgroup for the estimates reported in Appendix Table F.23.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table F.25. MD PROMISE: Impacts on primary outcomes, by whether the survey respondent completed the five-year survey before or during the pandemic (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Before pandemic					During pandemic					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	34.7	-9.5**	0.03	207	230	40.7	0.7	0.82	498	484	0.05†
Youth has a GED, high school diploma, or certificate of completion	74.8	-4.4	0.29	212	235	70.5	-3.6	0.21	517	502	0.88
Youth employed in a paid job in the past year	51.0	3.8	0.43	215	236	42.5	0.1	0.97	518	505	0.52
Youth earnings in the past year ($)	5,368	993	0.30	215	236	4,869	-33	0.96	518	505	0.36
Youth self-determination score (scale: 0 to 100)	77.6	2.0	0.19	164	182	79.1	-0.4	0.73	296	275	0.21
Youth expects to be financially independent at age 25	65.1	6.2	0.21	165	183	63.7	1.3	0.74	310	285	0.44
Youth covered by any health insurance	89.3	-0.3	0.93	208	223	92.3	-1.4	0.44	504	496	0.76
Youth income in the past year ($)	10,740	1,530*	0.09	215	236	9,849	229	0.68	518	505	0.22
Either parent worked for pay in the past year	66.8	0.7	0.87	228	246	67.0	0.2	0.93	502	475	0.93
Parents' earnings in the past year ($)	21,081	1,672	0.50	228	246	24,019	981	0.59	502	476	0.82
Parents' income in the past year ($)	24,234	2,266	0.36	218	228	27,297	571	0.76	477	444	0.58
Either parent is covered by health insurance	93.2	2.1	0.33	227	246	94.9	-0.6	0.68	498	473	0.30

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE on outcomes derived from survey data. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We weighted statistics to adjust for survey nonresponse. We defined before the pandemic as before March 13, 2020.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size

C. Findings from the benefit-cost analysis

In this section, we present findings from the benefit-cost analysis of MD PROMISE. First, we present benefits and costs estimated through the main model. Second, we present the results of sensitivity analyses. Third, we present the projected accrual of net benefits beyond the five-year evaluation period.

1. Benefit-cost estimates

Appendix Table F.26 provides estimates of the program's benefits and indirect costs, the costs of program components, and benefit-cost statistics estimated using the main model as described in Appendix B.

Appendix Table F.26. MD PROMISE: Benefits and costs ($) over the five-year evaluation time period, by accounting perspective

Benefit or cost measure	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Panel 1: Quantitative outcome measures						
Youth outcomes						
Earnings	1,457	0	0	0	0	1,457
Fringe benefits	369	0	0	0	0	369
Income, payroll, and sales taxes	-266	181	0	232	34	0
Work-related and child care costs	-173	0	0	0	0	-173
SSI benefits	1,363	-1,363	0	-1,363	0	0
OASDI benefits	296	-296	0	-296	0	0
SSI administrative costs	0	-106	0	-106	0	-106
SSDI administrative costs	0	-6	0	-6	0	-6
Medicaid and Medicare expenditures and administrative costs	-1,067	0	0	779	379	91
Education-related costs	-35	0	0	0	0	-35
Incarceration	0	0	0	0	41	41
Parent outcomes						
Earnings	-1,964	0	0	0	0	-1,964
Fringe benefits	-497	0	0	0	0	-497
Income, payroll, and sales taxes	434	-244	0	-312	-122	0
Work-related and child care costs	340	0	0	0	0	340
SSI benefits	-587	587	0	587	0	0
OASDI benefits	368	-368	0	-368	0	0
SSI administrative costs	0	46	0	46	0	46
SSDI administrative costs	0	-7	0	-7	0	-7
Medicaid and Medicare expenditures and administrative costs	1,080	0	0	-1,131	-41	-92

Benefit or cost measure	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Household outcomes						
TANF, SNAP, housing assistance, and related administrative costs	-282	0	0	-73	344	-12
Total	835	-1,576	0	-2,019	635	-549
Panel 2: Costs of program components						
Program administration	0	0	-6,140	-6,140	0	-6,140
Employment services	0	0	-3,250	-3,250	2	-3,249
Education services	0	0	-1,021	-1,021	0	-1,021
Case management services	0	0	-4,237	-4,237	0	-4,237
Financial and benefits counseling	0	0	-2,194	-2,194	0	-2,194
Parent training and information services	0	0	-312	-312	0	-312
Youth self-determination services	0	0	-2,147	-2,147	0	-2,147
Total	0	0	-19,302	-19,302	2	-19,300
Panel 3: Benefit-cost statistics						
Net benefits (benefits minus costs)	835	-1,576	-19,302	-21,321	636	-19,850
Net benefit ratio[b]	n.a.	n.a.	0	-0.10	-401.40	-0.03

Source: See Appendix Table B.4 for details on the sources and imputation methods for each benefit or cost component.

Note: To construct each component of the benefit-cost analysis, we used the estimated impacts on key outcomes (regardless of whether they were statistically significant), or imputation methods that combined the impact estimates with data from external sources**.** To construct program costs, we used data from program administrative records, financial documents, staff activity logs, and staff interviews. All benefits and costs are dollars per treatment group family over five years and are inflation-adjusted to 2020 dollars and discounted to 2020 present value.

[a] The perspective of the federal government as a whole incorporates the perspectives of SSA, ED, and other federal agencies that might experience benefits or costs because of PROMISE.

[b] Calculated for all key stakeholders as the sum of all quantitative measures in Panel 1, which include benefits and indirect costs, divided by the program costs.

ED = U.S. Department of Education; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; SSDI = Social Security Disability Insurance; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families.

2. Sensitivity analyses

As noted in Appendix B, we conducted three analyses to assess the sensitivity of the benefit-cost estimates to changes in the underlying assumptions and methodological choices. First, we sampled with replacement from the study population 1,000 times to create 1,000 random samples with an equal size as the true sample. For each sample, we calculated the net benefit for each accounting perspective. In Appendix Table F.27, we show the sampling distribution of the net benefit estimates from the perspective of the different stakeholders. The estimated net benefits for all key stakeholders were negative across the entire distribution, suggesting that the main conclusion (that MD PROMISE did not generate net benefits across all key stakeholders) is robust to sampling variability. The confidence interval on the net benefit estimate for all key stakeholders (-$19,850) ranged from -$27,259 (the 2.5th percentile) to -$12,352 (the 97.5th percentile).

Second, we recalculated the net benefits using only the impact estimates that were significant at the 10 percent level (Appendix Table F.28). From the perspective of all stakeholders, the net benefit was within 2 percent of the estimate from the main analysis and continued to be negative and sizeable.

Appendix Table F.28 shows whether the benefit-cost results were sensitive to the assumptions we used to estimate some of the individual components. From the perspective of all key stakeholders, net benefits under the alternative assumptions were always within 7 percent of the net benefits estimated under the main analysis, and net benefits were sizeable and negative under each scenario. However, net benefits for MD PROMISE youth and families were sensitive to the alternative assumptions. Specifically, while the net benefit for youth and families was $835 based on the main model, the net benefit became -$940 when only statistically significant estimates were used in the calculation. The reason the results were particularly sensitive to this assumption is that the impact estimates on earnings for both youth and parents were sizeable, but not statistically significant. Nonetheless, because the earnings estimates are small relative to the program costs, the main conclusion for all key stakeholders (that net benefits are negative and sizeable) is robust to alternative assumptions.

Appendix Table F.27. MD PROMISE: Sensitivity of net benefits to sampling variability

Estimate of net benefit	PROMISE youth and families	Federal government			State and local government, including PROMISE partners	All key stakeholders
		SSA	ED	Federal government as a whole[a]		
Original estimate	835	-1,576	-19,302	-21,321	636	-19,850
Min	-13,740	-4,898	-19,462	-32,072	-4,543	-32,339
2.5th percentile	-8,027	-3,951	-19,381	-27,982	-2,515	-27,259
25th percentile	-2,244	-2,308	-19,327	-23,709	-383	-22,447
50th percentile	542	-1,518	-19,299	-21,111	661	-19,759
75th percentile	3,555	-759	-19,268	-18,638	1,775	-17,243
97.5th percentile	8,876	673	-19,207	-13,740	3,548	-12,352
Max	15,395	2,438	-19,171	-10,018	5,828	-6,473

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: We quantified uncertainty in the estimated net benefits by constructing non-parametric bootstrap confidence intervals. We sampled with replacement from the study population 1,000 times and then re-estimated all cost and benefit parameters for these 1,000 random samples. We then calculated the net benefits for each bootstrap sample. The 2.5th percentile and 97.5th percentile of the resulting values represent the 95 percent confidence interval of the net benefit estimate.

Appendix Table F.28. MD PROMISE: Sensitivity of net benefits to different assumptions in the benefit cost analysis

Assumption	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Main benefit-cost analysis model	835	-1,576	-19,302	-21,321	636	-19,850
Excluded fringe benefits	964	-1,576	-19,302	-21,321	636	-19,721
Excluded education tuition costs	861	-1,576	-19,302	-21,321	636	-19,824
Used higher incarceration costs[b]	835	-1,576	-19,302	-21,321	691	-19,795
Used a fixed work-related cost measure (non-child care)[c]	-504	-1,576	-19,302	-21,321	636	-21,189
Used a low discount rate[d]	803	-1,533	-19,302	-21,218	629	-19,787
Used a high discount rate[d]	862	-1,614	-19,302	-21,412	641	-19,909
Used only statistically significant estimates in the calculation [e]	-940	-1,372	-19,308	-19,105	-56	-20,101

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: The inputs for the benefit-cost analysis are based on (1) program costs drawn from program administrative records, financial documents, staff activity logs and staff interviews (2) the estimated impacts on key outcomes (regardless of whether they were statistically significant), or (3) imputation methods that combined the impact estimates with data from external sources. All benefits and costs are dollars per treatment group family over five years and are inflation-adjusted to 2020 dollars and discounted to 2020 present value.

[a] The perspective of the federal government as a whole incorporates the perspectives of SSA, ED, and other federal agencies that might experience benefits or costs because of PROMISE.

[b] We changed incarceration costs from the national average ($97/day) to the highest state-specific cost (California, $228/day).

[c] We changed work-related costs from a multiplier of 10.6% to a fixed cost of $51 dollars per week.

[d] The low discount rate is 1 percent, and the high discount rate is 5 percent.

[e] This sensitivity analysis assigns a value of zero to impact estimates to impacts estimates that were not were significant at the .10 level. (The main analysis and all other sensitivity tests include impact estimates regardless of whether they were statistically significant).

ED = U.S. Department of Education; SSA = Social Security Administration.

3. Long-term forecast

We projected the accrual of net benefits over 10 and 20 years after RA to assess how costs and benefits may change after the five-year evaluation period. We projected the net benefits under three scenarios that varied in their potential returns to youth's education: high returns, diminishing returns, and no returns(Appendix Table F.29). Because MD PROMISE caused a small and nonsignificant decrease in youth's years of education (-0.04 years), the scenario assuming "no returns" to education generates the highest net benefit estimate and the scenario assuming "high returns" to education generates the lowest estimate. Across all scenarios, the forecasted net benefits 10 and 20 years after RA are higher than the net benefits estimated at five years after RA. This is because treatment group youth had higher earnings than control group youth in the fourth and fifth years after RA, an advantage that gets compounded in the forecast as earnings grow by an annual percentage over time.

We also calculated how large the impact on youth earnings would have to be, assuming all other impacts were the same as in the five-year analysis, for MD PROMISE's benefits to equal the costs in 10 and 20 years after RA (Appendix Figure F.1). The program would need to generate an average annual impact on youth earnings of $3,839 per year to be cost neutral 10 years after RA and $1,466 per year to be cost neutral 20 years after RA. The point estimate of the program's impact on youth earnings in the fifth year after RA was $431, so it seems unlikely that the program would generate impacts large enough to achieve cost neutrality 20 years after RA.

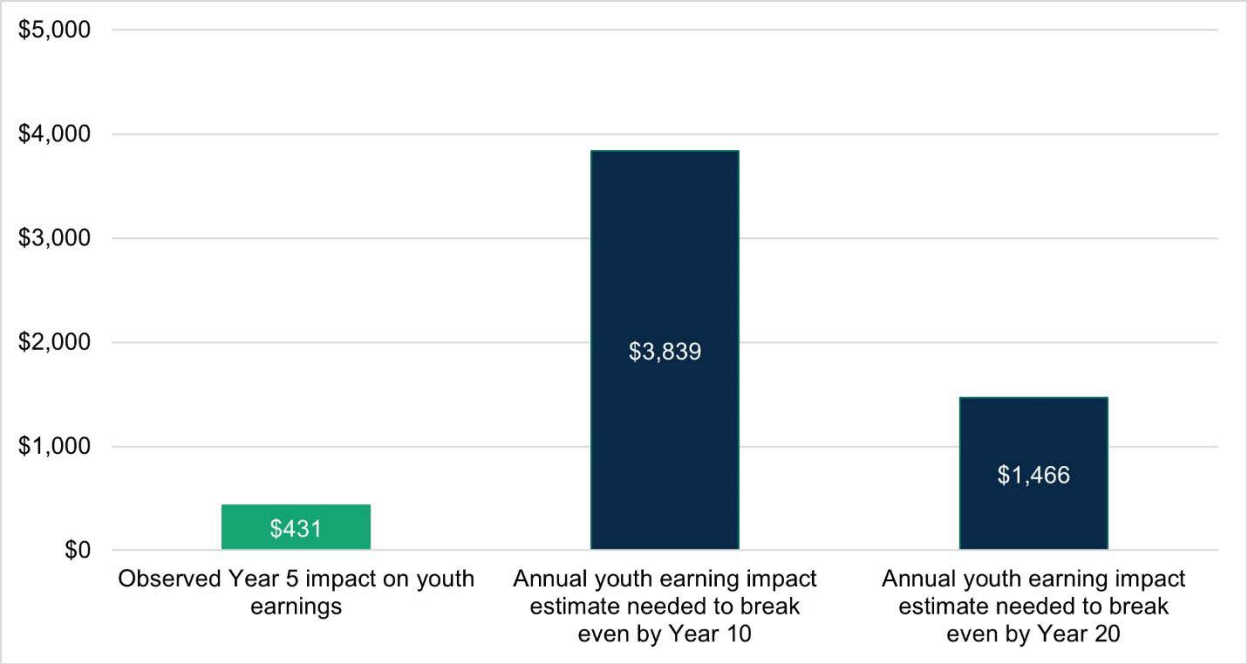
Appendix Table F.29. MD PROMISE: Net benefits ($) to all stakeholders forecast over 10 and 20 years after RA, under different assumptions about the returns to education and using the upper and lower bound of the earnings impact

Assumption	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
10-year forecast						
Returns to education						
Persistent high return to education	1,357	-3,108	-19,302	-22,383	1,504	-19,523
Diminishing return to education	1,420	-3,091	-19,302	-22,364	1,505	-19,439
No return to education	1,458	-3,079	-19,302	-22,350	1,506	-19,386
Confidence interval bounds						
Using upper bound of earnings impact	6,011	-2,151	-19,302	-21,245	1,625	-13,609
Using lower bound of earnings impact	-2,317	-3,913	-19,302	-23,333	1,407	-24,244
20-year forecast						
Returns to education						
Persistent high return to education	3,336	-5,331	-19,302	-23,789	2,959	-17,495
Diminishing return to education	3,637	-5,260	-19,302	-23,706	2,967	-17,101
No return to education	3,676	-5,248	-19,302	-23,692	2,968	-17,049
Confidence interval bounds						
Using upper bound of earnings impact	18,934	-2,600	-19,302	-20,464	3,357	1,827
Using lower bound of earnings impact	-8,479	-8,181	-19,302	-27,113	2,642	-32,951

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: To construct each component of the benefit-cost analysis, we used either (1) the impact estimates themselves (regardless of whether they were statistically significant), or (2) imputation methods to combine the impact estimates with data from external sources. To construct program costs, we used data from program administrative records, financial documents, staff activity logs, and staff interviews. All benefits and costs are dollars per treatment group family and are inflation-adjusted to 2020 dollars and discounted to 2020 present value. The 10-year and 20-year projections are based on costs observed from the five-year evaluation period and a forecasting scenario for the five and fifteen following years, respectively, assuming that earnings grow over time. Additionally, the persistent high return to education forecasting scenario assumes a return to education of 10 percent per additional year of schooling; the diminishing returns to education scenario assumes the returns to education are 10 percent in Year 6 and then diminish over time to zero percent in Year 10; and the no return to education scenario assumes no increase over time in the return to education.

Appendix Figure F.1. MD PROMISE: Impacts needed for cost-neutrality from the perspective of all key stakeholders



Note: The first bar shows the estimated impact on youth earnings in Year 5 after RA. The second bar shows the impact on youth earnings needed every year between Years 6 and 10 after RA for the program to be cost neutral 10 years after RA, assuming other benefits and costs are held constant between Years 6 and 10 after RA. The third bar shows the impact on youth earnings needed every year between Years 6 and 20 after RA for the program to be cost neutral 20 years after RA, assuming other benefits and costs are held constant between Years 6 and 20 after RA. All values are per treatment group family, inflation-adjusted to 2020 dollars, and discounted to 2020 present value.

MD = Maryland; RA = random assignment.

Appendix G. NYS PROMISE Impacts, Benefits, and Costs

A. Enrollees and analysis samples

The full research sample for the evaluation of NYS PROMISE consists of the 1,967 youth who enrolled in the evaluation and were randomly assigned, as well as their families. To assess the extent to which the findings might reflect the baseline characteristics of various samples, we compared differences between (1) the treatment and control groups, (2) survey respondents and nonrespondents, and (3) self-reporting and proxy youth respondents.

1. Differences between the treatment and control groups

We compared 25 baseline characteristics of the treatment and control groups for four samples: all youth survey respondents, all parent survey respondents, all enrollees, and all proxy youth respondents (Appendix Tables G.1–G.4). The similarity of samples across the characteristics examined suggest that RA created treatment and control groups that were equivalent in their baseline characteristics. Although we found statistically significant differences for a few characteristics, they are not concerning for two reasons. First, with a significance level of 10 percent, we expect to reject the null hypothesis that the groups were equivalent for 1 out of every 10 characteristics by chance alone, even when the two groups in fact had no underlying differences. Second, we included characteristics that were significantly different at baseline as covariates in our regression-adjusted impact analyses, allowing us to control for the observed differences.

Appendix Table G.1. NYS PROMISE: Baseline characteristics of youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.7	31.1	34.4	-3.4	0.15
Youth age at RA					0.77
14	38.2	38.4	37.9	0.6	
15	31.8	31.0	32.7	-1.6	
16	30.0	30.5	29.5	1.1	
Average age at RA	15.4	15.4	15.4	0.0	0.82
Youth language preference at SSI application					
Prefers English for written language	85.1	84.2	86.1	-1.9	0.28
Prefers English for spoken language	84.8	84.3	85.4	-1.0	0.56
Youth living arrangement at SSI application				††	0.01
In parents' household	85.6	88.1	83.1	5.0	
Own household or alone	12.6	10.5	14.7	-4.2	
Another household and receiving support	1.8	1.4	2.2	-0.8	
Youth race and ethnicity					0.35
Non-Hispanic White	6.7	6.7	6.7	0.0	
Non-Hispanic Black	35.4	34.0	36.8	-2.9	
Hispanic	34.1	36.7	31.6	5.1	
Non-Hispanic American Indian	0.6	0.6	0.7	-0.1	
Non-Hispanic other or mixed race	7.9	7.2	8.7	-1.5	
Missing	15.2	14.9	15.6	-0.6	
Enrolling parent age at RA	44.2	44.2	44.2	0.1	0.89
Parent race and ethnicity					0.22
Non-Hispanic White	10.5	10.9	10.0	0.9	
Non-Hispanic Black	38.3	37.8	38.9	-1.1	
Hispanic	32.8	33.5	32.1	1.4	
Non-Hispanic American Indian	0.8	0.3	1.3	-1.0	
Non-Hispanic other or mixed race	7.2	7.7	6.6	1.2	
Missing	10.4	9.7	11.1	-1.4	
Disability					
Youth primary impairment					0.84
Intellectual or developmental disability	58.0	57.8	58.2	-0.4	
Speech, hearing, or visual impairment	1.3	1.0	1.6	-0.6	
Physical disability	11.8	12.1	11.6	0.4	
Other mental impairment	24.8	25.1	24.4	0.7	
Other or unknown disability	4.1	4.0	4.1	-0.1	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	96.0	95.6	96.4	-0.8	0.38
Received OASDI	10.0	8.9	11.1	-2.2	0.14
Years between youth's earliest SSI eligibility and RA	9.7	9.9	9.5	0.5**	0.03
Youth age at most recent SSI application	6.1	5.8	6.3	-0.5**	0.01
Youth payments in the year before RA ($)					
SSI	7,568	7,618	7,517	101	0.34
OASDI	273	216	330	-114**	0.03
Total SSI and OASDI	7,840	7,834	7,847	-13	0.89
Household had multiple SSI-eligible children	18.8	18.3	19.3	-1.0	0.59
Enrolling parent provided a valid SSN at RA	85.3	86.4	84.2	2.2	0.21
Parents included in the administrative data				†††	0.00
None	5.3	3.5	7.1	-3.6	
One parent	67.7	68.3	67.0	1.3	
Two parents	27.1	28.2	25.9	2.3	
Parent SSA payment status at RA				††	0.01
Any parent received SSI only	11.6	11.4	11.9	-0.4	
Any parent received OASDI only	8.6	8.3	8.9	-0.6	
Any parent received both SSI and OASDI	5.8	5.4	6.3	-0.9	
No parent received any SSA payments	68.7	71.4	65.9	5.5	
No parent was included in the SSA data analyses	5.3	3.5	7.1	-3.6	
Earnings					
Youth had earnings in the calendar year before RA	6.5	6.3	6.8	-0.4	0.73
Youth earnings in the calendar year before RA ($)	57	53	60	-7	0.51
Parent had earnings in the calendar year before RA	63.0	62.4	63.6	-1.2	0.64
Parent earnings in the calendar year before RA ($)	14,437	14,774	14,085	689	0.44
Number of youth	1,662	847	815		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who completed the PROMISE five-year youth survey. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table G.2. NYS PROMISE: Baseline characteristics of parent survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.5	31.1	33.8	-2.7	0.24
Youth age at RA					0.87
14	37.7	38.0	37.5	0.5	
15	32.4	31.8	33.0	-1.2	
16	29.8	30.2	29.5	0.7	
Average age at RA	15.4	15.4	15.4	0.0	0.93
Youth language preference at SSI application					
Prefers English for written language	84.6	83.8	85.5	-1.7	0.35
Prefers English for spoken language	84.3	83.9	84.8	-0.9	0.62
Youth living arrangement at SSI application				†††	0.01
In parents' household	86.0	88.7	83.3	5.5	
Own household or alone	12.4	10.0	14.7	-4.7	
Another household and receiving support	1.6	1.2	2.0	-0.8	
Youth race and ethnicity					0.32
Non-Hispanic White	6.8	6.9	6.8	0.1	
Non-Hispanic Black	34.9	33.5	36.2	-2.7	
Hispanic	34.8	37.4	32.1	5.3	
Non-Hispanic American Indian	0.7	0.6	0.7	-0.1	
Non-Hispanic other or mixed race	8.4	7.6	9.2	-1.7	
Missing	14.5	14.0	14.9	-0.9	
Enrolling parent age at RA	44.0	44.0	44.1	-0.1	0.78
Parent race and ethnicity					0.20
Non-Hispanic White	10.5	10.9	10.1	0.8	
Non-Hispanic Black	37.6	37.2	38.1	-1.0	
Hispanic	33.1	33.7	32.5	1.2	
Non-Hispanic American Indian	0.9	0.3	1.4	-1.1	
Non-Hispanic other or mixed race	7.1	7.7	6.5	1.2	
Missing	10.8	10.2	11.4	-1.2	
Disability					
Youth primary impairment					0.77
Intellectual or developmental disability	57.8	57.2	58.5	-1.3	
Speech, hearing, or visual impairment	1.3	1.0	1.6	-0.6	
Physical disability	12.2	12.5	11.9	0.5	
Other mental impairment	24.8	25.5	24.1	1.4	
Other or unknown disability	3.8	3.8	3.8	0.0	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	96.1	95.6	96.5	-0.9	0.37
Received OASDI	9.4	8.6	10.3	-1.7	0.23
Years between youth's earliest SSI eligibility and RA	9.7	9.8	9.5	0.4*	0.09
Youth age at most recent SSI application	6.1	5.9	6.3	-0.5**	0.03
Youth payments in the year before RA ($)					
SSI	7,590	7,650	7,529	121	0.25
OASDI	259	206	313	-106**	0.04
Total SSI and OASDI	7,849	7,857	7,842	15	0.87
Household had multiple SSI-eligible children	19.0	18.8	19.1	-0.3	0.88
Enrolling parent provided a valid SSN at RA	84.9	86.0	83.7	2.3	0.20
Parents included in the administrative data				†††	0.00
None	5.5	3.6	7.4	-3.8	
One parent	67.2	67.8	66.5	1.3	
Two parents	27.4	28.6	26.1	2.6	
Parent SSA payment status at RA				†††	0.01
Any parent received SSI only	11.6	11.2	11.9	-0.6	
Any parent received OASDI only	7.9	7.6	8.2	-0.6	
Any parent received both SSI and OASDI	5.9	5.6	6.2	-0.6	
No parent received any SSA payments	69.1	71.9	66.3	5.7	
No parent was included in the SSA data analyses	5.5	3.6	7.4	-3.8	
Earnings					
Youth had earnings in the calendar year before RA	6.5	6.2	6.7	-0.5	0.67
Youth earnings in the calendar year before RA ($)	56	52	60	-8	0.47
Parent had earnings in the calendar year before RA	63.9	63.5	64.4	-0.9	0.70
Parent earnings in the calendar year before RA ($)	14,614	15,044	14,163	881	0.32
Number of youth	1,644	837	807		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth whose parent completed the PROMISE five-year youth survey. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table G.3. NYS PROMISE: Baseline characteristics of all youth enrollees (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.2	31.6	32.7	-1.1	0.61
Youth age at RA					0.67
14	37.6	38.5	36.7	1.8	
15	31.7	31.5	31.9	-0.4	
16	30.7	29.9	31.4	-1.5	
Average age at RA	15.4	15.4	15.4	-0.0	0.41
Youth language preference at SSI application					
Prefers English for written language	85.2	84.7	85.7	-1.0	0.51
Prefers English for spoken language	85.0	84.9	85.0	-0.1	0.94
Youth living arrangement at SSI application				†††	0.00
In parents' household	85.6	88.1	83.0	5.2	
Own household or alone	12.7	10.5	14.8	-4.2	
Another household and receiving support	1.8	1.3	2.2	-0.9	
Youth race and ethnicity					0.25
Non-Hispanic White	6.5	6.5	6.5	-0.0	
Non-Hispanic Black	34.7	33.3	36.2	-2.9	
Hispanic	33.9	36.4	31.3	5.1	
Non-Hispanic American Indian	0.7	0.6	0.8	-0.2	
Non-Hispanic other or mixed race	7.8	7.1	8.5	-1.4	
Missing	16.4	16.1	16.7	-0.6	
Enrolling parent age at RA	44.1	44.1	44.1	-0.0	0.95
Parent race and ethnicity					0.13
Non-Hispanic White	10.0	10.6	9.4	1.3	
Non-Hispanic Black	37.6	37.4	37.7	-0.3	
Hispanic	32.0	32.3	31.7	0.5	
Non-Hispanic American Indian	0.8	0.3	1.3	-1.0	
Non-Hispanic other or mixed race	7.0	7.4	6.5	0.9	
Missing	12.7	12.0	13.4	-1.4	
Disability					
Youth primary impairment					0.64
Intellectual or developmental disability	57.6	57.4	57.8	-0.4	
Speech, hearing, or visual impairment	1.3	0.9	1.6	-0.7	
Physical disability	11.6	11.9	11.4	0.4	
Other mental impairment	25.6	26.2	25.1	1.1	
Other or unknown disability	3.9	3.7	4.1	-0.4	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	96.1	95.7	96.4	-0.7	0.43
Received OASDI	9.7	8.9	10.4	-1.5	0.27
Years between youth's earliest SSI eligibility and RA	9.7	9.8	9.5	0.3	0.11
Youth age at most recent SSI application	6.1	5.9	6.3	-0.4**	0.04
Youth payments in the year before RA ($)					
SSI	7,570	7,589	7,550	39	0.69
OASDI	277	239	314	-76	0.13
Total SSI and OASDI	7,846	7,828	7,864	-36	0.68
Household had multiple SSI-eligible children	18.8	18.6	19.1	-0.5	0.76
Enrolling parent provided a valid SSN at RA	85.2	86.4	83.9	2.5	0.12
Parents included in the administrative data				†††	0.00
None	5.4	3.5	7.2	-3.7	
One parent	67.6	68.8	66.5	2.3	
Two parents	27.0	27.7	26.3	1.4	
Parent SSA payment status at RA				†††	0.01
Any parent received SSI only	11.8	11.7	11.9	-0.3	
Any parent received OASDI only	8.6	8.2	9.1	-0.9	
Any parent received both SSI and OASDI	5.8	5.8	5.9	-0.1	
No parent received any SSA payments	68.3	70.8	65.9	4.9	
No parent was included in the SSA data analyses	5.4	3.5	7.2	-3.7	
Earnings					
Youth had earnings in the calendar year before RA	6.6	6.5	6.6	-0.1	0.90
Youth earnings in the calendar year before RA ($)	56	54	58	-4	0.70
Parent had earnings in the calendar year before RA	63.2	62.6	64.0	-1.4	0.53
Parent earnings in the calendar year before RA ($)	14,452	14,856	14,030	826	0.31
Number of youth	1,967	986	981		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who enrolled in PROMISE. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table G.4. NYS PROMISE: Baseline characteristics of proxy youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	30.9	29.2	32.8	-3.5	0.33
Youth age at RA					0.48
14	36.4	36.3	36.5	-0.2	
15	32.9	31.1	34.8	-3.7	
16	30.7	32.6	28.7	3.9	
Average age at RA	15.4	15.4	15.4	0.0	0.58
Youth language preference at SSI application					
Prefers English for written language	81.7	81.3	82.1	-0.8	0.79
Prefers English for spoken language	81.1	81.6	80.7	0.9	0.77
Youth living arrangement at SSI application				††	0.03
In parents' household	86.2	89.0	83.2	5.8	
Own household or alone	11.8	10.1	13.6	-3.5	
Another household and receiving support	2.0	0.9	3.2	-2.3	
Youth race and ethnicity					0.92
Non-Hispanic White	6.7	5.9	7.4	-1.5	
Non-Hispanic Black	27.8	27.0	28.6	-1.6	
Hispanic	38.6	40.4	36.7	3.7	
Non-Hispanic American Indian	0.3	0.3	0.3	-0.0	
Non-Hispanic other or mixed race	9.3	8.9	9.7	-0.8	
Missing	17.4	17.5	17.3	0.3	
Enrolling parent age at RA	44.9	45.1	44.7	0.3	0.62
Parent race and ethnicity					0.51
Non-Hispanic White	9.1	9.7	8.6	1.1	
Non-Hispanic Black	31.4	31.8	31.0	0.8	
Hispanic	37.9	39.9	35.9	4.0	
Non-Hispanic American Indian	0.7	0.5	0.9	-0.4	
Non-Hispanic other or mixed race	9.3	8.8	9.8	-1.0	
Missing	11.5	9.3	13.8	-4.5	
Disability					
Youth primary impairment					0.77
Intellectual or developmental disability	62.2	60.5	63.9	-3.4	
Speech, hearing, or visual impairment	1.6	1.3	2.0	-0.7	
Physical disability	15.1	15.8	14.3	1.5	
Other mental impairment	16.3	17.6	14.8	2.8	
Other or unknown disability	4.9	4.8	4.9	-0.1	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	96.5	95.0	98.1	-3.1**	0.03
Received OASDI	9.7	8.8	10.5	-1.7	0.47
Years between youth's earliest SSI eligibility and RA	10.4	10.7	10.0	0.7**	0.02
Youth age at most recent SSI application	5.5	5.2	5.8	-0.6*	0.08
Youth payments in the year before RA ($)					
SSI	7,474	7,582	7,360	222	0.19
OASDI	270	196	348	-152*	0.07
Total SSI and OASDI	7,744	7,778	7,708	70	0.64
Household had multiple SSI-eligible children	19.0	19.9	18.1	1.8	0.57
Enrolling parent provided a valid SSN at RA	85.6	87.3	83.8	3.5	0.21
Parents included in the administrative data				††	0.02
None	4.9	2.9	7.1	-4.2	
One parent	64.9	64.4	65.3	-1.0	
Two parents	30.2	32.7	27.5	5.2	
Parent SSA payment status at RA					0.12
Any parent received SSI only	9.7	10.5	8.9	1.6	
Any parent received OASDI only	7.8	8.5	7.0	1.5	
Any parent received both SSI and OASDI	4.0	4.6	3.3	1.3	
No parent received any SSA payments	73.6	73.5	73.7	-0.1	
No parent was included in the SSA data analyses	4.9	2.9	7.1	-4.2	
Earnings					
Youth had earnings in the calendar year before RA	4.1	4.2	4.0	0.1	0.93
Youth earnings in the calendar year before RA ($)	39	39	38	1	0.93
Parent had earnings in the calendar year before RA	64.3	64.0	64.6	-0.6	0.89
Parent earnings in the calendar year before RA ($)	15,628	15,797	15,440	357	0.81
Number of youth	649	339	310		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who completed the PROMISE five-year youth survey by proxy. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

2. Differences between survey respondents and nonrespondents

We compared youth and parent survey respondents with nonrespondents across 25 baseline characteristics to assess the extent to which survey nonresponse might limit generalizability of the impact findings to all evaluation enrollees (Appendix Tables G.5 and G.6). Youth survey respondents differed from nonrespondents with respect to enrolling parent age at RA, the years between youth's earliest SSI eligibility and RA, and youth age at the most recent SSI application. Parent survey respondents differed from nonrespondents with respect to youth age at most recent SSI application and parents' earnings in the year before RA. Overall, even when the differences were statistically significant, they generally were small. The extent and magnitude of the differences suggested that the respondents were not markedly different from the nonrespondents. To account for survey nonresponse, we calculated and used survey weights in all regression models to estimate impacts on the survey-based outcome measures.

Appendix Table G.5. NYS PROMISE: Baseline characteristics of youth survey respondents and nonrespondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.2	32.6	29.8	2.8	0.33
Youth age at RA					0.11
14	37.6	38.1	34.8	3.4	
15	31.7	32.1	29.5	2.6	
16	30.7	29.7	35.7	-6.0	
Average age at RA	15.4	15.4	15.4	-0.1	0.25
Youth language preference at SSI application					
Prefers English for written language	85.2	85.2	85.2	-0.0	0.98
Prefers English for spoken language	85.0	84.8	85.6	-0.7	0.74
Youth living arrangement at SSI application					0.93
In parents' household	85.6	85.4	86.2	-0.8	
Own household or alone	12.7	12.8	12.1	0.6	
Another household and receiving support	1.8	1.8	1.6	0.2	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	6.5	7.0	3.9	3.0	
Non-Hispanic Black	34.7	36.1	27.2	8.9	
Hispanic	33.9	35.0	27.9	7.1	
Non-Hispanic American Indian	0.7	0.7	1.0	-0.3	
Non-Hispanic other or mixed race	7.8	8.3	4.9	3.4	
Missing	16.4	13.0	35.1	-22.1	
Enrolling parent age at RA	44.1	44.3	42.9	1.4**	0.01
Parent race and ethnicity				†††	0.00
Non-Hispanic White	10.0	10.6	6.9	3.7	
Non-Hispanic Black	37.6	38.9	30.5	8.4	
Hispanic	32.0	33.2	25.2	8.0	
Non-Hispanic American Indian	0.8	0.8	0.7	0.2	
Non-Hispanic other or mixed race	7.0	7.4	4.6	2.8	
Missing	12.7	9.1	32.1	-23.0	
Disability					
Youth primary impairment				††	0.01
Intellectual or developmental disability	57.6	58.1	54.8	3.4	
Speech, hearing, or visual impairment	1.3	1.3	1.3	-0.0	
Physical disability	11.6	12.2	8.9	3.3	
Other mental impairment	25.6	24.3	32.8	-8.5	
Other or unknown disability	3.9	4.2	2.3	1.9	

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	96.1	95.9	97.0	-1.1	0.29
Received OASDI	9.7	10.0	7.5	2.5	0.14
Years between youth's earliest SSI eligibility and RA	9.7	9.8	9.2	0.6**	0.02
Youth age at most recent SSI application	6.1	6.0	6.8	-0.8***	0.00
Youth payments in the year before RA ($)					
SSI	7,570	7,539	7,739	-200	0.13
OASDI	277	279	261	18	0.80
Total SSI and OASDI	7,846	7,818	8,000	-182	0.11
Household had multiple SSI-eligible children	18.8	18.8	19.3	-0.6	0.81
Enrolling parent provided a valid SSN at RA	85.2	85.1	85.6	-0.5	0.82
Parents included in the administrative data					0.21
None	5.4	5.4	5.2	0.2	
One parent	67.6	66.8	71.8	-5.0	
Two parents	27.0	27.7	23.0	4.8	
Parent SSA payment status at RA					0.98
Any parent received SSI only	11.8	11.6	12.8	-1.2	
Any parent received OASDI only	8.6	8.7	8.5	0.1	
Any parent received both SSI and OASDI	5.8	5.8	6.2	-0.5	
No parent received any SSA payments	68.3	68.5	67.2	1.3	
No parent was included in the SSA data analyses	5.4	5.4	5.2	0.2	
Earnings					
Youth had earnings in the calendar year before RA	6.6	6.6	6.6	0.0	1.00
Youth earnings in the calendar year before RA ($)	56	57	49	8	0.52
Parent had earnings in the calendar year before RA	63.2	63.1	64.0	-0.9	0.77
Parent earnings in the calendar year before RA ($)	14,452	14,635	13,459	1,176	0.26
Number of youth	1,967	1,662	305		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who enrolled in PROMISE. Nonrespondents include youth ineligible for the survey because they died or withdrew from the study. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table G.6. NYS PROMISE: Baseline characteristics of parent survey respondents and nonrespondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.2	32.4	31.0	1.5	0.60
Youth age at RA					0.10
14	37.6	37.8	36.8	0.9	
15	31.7	32.5	27.9	4.6	
16	30.7	29.7	35.3	-5.5	
Average age at RA	15.4	15.4	15.4	-0.0	0.50
Youth language preference at SSI application					
Prefers English for written language	85.2	85.2	85.1	0.1	0.97
Prefers English for spoken language	85.0	84.9	85.1	-0.2	0.92
Youth living arrangement at SSI application					0.31
In parents' household	85.6	85.8	84.2	1.6	
Own household or alone	12.7	12.6	13.0	-0.4	
Another household and receiving support	1.8	1.6	2.8	-1.2	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	6.5	7.0	4.0	3.0	
Non-Hispanic Black	34.7	35.6	30.0	5.6	
Hispanic	33.9	34.9	28.5	6.4	
Non-Hispanic American Indian	0.7	0.7	0.9	-0.3	
Non-Hispanic other or mixed race	7.8	8.6	3.7	4.9	
Missing	16.4	13.2	32.8	-19.6	
Enrolling parent age at RA	44.1	44.1	43.9	0.2	0.72
Parent race and ethnicity				†††	0.00
Non-Hispanic White	10.0	10.6	6.8	3.8	
Non-Hispanic Black	37.6	38.6	32.2	6.4	
Hispanic	32.0	33.1	26.3	6.8	
Non-Hispanic American Indian	0.8	0.9	0.3	0.6	
Non-Hispanic other or mixed race	7.0	7.4	4.6	2.8	
Missing	12.7	9.3	29.7	-20.4	
Disability					
Youth primary impairment				††	0.02
Intellectual or developmental disability	57.6	57.8	56.3	1.5	
Speech, hearing, or visual impairment	1.3	1.3	1.2	0.0	
Physical disability	11.6	12.5	7.4	5.0	
Other mental impairment	25.6	24.5	31.6	-7.1	
Other or unknown disability	3.9	4.0	3.4	0.5	

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	96.1	96.0	96.6	-0.6	0.59
Received OASDI	9.7	9.5	10.5	-1.0	0.58
Years between youth's earliest SSI eligibility and RA	9.7	9.7	9.4	0.4	0.15
Youth age at most recent SSI application	6.1	6.0	6.5	-0.4*	0.08
Youth payments in the year before RA ($)					
SSI	7,570	7,563	7,602	-38	0.77
OASDI	277	265	335	-71	0.34
Total SSI and OASDI	7,846	7,828	7,937	-109	0.35
Household had multiple SSI-eligible children	18.8	18.8	18.9	-0.0	0.99
Enrolling parent provided a valid SSN at RA	85.2	84.9	86.7	-1.8	0.38
Parents included in the administrative data					0.13
None	5.4	5.5	4.6	0.9	
One parent	67.6	66.7	72.4	-5.8	
Two parents	27.0	27.8	22.9	4.9	
Parent SSA payment status at RA					0.15
Any parent received SSI only	11.8	11.6	12.7	-1.1	
Any parent received OASDI only	8.6	8.0	12.1	-4.1	
Any parent received both SSI and OASDI	5.8	5.8	5.9	-0.0	
No parent received any SSA payments	68.3	69.0	64.7	4.3	
No parent was included in the SSA data analyses	5.4	5.5	4.6	0.9	
Earnings					
Youth had earnings in the calendar year before RA	6.6	6.5	6.8	-0.3	0.84
Youth earnings in the calendar year before RA ($)	56	57	51	6	0.65
Parent had earnings in the calendar year before RA	63.2	63.9	60.1	3.8	0.21
Parent earnings in the calendar year before RA ($)	14,452	14,765	12,872	1,893*	0.06
Number of youth	1,967	1,644	323		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes the parents who were eligible for the survey. Nonrespondents include parents ineligible for the survey because they died or withdrew from the study. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

3. Differences between self-reporting and proxy youth respondents

We compared the baseline characteristics of youth who self-responded to the survey to those who responded via proxies to assess whether systematically missing data from different survey modes might affect the estimated impacts on survey-based outcomes (Appendix Table G.7). We found differences in 8 of 25 baseline characteristics by survey response type. Compared with self-respondents, youth who responded by proxy were less likely to prefer English as a spoken or written language; they had fewer years between earliest SSI eligibility and RA and were older at the time of their most recent SSI application; they were less likely to be employed in the year before RA and had lower average earnings in that year; their enrolling parents were older and had more earnings in the year before RA, on average. Because of these differences, findings on survey-based outcomes that are available only for self-respondents might not generalize to all survey respondents.

Appendix Table G.7. NYS PROMISE: Baseline characteristics of proxy and self-reporting youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Proxy respondent (B)	Self-reporting respondent (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	32.7	30.9	33.9	-3.0	0.21
Youth age at RA					0.50
14	38.2	36.4	39.3	-2.9	
15	31.8	32.9	31.2	1.7	
16	30.0	30.7	29.6	1.1	
Average age at RA	15.4	15.4	15.4	0.0	0.55
Youth language preference at SSI application					
Prefers English for written language	85.1	81.7	87.3	-5.6***	0.00
Prefers English for spoken language	84.8	81.1	87.2	-6.1***	0.00
Youth living arrangement at SSI application					0.66
In parents' household	85.6	86.2	85.2	1.0	
Own household or alone	12.6	11.8	13.1	-1.3	
Another household and receiving support	1.8	2.0	1.7	0.3	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	6.7	6.7	6.7	-0.0	
Non-Hispanic Black	35.4	27.8	40.3	-12.5	
Hispanic	34.1	38.6	31.3	7.3	
Non-Hispanic American Indian	0.6	0.3	0.9	-0.6	
Non-Hispanic other or mixed race	7.9	9.3	7.0	2.2	
Missing	15.2	17.4	13.9	3.6	
Enrolling parent age at RA	44.2	44.9	43.8	1.1**	0.01
Parent race and ethnicity				†††	0.00
Non-Hispanic White	10.5	9.1	11.3	-2.2	
Non-Hispanic Black	38.3	31.4	42.8	-11.3	
Hispanic	32.8	37.9	29.5	8.5	
Non-Hispanic American Indian	0.8	0.7	0.9	-0.2	
Non-Hispanic other or mixed race	7.2	9.3	5.8	3.4	
Missing	10.4	11.5	9.7	1.8	
Disability					
Youth primary impairment				†††	0.00
Intellectual or developmental disability	58.0	62.2	55.4	6.8	
Speech, hearing, or visual impairment	1.3	1.6	1.1	0.5	
Physical disability	11.8	15.1	9.8	5.3	
Other mental impairment	24.8	16.3	30.2	-13.9	
Other or unknown disability	4.1	4.9	3.6	1.3	

Baseline characteristic	All (A)	Proxy respondent (B)	Self-reporting respondent (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	96.0	96.5	95.6	0.9	0.37
Received OASDI	10.0	9.7	10.2	-0.6	0.71
Years between youth's earliest SSI eligibility and RA	9.7	10.4	9.2	1.1***	0.00
Youth age at most recent SSI application	6.1	5.5	6.5	-1.0***	0.00
Youth payments in the year before RA ($)					
SSI	7,568	7,474	7,627	-153	0.16
OASDI	273	270	274	-5	0.93
Total SSI and OASDI	7,840	7,744	7,901	-157	0.10
Household had multiple SSI-eligible children	18.8	19.0	18.7	0.4	0.86
Enrolling parent provided a valid SSN at RA	85.3	85.6	85.1	0.5	0.76
Parents included in the administrative data				†	0.07
None	5.3	4.9	5.5	-0.5	
One parent	67.7	64.9	69.5	-4.6	
Two parents	27.1	30.2	25.0	5.2	
Parent SSA payment status at RA				†††	0.01
Any parent received SSI only	11.6	9.7	12.9	-3.1	
Any parent received OASDI only	8.6	7.8	9.1	-1.3	
Any parent received both SSI and OASDI	5.8	4.0	7.0	-3.1	
No parent received any SSA payments	68.7	73.6	65.5	8.1	
No parent was included in the SSA data analyses	5.3	4.9	5.5	-0.5	
Earnings					
Youth had earnings in the calendar year before RA	6.5	4.1	8.1	-4.0***	0.00
Youth earnings in the calendar year before RA ($)	57	39	68	-29***	0.01
Parent had earnings in the calendar year before RA	63.0	64.3	62.1	2.2	0.39
Parent earnings in the calendar year before RA ($)	14,437	15,628	13,674	1,954**	0.03
Number of youth	1,662	649	1,013		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all PROMISE five-year youth survey respondents. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

B. Findings from the impact analysis

In this section, we present findings from the impact analysis of NYS PROMISE. First, we present impacts estimated through the main models. Second, we present the results of sensitivity analyses. Third, we present impacts for key subgroups of evaluation enrollees.

1. Impact estimates

Appendix Tables G.8–G.17 provide results and inference statistics for the regression-adjusted impacts estimated through the main models described in Appendix B. For each outcome measure, we report the estimated regression-adjusted impact; the control group mean (weighted, as applicable); and additional inference statistics, such as standard errors, effect sizes, and sample sizes by treatment status.

Appendix Table G.8. NYS PROMISE: Impact on the youth's education and training (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group sample size	Control group sample size
Primary outcomes							
Enrolled in an educational or training program	57.1	-4.7**	0.04	2.3	-0.115	826	797
Has a GED, high school diploma, or certificate of completion	56.1	-1.0	0.67	2.4	-0.025	830	805
Supplementary outcomes							
Enrolled in postsecondary education	13.7	-1.1	0.52	1.7	-0.057	828	799
Type of school attending							
High school serving a variety of students	11.5	-2.0	0.18	1.5	-0.129	828	799
High school serving only students with disabilities	20.5	-0.1	0.95	1.9	-0.004	828	799
GED program or other adult education program	2.9	-0.5	0.51	0.8	-0.123	828	799
Postsecondary vocational, trade, or technical school	3.6	-0.9	0.32	0.9	-0.178	828	799
Postsecondary college or advanced degree program	10.1	-0.2	0.90	1.5	-0.013	828	799
Other type of school	2.0	-0.5	0.46	0.7	-0.173	828	799
Not attending school	49.4	4.2*	0.07	2.3	0.102	828	799
Highest grade completed							
Lower than 12th grade	30.5	-1.0	0.67	2.2	-0.028	847	815
12th grade or senior in high school	52.1	-1.3	0.61	2.5	-0.031	847	815
Some or all of college or university	8.1	-0.2	0.88	1.3	-0.017	847	815
Other or do not know	9.3	2.4	0.10	1.5	0.157	847	815
Enrolled in a training program	13.0	-1.8	0.28	1.7	-0.102	808	784
Received any training credential in the past year	10.3	-1.2	0.41	1.5	-0.085	838	810
Any school suspensions or expulsions in the past year	2.8	0.7	0.43	0.9	0.137	809	787

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group sample size	Control group sample size
Accommodations							
Receives educational accommodation	36.4	-1.2	0.60	2.2	-0.031	826	795
Receives training accommodation	8.6	-1.9	0.15	1.4	-0.168	806	784
Received supports or services for postsecondary education in the past year	27.1	-1.4	0.54	2.2	-0.043	839	805

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

GED = General Educational Development.

Appendix Table G.9. NYS PROMISE: Impact on the youth's employment and earnings (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Employed in a paid job in the past year[a]	32.8	4.3*	0.06	2.3	0.116	847	815
Earnings in the past year ($)	2,828	370	0.27	337	0.055	847	815
Earnings during the five calendar years after RA ($)	7,846	385	0.55	639	0.027	986	981
Supplementary outcomes							
Employment in the past year							
Any employment	36.7	3.7	0.12	2.4	0.096	847	815
Weekly hours worked	4.1	0.4	0.39	0.5	0.043	847	815
Employed in a paid job offering fringe benefits	15.3	-0.9	0.60	1.8	-0.044	847	815
Employment settings							
Integrated	23.3	6.4***	0.00	2.2	0.200	847	815
Outside of school-sponsored activities	23.6	4.8**	0.02	2.1	0.152	847	815
With coaching	9.5	0.1	0.92	1.5	0.010	847	815
Received supports or services in getting or keeping a job	16.0	3.7*	0.05	1.9	0.152	841	810
Employment at the time of the survey							
Any paid employment	15.2	2.7	0.14	1.8	0.119	847	815
Average weekly earnings ($)	51	12	0.12	8	0.078	847	815
Weekly hours worked	3.8	0.8	0.13	0.5	0.076	847	815
Labor force participation	39.2	4.5*	0.05	2.4	0.113	847	815
Employment and earnings in calendar years after RA							
Ever employed in Year 1	20.2	3.6**	0.04	1.8	0.127	986	981
Ever employed in Year 2	29.3	4.2**	0.04	2.0	0.118	986	981
Ever employed in Year 3	37.4	4.0*	0.06	2.1	0.102	986	981
Ever employed in Year 4	36.8	6.9***	0.00	2.1	0.175	986	981
Ever employed in Year 5	35.3	3.2	0.12	2.1	0.085	986	981
Ever employed during Years 1-5	56.7	8.9***	0.00	2.1	0.227	986	981
Earnings in Year 1 ($)	301	56	0.11	35	0.071	986	981

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Earnings in Year 2 ($)	697	104	0.15	72	0.063	986	981
Earnings in Year 3 ($)	1,562	-30	0.84	146	-0.009	986	981
Earnings in Year 4 ($)	2,339	-13	0.95	217	-0.003	986	981
Earnings in Year 5 ($)	2,947	268	0.38	305	0.040	986	981
VR services during the 5 years after RA[a]							
Applied for VR services	20.2	3.5*	0.06	1.9	0.126	986	981
Received VR services	12.3	1.6	0.30	1.5	0.084	986	981

Source: PROMISE five-year survey, RSA-911 data (VR service outcomes), and SSA administrative records (employment and earnings in years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] RSA-911 data are available only through 2020. VR services outcomes used only four years of data for youth who enrolled in PROMISE in 2016.

N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration; VR = vocational rehabilitation.

Appendix Table G.10. NYS PROMISE: Impact on the youth's self-determination and expectations (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Self-determination score (scale: 0 to 100)[a]	78.0	-0.3	0.74	0.9	-0.022	489	487
Youth expects to be financially independent at age 25	65.5	5.5*	0.07	3.0	0.154	494	490
Supplementary outcomes							
Scores on subdomains of self-determination[a]							
Autonomy (scale: 0 to 300)	130.7	-5.8	0.12	3.7	-0.102	488	487
Psychological empowerment (scale: 0 to 100)	87.6	0.8	0.47	1.2	0.046	487	487
Self-realization (scale: 0 to 100)	91.4	-0.6	0.59	1.0	-0.035	489	487
Agentic action (scale: 0 to 100)	89.2	1.0	0.50	1.4	0.044	488	487
Youth expects to:							
Get postsecondary education (beyond high school/GED)	58.3	-2.7	0.40	3.2	-0.067	490	483
Live independently at age 25	59.9	3.9	0.21	3.1	0.099	489	482
Be employed in a paid job at age 25	89.5	3.0	0.10	1.9	0.226	497	493
Parent expects youth to:							
Get postsecondary education (beyond high school/GED)	44.2	-0.6	0.82	2.6	-0.015	774	744
Live independently at age 25	33.5	-1.0	0.67	2.3	-0.027	772	760
Be financially independent at age 25	46.1	3.6	0.15	2.5	0.086	794	776
Be employed in a paid job at age 25	77.6	3.0	0.13	2.0	0.111	792	782
Parent believes it important that youth be employed eventually	87.8	3.7**	0.02	1.5	0.244	775	769

Source: PROMISE five-year survey.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] Higher scores on the scales indicate higher levels of self-determination.

GED = General Educational Development; N = sample size.

Appendix Table G.11. NYS PROMISE: Impact on the youth's SSA payments and knowledge (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Received SSA payments in Year 5 after RA	67.8	1.8	0.36	2.0	0.051	986	981
Total SSA payments in Year 5 after RA ($)	5,426	-10	0.96	182	-0.002	986	981
Total SSA payments during Years 1–5 after RA ($)	34,428	-17	0.97	522	-0.001	986	981
Supplementary outcomes							
Aware of the following SSA policies							
Children receiving SSI are not automatically eligible for SSI as adults	41.5	4.2	0.19	3.2	0.104	488	486
People receiving SSI can work for pay	68.4	3.1	0.30	3.0	0.089	488	486
People receiving SSI must report earnings to SSA	74.8	1.2	0.66	2.8	0.040	488	486
Aware of the following work supports							
SSI Student Earned Income Exclusion	6.5	3.6**	0.05	1.8	0.292	488	486
SSI earned income exclusion	6.0	2.1	0.22	1.7	0.193	488	486
SSI PASS plan	6.5	1.8	0.29	1.7	0.160	488	486
ABLE account	6.2	0.8	0.63	1.6	0.076	488	486
SSA payments in years after RA							
Received any in Year 1	97.9	-1.0	0.13	0.7	-0.239	986	981
Received any in Year 2	93.8	0.1	0.91	1.1	0.012	986	981
Received any in Year 3	87.7	1.1	0.43	1.4	0.064	986	981
Received any in Year 4	78.6	1.1	0.54	1.8	0.040	986	981
Received any in Years 1–5	98.2	0.1	0.91	0.6	0.023	986	981
Amount in Year 1 ($)	8,310	-74	0.34	77	-0.031	986	981
Amount in Year 2 ($)	7,695	-32	0.77	106	-0.011	986	981
Amount in Year 3 ($)	6,960	14	0.92	136	0.004	986	981
Amount in Year 4 ($)	6,037	85	0.60	162	0.022	986	981

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
SSI payments in years after RA							
Received any in Year 1	97.2	-0.9	0.20	0.7	-0.185	986	981
Received any in Year 2	92.7	-0.0	0.98	1.1	-0.002	986	981
Received any in Year 3	85.5	1.1	0.44	1.5	0.058	986	981
Received any in Year 4	76.4	1.0	0.57	1.8	0.035	986	981
Received any in Year 5	66.4	1.6	0.44	2.0	0.043	986	981
Received any in Years 1–5	97.8	0.2	0.72	0.6	0.066	986	981
Amount in Year 1 ($)	7,890	-35	0.65	76	-0.013	986	981
Amount in Year 2 ($)	7,242	9	0.93	107	0.003	986	981
Amount in Year 3 ($)	6,502	59	0.66	137	0.017	986	981
Amount in Year 4 ($)	5,622	118	0.46	161	0.031	986	981
Amount in Year 5 ($)	5,060	-15	0.93	177	-0.004	986	981
Total amount during Years 1–5 ($)	32,317	137	0.79	522	0.010	986	981
OASDI benefits in years after RA							
Received any in Year 1	11.5	-0.4	0.68	0.9	-0.022	986	981
Received any in Year 2	12.3	-0.8	0.38	1.0	-0.049	986	981
Received any in Year 3	11.2	-0.4	0.73	1.1	-0.023	986	981
Received any in Year 4	10.3	-1.1	0.33	1.1	-0.075	986	981
Received any in Year 5	7.4	0.3	0.76	1.1	0.028	986	981
Received any in Years 1–5	15.0	-0.3	0.79	1.2	-0.015	986	981
Amount in Year 1 ($)	420	-39	0.17	29	-0.028	986	981
Amount in Year 2 ($)	453	-40	0.32	41	-0.028	986	981
Amount in Year 3 ($)	458	-45	0.42	56	-0.029	986	981
Amount in Year 4 ($)	415	-34	0.57	58	-0.022	986	981
Amount in Year 5 ($)	365	5	0.95	69	0.003	986	981
Total amount during Years 1–5 ($)	2,111	-154	0.45	205	-0.023	986	981

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Age-18 redetermination status five years after RA							
Final decision: benefits ceased	22.3	1.5	0.41	1.8	0.051	986	981
Final decision: benefits continued	46.2	0.6	0.77	2.1	0.015	986	981
Final decision is pending	7.7	-0.5	0.67	1.2	-0.044	986	981
Did not have an age-18 redetermination	23.8	-1.6	0.37	1.8	-0.055	986	981

Source: SSA administrative records and PROMISE five-year survey (awareness of work supports and SSA policies).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

ABLE = Achieving a Better Life Experience; OASDI = Old-Age, Survivors, and Disability Insurance; PASS = Plan for Achieving Self Support; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table G.12. NYS PROMISE: Impact on the youth's health insurance coverage and expenditures (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Covered by any health insurance	94.4	0.6	0.61	1.1	0.069	827	793
Average monthly Medicaid and Medicare expenditures in the five years after RA ($)	1,346	-65**	0.04	32	-0.075	986	981
Supplementary outcomes							
Covered by private health insurance	6.0	2.2	0.11	1.3	0.200	827	793
Covered by private health insurance purchased through an ACA health exchange	0.6	0.3	0.51	0.4	0.216	827	793
Medicaid and Medicare participation in years after RA							
Ever enrolled in Year 1	99.4	-0.0	0.96	0.4	-0.020	986	981
Ever enrolled in Year 2	98.8	-0.4	0.46	0.5	-0.169	986	981
Ever enrolled in Year 3	97.5	-0.4	0.55	0.7	-0.099	986	981
Ever enrolled in Year 4	95.6	0.2	0.84	0.9	0.027	986	981
Ever enrolled in Year 5	93.6	-0.5	0.65	1.1	-0.050	986	981
Percentage of months enrolled in Years 1–5	94.5	-0.0	1.00	0.7	-0.000	986	981
Average monthly Medicaid and Medicare expenditures in years after RA							
Year 1 ($)	1,312	-32*	0.10	19	-0.049	986	981
Year 2 ($)	1,310	-39	0.16	28	-0.052	986	981
Year 3 ($)	1,311	-65*	0.05	34	-0.076	986	981
Year 4 ($)	1,449	-69	0.19	53	-0.052	986	981
Year 5 ($)	1,347	-120**	0.04	58	-0.084	986	981
Medicaid participation in years after RA							
Ever enrolled in Year 1	99.4	-0.0	0.96	0.4	-0.020	986	981
Ever enrolled in Year 2	98.8	-0.4	0.46	0.5	-0.169	986	981
Ever enrolled in Year 3	97.5	-0.4	0.55	0.7	-0.099	986	981
Ever enrolled in Year 4	95.6	0.2	0.84	0.9	0.027	986	981
Ever enrolled in Year 5	93.6	-0.5	0.65	1.1	-0.050	986	981
Percentage of months enrolled in Years 1–5	94.5	0.0	0.98	0.7	0.001	986	981

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Average monthly Medicaid expenditures in years after RA							
Year 1 ($)	1,308	-27	0.14	18	-0.042	986	981
Year 2 ($)	1,303	-30	0.25	26	-0.041	986	981
Year 3 ($)	1,302	-55*	0.08	32	-0.067	986	981
Year 4 ($)	1,436	-57	0.27	52	-0.044	986	981
Year 5 ($)	1,311	-94*	0.08	54	-0.070	986	981
Years 1–5 ($)	1,332	-53*	0.08	30	-0.063	986	981
Medicare participation in years after RA							
Ever enrolled in Year 1	0.1	-0.1	0.32	0.1		986	981
Ever enrolled in Year 2	0.1	-0.1	0.32	0.1		986	981
Ever enrolled in Year 3	0.2	-0.1	0.56	0.2	-0.445	986	981
Ever enrolled in Year 4	2.4	-0.3	0.58	0.6	-0.092	986	981
Ever enrolled in Year 5	5.1	-1.0	0.26	0.8	-0.133	986	981
Percentage of months enrolled in Years 1–5	1.1	-0.3	0.22	0.2	-0.053	986	981
Average monthly Medicare expenditures in years after RA							
Year 1 ($)	4	-5	0.32	5	-0.053	986	981
Year 2 ($)	7	-8	0.32	8	-0.053	986	981
Year 3 ($)	8	-10	0.32	9	-0.053	986	981
Year 4 ($)	13	-12	0.17	9	-0.065	986	981
Year 5 ($)	36	-26	0.14	18	-0.065	986	981
Years 1–5 ($)	14	-12	0.13	8	-0.076	986	981

Source: CMS administrative records and PROMISE five-year survey (non-Medicare/Medicaid outcomes).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

ACA = Affordable Care Act; CMS = Centers for Medicare & Medicaid Services; N = sample size; RA = random assignment.

Appendix Table G.13. NYS PROMISE: Impact on the youth's economic and social well-being (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Total income in the past year ($)	8,422	210	0.54	340	0.031	847	815
Total income during the five calendar years after RA ($)	43,845	348	0.63	716	0.021	986	981
Supplementary outcomes							
Engaging in productive market activities[a]	80.4	-0.4	0.83	2.0	-0.016	837	803
Income in calendar years after RA							
Year 1 ($)	8,937	63	0.56	108	0.021	986	981
Year 2 ($)	8,667	60	0.65	132	0.018	986	981
Year 3 ($)	8,671	71	0.70	186	0.017	986	981
Year 4 ($)	8,693	63	0.79	233	0.012	986	981
Year 5 ($)	8,877	90	0.76	297	0.014	986	981
Household income in the past year ($)[b]	27,818	-1,155	0.17	845	-0.072	750	721
Household receives TANF, SNAP, or housing assistance[b]	63.6	-0.7	0.77	2.4	-0.019	779	751
Amount of public assistance in the past month							
TANF ($)[b]	21	1	0.85	5	0.009	782	755
SNAP benefits ($)[b]	191	-9	0.42	11	-0.041	788	765
Housing assistance ($)[b]	216	13	0.57	23	0.028	783	762
Family structure and living arrangements							
Living independently	6.0	1.2	0.33	1.2	0.116	845	812
Married or in a marriage-like relationship	2.6	0.6	0.51	0.9	0.126	809	783
Responsible for a child or children	6.6	0.5	0.67	1.3	0.051	807	785
Engagement with the criminal justice system							
Ever arrested	7.3	3.1**	0.03	1.4	0.232	804	784
Number of times arrested	0.2	0.0	0.39	0.0	0.045	804	784
Arrested in the past year	2.0	1.2	0.15	0.8	0.286	803	784
Ever incarcerated	1.2	1.0	0.15	0.7	0.366	799	778
Length of incarceration (days)	7.0	8.2	0.19	6.3	0.071	799	778

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Self-reported health status							
Poor	5.7	-0.6	0.59	1.1	-0.070	803	782
Fair	12.0	3.0*	0.08	1.7	0.156	803	782
Good	40.7	-0.8	0.74	2.5	-0.021	803	782
Very good or excellent	41.6	-1.6	0.52	2.5	-0.040	803	782
Received help in getting accommodations for school, work, or living independently in past year	16.8	-0.1	0.97	1.9	-0.003	842	813

Source: PROMISE five-year surveys and SSA administrative records (SSA payments and income in calendar years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] Productive market activities include engaging in any of the following at the time of the five-year survey: employment in paid or unpaid work, looking for work, or enrollment in school or a training program.

[b] This outcome is based on data from the parent survey about the parent's household if the youth lived with the parent at interview.

N = sample size; RA = random assignment; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; TANF = Temporary Assistance for Needy Families.

Appendix Table G.14. NYS PROMISE: Impact on the parents' employment and earnings (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent worked for pay in the past year	56.5	2.4	0.30	2.3	0.059	836	805
Parents' earnings in the past year ($)	16,130	402	0.69	1,005	0.019	837	805
Parents' earnings during the five calendar years after RA ($)	90,576	2,041	0.48	2,886	0.019	951	910
Supplementary outcomes							
Highest educational attainment achieved by either parent							
Not a high school graduate	28.1	2.4	0.27	2.2	0.070	836	807
High school diploma or GED	33.6	-0.5	0.82	2.4	-0.015	836	807
Some postsecondary education or more	36.6	-2.3	0.32	2.3	-0.061	836	807
Other or do not know	1.7	0.4	0.53	0.7	0.142	836	807
Employment in the past year							
Number of parents that worked for pay	0.6	0.0	0.42	0.0	0.038	833	804
Number of weeks worked	29.0	0.8	0.55	1.4	0.028	833	804
Weekly hours worked	21.5	0.2	0.83	1.1	0.010	837	805
Either parent was offered fringe benefits through a job	37.6	2.8	0.23	2.3	0.071	835	805
Employment at the time of survey							
Either parent is in the labor force	56.9	2.9	0.22	2.4	0.073	802	785
Either parent is working for pay	44.2	1.7	0.47	2.4	0.043	802	789
Employment and earnings in calendar years after RA							
Ever employed in Year 1	64.6	-0.0	0.99	1.7	-0.001	951	910
Ever employed in Year 2	64.1	1.7	0.34	1.8	0.045	951	910
Ever employed in Year 3	65.5	1.9	0.30	1.8	0.052	951	910
Ever employed in Year 4	65.3	1.4	0.46	1.9	0.037	951	910
Ever employed in Year 5	61.6	2.8	0.15	1.9	0.072	951	910
Ever employed in Years 1-5	75.8	1.1	0.52	1.7	0.036	951	910
Earnings in Year 1 ($)	16,097	507	0.30	490	0.025	951	910
Earnings in Year 2 ($)	17,416	463	0.42	573	0.022	951	910
Earnings in Year 3 ($)	18,986	195	0.76	644	0.009	951	910

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Earnings in Year 4 ($)	19,591	2	1.00	758	0.000	951	910
Earnings in Year 5 ($)	18,486	874	0.31	867	0.034	951	910

Source: PROMISE five-year survey and SSA administrative records (employment and earnings in years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

GED = General Educational Development; N = sample size; RA = random assignment.

Appendix Table G.15. NYS PROMISE: Impact on the parents' SSA payments (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent received SSA payments in Year 5	33.0	-1.3	0.36	1.4	-0.035	951	910
Total SSA payments received in Year 5 ($)	3,369	-101	0.58	181	-0.019	951	910
Total SSA payments during the five years after RA ($)	16,194	-346	0.60	654	-0.014	951	910
Supplementary outcomes							
SSA payments in years after RA							
Received any in Year 1	29.7	0.5	0.51	0.7	0.013	951	910
Received any in Year 2	30.9	-0.9	0.36	0.9	-0.025	951	910
Received any in Year 3	32.4	-1.5	0.18	1.1	-0.042	951	910
Received any in Year 4	32.5	-0.9	0.50	1.3	-0.024	951	910
Received any in Years 1–5	36.5	-1.5	0.23	1.2	-0.039	951	910
Amount in Year 1 ($)	3,110	-52	0.66	118	-0.010	951	910
Amount in Year 2 ($)	3,175	-22	0.88	148	-0.004	951	910
Amount in Year 3 ($)	3,233	-107	0.48	153	-0.021	951	910
Amount in Year 4 ($)	3,307	-63	0.71	169	-0.012	951	910
SSI payments in years after RA							
Received any in Year 1	19.1	0.5	0.48	0.7	0.019	951	910
Received any in Year 2	19.1	-0.4	0.68	0.9	-0.014	951	910
Received any in Year 3	19.7	-0.9	0.36	1.0	-0.037	951	910
Received any in Year 4	19.1	-0.1	0.90	1.1	-0.006	951	910
Received any in Year 5	18.9	0.1	0.93	1.2	0.004	951	910
Received any in Years 1–5	24.1	-1.0	0.38	1.1	-0.032	951	910
Amount in Year 1 ($)	1,447	-13	0.87	79	-0.004	951	910
Amount in Year 2 ($)	1,359	37	0.65	80	0.011	951	910
Amount in Year 3 ($)	1,359	-19	0.82	84	-0.006	951	910
Amount in Year 4 ($)	1,390	-39	0.71	104	-0.012	951	910
Amount in Year 5 ($)	1,346	-26	0.79	98	-0.008	951	910
Total amount during Years 1–5 ($)	6,900	-60	0.87	372	-0.004	951	910

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
OASDI benefits in years after RA							
Received any in Year 1	17.0	0.1	0.87	0.7	0.005	951	910
Received any in Year 2	18.4	-0.6	0.43	0.8	-0.026	951	910
Received any in Year 3	19.9	-1.5	0.14	1.0	-0.059	951	910
Received any in Year 4	20.1	-0.5	0.69	1.1	-0.017	951	910
Received any in Year 5	20.3	-0.5	0.67	1.2	-0.020	951	910
Received any in Years 1–5	22.9	-1.2	0.29	1.2	-0.043	951	910
Amount in Year 1 ($)	1,663	-39	0.67	92	-0.010	951	910
Amount in Year 2 ($)	1,816	-58	0.63	121	-0.014	951	910
Amount in Year 3 ($)	1,874	-88	0.50	130	-0.021	951	910
Amount in Year 4 ($)	1,917	-24	0.86	135	-0.006	951	910
Amount in Year 5 ($)	2,024	-75	0.63	156	-0.017	951	910
Total amount during Years 1–5 ($)	9,294	-286	0.60	549	-0.015	951	910

Source: SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

N = sample size; OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table G.16. NYS PROMISE: Impact on the parents' health insurance coverage and expenditures (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent is covered by health insurance	92.6	0.9	0.41	1.1	0.087	828	802
Average monthly Medicaid and Medicare expenditures in the five years after RA ($)	858	0	0.99	27	0.000	951	910
Supplementary outcomes							
Covered by private health insurance	20.3	-0.0	1.00	1.9	-0.000	828	801
Medicaid and Medicare participation in years after RA							
Ever enrolled in Year 1	89.2	-0.9	0.49	1.4	-0.058	951	910
Ever enrolled in Year 2	86.8	-0.6	0.70	1.5	-0.029	951	910
Ever enrolled in Year 3	85.8	-1.6	0.30	1.6	-0.078	951	910
Ever enrolled in Year 4	85.4	-1.7	0.27	1.6	-0.081	951	910
Ever enrolled in Year 5	82.3	1.3	0.43	1.7	0.056	951	910
Percentage of months enrolled in Years 1–5	82.0	-1.0	0.45	1.4	-0.032	951	910
Average monthly Medicaid and Medicare expenditures in years after RA							
Year 1 ($)	740	1	0.94	20	0.002	951	910
Year 2 ($)	802	-7	0.81	27	-0.007	951	910
Year 3 ($)	869	-10	0.78	34	-0.009	951	910
Year 4 ($)	950	22	0.60	42	0.018	951	910
Year 5 ($)	929	-6	0.89	43	-0.005	951	910
Medicaid participation in years after RA							
Ever enrolled in Year 1	88.0	-1.6	0.26	1.4	-0.089	951	910
Ever enrolled in Year 2	85.3	-1.2	0.43	1.6	-0.057	951	910
Ever enrolled in Year 3	83.7	-1.5	0.37	1.6	-0.064	951	910
Ever enrolled in Year 4	82.6	-1.4	0.40	1.7	-0.058	951	910
Ever enrolled in Year 5	79.9	1.6	0.35	1.7	0.063	951	910
Percentage of months enrolled in Years 1–5	79.6	-1.1	0.44	1.4	-0.033	951	910

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Average monthly Medicaid expenditures in years after RA							
Year 1 ($)	638	-20	0.24	17	-0.034	951	910
Year 2 ($)	676	-38*	0.08	21	-0.056	951	910
Year 3 ($)	722	-34	0.17	25	-0.046	951	910
Year 4 ($)	799	-27	0.39	32	-0.031	951	910
Year 5 ($)	777	-71**	0.03	32	-0.082	951	910
Years 1–5 ($)	723	-38*	0.07	21	-0.056	951	910
Medicare participation in years after RA							
Ever enrolled in Year 1	15.9	0.7	0.35	0.8	0.032	951	910
Ever enrolled in Year 2	16.9	0.2	0.80	0.8	0.009	951	910
Ever enrolled in Year 3	18.1	-0.2	0.87	1.0	-0.007	951	910
Ever enrolled in Year 4	19.1	-0.3	0.77	1.1	-0.013	951	910
Ever enrolled in Year 5	20.4	-0.9	0.47	1.2	-0.033	951	910
Percentage of months enrolled in Years 1–5	17.3	-0.0	1.00	0.8	-0.000	951	910
Average monthly Medicare expenditures in years after RA							
Year 1 ($)	101	21	0.17	16	0.049	951	910
Year 2 ($)	126	31	0.13	21	0.055	951	910
Year 3 ($)	147	25	0.30	24	0.039	951	910
Year 4 ($)	151	49*	0.06	27	0.070	951	910
Year 5 ($)	153	66**	0.02	29	0.091	951	910
Years 1–5 ($)	135	38**	0.04	19	0.071	951	910

Source: CMS administrative records and PROMISE five-year survey (non-Medicare/Medicaid outcomes).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

CMS = Centers for Medicare & Medicaid Services; N = sample size.

Appendix Table G.17. NYS PROMISE: Impact on the parents' economic well-being (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Parents' total income in the past year ($)	19,802	296	0.77	1,009	0.015	807	744
Parents' total income during the five calendar years after RA ($)	108,303	1,738	0.54	2,812	0.017	951	910
Supplementary outcomes							
Parents' income in calendar years after RA							
Year 1 ($)	19,500	488	0.33	498	0.026	951	910
Year 2 ($)	20,844	405	0.48	572	0.020	951	910
Year 3 ($)	22,532	219	0.73	629	0.010	951	910
Year 4 ($)	23,244	-47	0.95	739	-0.002	951	910
Year 5 ($)	22,184	673	0.43	846	0.028	951	910
Household receives TANF, SNAP, or housing assistance	63.6	1.5	0.52	2.4	0.040	818	786
Household income in the past year ($)	27,954	-329	0.68	811	-0.021	790	761

Source: PROMISE five-year survey and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

N = sample size; RA = random assignment; SSA = Social Security Administration.

2. Sensitivity analyses

We assessed the sensitivity of the estimated impacts on primary outcomes to methodological choices we incorporated in the main impact estimates. In Appendix Table G.18, we show the impact estimated by the main regression model for each outcome, as well as by alternative models that do not (1) use the survey weights, (2) include covariate adjustment, and (3) use imputed data for outcomes that underwent multiple imputation. The alternative models produced broadly similar results, suggesting that the main model's estimates of program impacts were not sensitive to the choice of estimation method.

We also assessed the extent to which the lack of survey data for some enrollees would influence the estimates of program impacts. In Appendix Table G.19, we compare how the estimated impacts on primary outcomes varied when nonrespondents were included and excluded from analyses of outcomes measured using administrative data. For all outcomes, the impact estimated using the weighted survey respondent sample did not significantly differ from the impact estimated using the administrative analysis sample. The findings suggest that use of the analysis weights minimized the potential for nonresponse bias because the estimated impacts for the survey respondent sample were comparable to those for the full research sample.

Appendix Table G.18. NYS PROMISE: Impact on primary outcomes, by estimation approach (values measured at the time of the survey and shown in in percentages, unless otherwise noted)

Outcome	Main model	No weighting for non-response	No covariate adjustment	No imputation
Enrolled in an educational or training program	-4.7**	-4.4*	-4.4*	n.a.
Has a GED, high school diploma, or certificate of completion	-1.0	-1.0	-1.6	n.a.
Youth employed in a paid job in the past year	4.3*	4.5*	3.3	4.2*
Youth earnings in the past year ($)	370	400	241	322
Youth earnings during the five calendar years after RA ($)	385	n.a.	111	n.a.
Youth self-determination score (scale: 0 to 100)[a]	-0.3	-0.4	-0.3	n.a.
Youth expects to be financially independent at age 25	5.5*	5.5*	4.6	n.a.
Youth received SSA payments in Year 5 after RA	1.8	n.a.	2.4	n.a.
Youth total SSA payments in Year 5 after RA ($)	-10	n.a.	10	n.a.
Youth total SSA payments during Years 1–5 after RA ($)	-17	n.a.	-110	n.a.
Youth covered by any health insurance	0.6	0.5	0.4	n.a.
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	-65**	n.a.	-65**	n.a.
Youth total income in the past year ($)	210	231	122	142
Youth total income during the five calendar years after RA ($)	348	n.a.	-24	n.a.
Either parent worked for pay in the past year	2.4	2.0	3.4	n.a.
Parents' earnings in the past year ($)	402	330	882	454
Parents' earnings during the five calendar years after RA ($)	2,041	n.a.	6,730	n.a.
Either parent received SSA payments in Year 5 after RA	-1.3	n.a.	-3.2	n.a.
Parents' total SSA payments received in Year 5 after RA ($)	-101	n.a.	-320	n.a.
Parents' total SSA payments during the five years after RA ($)	-346	n.a.	-1,564	n.a.
Parents' total income in the past year ($)	296	247	404	231
Parents' income during the five calendar years after RA ($)	1,738	n.a.	5,073	n.a.
Either parent is covered by health insurance	0.9	0.9	2.6**	n.a.
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	0	n.a.	0	n.a.

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the impact estimates of NYS PROMISE, using different modeling approaches. In the main model, we used covariate adjustment and, for outcomes derived from survey data, we weighted statistics to adjust for survey nonresponse and used multiple imputation when an outcome had a

missing value conditional on the value of another variable. In the model with "No weighting for non-response", we followed the main model but did not apply weights to adjust for non-response. In the model with "No covariate adjustment", we followed the main model but did not include covariates. For the model with "No multiple imputation", we followed the main model except that we excluded cases with outcomes that had a missing value conditional on the value of another variable.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; n.a.= not applicable; RA = random assignment; SSA = Social Security Administration.

Appendix Table G.19. NYS PROMISE: Impact on primary outcomes measured using administrative data, including and excluding five-year survey nonrespondents (percentage, unless otherwise noted)

Outcome	Administrative analysis samples			Five-year survey respondents (weighted)			*p*-value for difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth earnings during the five calendar years after RA ($)	7,846	385	0.55	7,690	350	0.62	0.96
Youth received SSA payments in Year 5 after RA	67.8	1.8	0.36	70.1	0.3	0.90	0.46
Youth total SSA payments in Year 5 after RA ($)	5,426	-10	0.96	5,676	-128	0.52	0.53
Youth total SSA payments during Years 1–5 after RA ($)	34,428	-17	0.97	34,859	-194	0.73	0.75
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,346	-65**	0.04	1,364	-67*	0.05	0.94
Youth total income during the five calendar years after RA ($)	43,845	348	0.63	44,198	159	0.84	0.80
Parents' earnings during the five calendar years after RA ($)	90,576	2,041	0.48	91,966	2,159	0.50	0.97
Either parent received SSA payments in Year 5 after RA	33.0	-1.3	0.36	34.0	-1.8	0.22	0.72
Parents' total SSA payments received in Year 5 after RA ($)	3,369	-101	0.58	3,531	-242	0.20	0.45
Parents' total SSA payments during the five years after RA ($)	16,194	-346	0.60	16,630	-922	0.18	0.39
Parents' total income during the five calendar years after RA ($)	108,303	1,738	0.54	110,281	1,221	0.69	0.86
Parents' average monthly Medicaid and Medicare expenditures in years after RA in Years 1-5 after RA ($)	858	0	0.99	859	18	0.52	0.52

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE for administrative analysis samples and five-year survey respondents. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For the sample of five-year survey respondents, we weighted the statistics to adjust for survey nonresponse, applying youth weights for youths' outcomes and parent weights for parents' outcomes.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for the two samples are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; N = sample size; RA = random assignment. SSA = Social Security Administration.

3. Subgroup impact estimates

We estimated the five-year impacts for key subgroups of evaluation enrollees to understand whether the impacts of NYS PROMISE differed by enrollee characteristics. We focused on subgroups defined by the following baseline characteristics of youth: age (ages 14 and 15, and age 16); sex (females and males); whether a youth's parent received SSA payments at the time of RA (yes or no); primary impairment (intellectual or developmental disabilities, other mental impairments, and other disabilities); and whether the survey respondent completed the five-year survey before or after the onset of the COVID-19 pandemic (yes or no). Appendix Tables G.20–G.25 present the subgroup impact estimates.

Appendix Table G.20. NYS PROMISE: Impacts on primary outcomes, by youth's age (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Age 14 and 15					Age 16					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	65.9	-5.4**	0.05	578	565	35.9	-3.1	0.47	248	232	0.65
Youth has a GED, high school diploma, or certificate of completion	49.4	-1.6	0.58	577	568	72.0	0.4	0.93	253	237	0.69
Youth employed in a paid job in the past year	31.2	3.7	0.18	592	576	36.5	5.8	0.19	255	239	0.68
Youth earnings in the past year ($)	2,612	195	0.60	592	576	3,346	774	0.27	255	239	0.46
Youth earnings during the five calendar years after RA ($)	6,370	326	0.62	691	673	11,072	445	0.76	295	308	0.94
Youth self-determination score (scale: 0 to 100)	77.8	0.3	0.73	346	344	78.3	-1.8	0.29	143	143	0.27
Youth expects to be financially independent at age 25	66.8	5.5	0.12	353	345	62.5	5.5	0.33	141	145	1.00
Youth received SSA payments in Year 5 after RA	71.3	0.4	0.87	691	673	60.1	5.0	0.18	295	308	0.28
Youth total SSA payments in Year 5 after RA ($)	5,632	-167	0.44	691	673	4,974	344	0.31	295	308	0.20
Youth total SSA payments during Years 1–5 after RA ($)	35,138	-248	0.68	691	673	32,875	504	0.62	295	308	0.52
Youth covered by any health insurance	95.5	-0.4	0.74	580	560	91.7	2.9	0.22	247	233	0.21
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,369	-69*	0.06	691	673	1,295	-56	0.37	295	308	0.86
Youth total income in the past year ($)	8,378	-210	0.58	592	576	8,526	1,183*	0.09	255	239	0.07†
Youth total income during the five calendar years after RA ($)	43,119	-51	0.95	691	673	45,432	1,209	0.40	295	308	0.44

Outcome	Age 14 and 15					Age 16					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Either parent worked for pay in the past year	58.1	2.0	0.47	585	569	52.6	3.3	0.43	251	236	0.78
Parents' earnings in the past year ($)	16,144	515	0.66	585	569	16,096	137	0.94	252	236	0.86
Parents' earnings during the five calendar years after RA ($)	94,814	1,468	0.66	666	622	81,425	3,538	0.51	285	288	0.74
Either parent received SSA payments in Year 5 after RA	31.8	-1.6	0.30	666	622	35.4	-0.4	0.87	285	288	0.69
Parents' total SSA payments received in Year 5 after RA ($)	3,338	-223	0.31	666	622	3,437	173	0.58	285	288	0.29
Parents' total SSA payments during the five years after RA ($)	15,857	-933	0.22	666	622	16,923	979	0.43	285	288	0.18
Parents' total income in the past year ($)	19,624	477	0.69	563	521	20,216	-128	0.95	244	223	0.79
Parents' total income during the five calendar years after RA ($)	112,198	461	0.89	666	622	99,892	4,810	0.36	285	288	0.48
Either parent is covered by health insurance	92.7	0.5	0.73	579	567	92.3	2.0	0.33	249	235	0.52
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	790	35	0.23	666	622	1,005	-77	0.17	285	288	0.07†

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; RA = random assignment; SSA = Social Security Administration.

Appendix Table G.21. NYS PROMISE: Impacts on primary outcomes, by youth's sex (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Male					Female					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	57.1	-4.7*	0.09	569	524	57.0	-4.7	0.23	257	273	0.99
Youth has a GED, high school diploma, or certificate of completion	53.1	-1.0	0.74	574	530	61.8	-1.1	0.79	256	275	0.97
Youth employed in a paid job in the past year	31.3	5.1*	0.07	584	536	35.7	2.7	0.52	263	279	0.62
Youth earnings in the past year ($)	2,673	406	0.32	584	536	3,125	294	0.62	263	279	0.87
Youth earnings during the five calendar years after RA ($)	7,321	460	0.54	674	660	8,926	226	0.84	312	321	0.86
Youth self-determination score (scale: 0 to 100)	78.0	-0.5	0.64	335	318	78.0	0.1	0.94	154	169	0.75
Youth expects to be financially independent at age 25	67.6	3.5	0.35	337	318	61.7	9.5*	0.07	157	172	0.34
Youth received SSA payments in Year 5 after RA	67.0	2.6	0.28	674	660	69.5	0.2	0.96	312	321	0.57
Youth total SSA payments in Year 5 after RA ($)	5,370	-12	0.96	674	660	5,539	-6	0.98	312	321	0.99
Youth total SSA payments during Years 1–5 after RA ($)	33,955	210	0.74	674	660	35,400	-500	0.58	312	321	0.52
Youth covered by any health insurance	93.2	0.3	0.84	566	522	96.7	1.1	0.43	261	271	0.71
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,315	-64*	0.08	674	660	1,410	-67	0.27	312	321	0.97
Youth income in the past year ($)	8,250	212	0.61	584	536	8,749	205	0.72	263	279	0.99
Youth total income during the five calendar years after RA ($)	42,837	590	0.50	674	660	45,917	-168	0.89	312	321	0.61
Either parent worked for pay in the past year	57.8	2.5	0.36	576	533	54.0	2.1	0.61	260	272	0.93

Outcome	Male					Female					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Parents' earnings in the past year ($)	16,948	441	0.72	577	533	14,526	322	0.85	260	272	0.96
Parents' earnings during the five calendar years after RA ($)	94,470	2,389	0.50	651	608	82,738	1,306	0.79	300	302	0.86
Either parent received SSA payments in Year 5 after RA	31.6	-1.2	0.47	651	608	35.8	-1.4	0.58	300	302	0.95
Parents' total SSA payments received in Year 5 after RA ($)	3,188	-137	0.52	651	608	3,735	-24	0.94	300	302	0.77
Parents' total SSA payments during the five years after RA ($)	15,543	-516	0.51	651	608	17,505	16	0.99	300	302	0.71
Parents' income in the past year ($)	20,634	149	0.91	558	487	18,222	602	0.72	249	257	0.83
Parents' income during the five calendar years after RA ($)	111,532	1,761	0.61	651	608	101,802	1,689	0.72	300	302	0.99
Either parent is covered by health insurance	92.9	0.4	0.76	569	532	92.0	2.0	0.29	259	270	0.49
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	855	-20	0.53	651	608	864	42	0.39	300	302	0.28

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table G.22. NYS PROMISE: Impacts on primary outcomes, by whether parent received SSA payments before RA (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	No parent received SSA payments					At least one parent received SSA payments					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	61.0	-4.3	0.11	586	524	43.4	-4.4	0.35	210	213	0.99
Youth has a GED, high school diploma, or certificate of completion	54.7	-3.2	0.28	596	531	59.9	4.0	0.40	208	217	0.19
Youth employed in a paid job in the past year	32.0	4.6*	0.10	604	535	34.9	4.6	0.32	213	220	1.00
Youth earnings in the past year ($)	2,950	-31	0.94	604	535	2,772	992	0.15	213	220	0.20
Youth earnings during the five calendar years after RA ($)	7,675	-143	0.84	698	646	8,714	595	0.66	253	264	0.63
Youth self-determination score (scale: 0 to 100)	78.4	0.2	0.81	338	297	77.6	-0.5	0.76	132	153	0.69
Youth expects to be financially independent at age 25	65.4	5.6	0.14	345	297	65.4	4.3	0.43	133	156	0.84
Youth received SSA payments in Year 5 after RA	66.3	3.3	0.17	698	646	70.8	-2.7	0.50	253	264	0.20
Youth total SSA payments in Year 5 after RA ($)	5,220	55	0.80	698	646	5,737	-233	0.53	253	264	0.50
Youth total SSA payments during Years 1–5 after RA ($)	33,279	7	0.99	698	646	36,366	-107	0.92	253	264	0.92
Youth covered by any health insurance	95.1	0.5	0.68	588	522	92.5	0.1	0.98	210	211	0.87
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,365	-55	0.16	698	646	1,281	-92	0.11	253	264	0.59
Youth income in the past year ($)	8,357	-116	0.77	604	535	8,613	607	0.39	213	220	0.37
Youth total income during the five calendar years after RA ($)	42,552	-186	0.83	698	646	46,343	621	0.66	253	264	0.62
Either parent worked for pay in the past year	68.2	1.5	0.58	601	531	23.6	7.5*	0.09	205	213	0.25

Outcome	No parent received SSA payments					At least one parent received SSA payments					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Parents' earnings in the past year ($)	20,543	147	0.91	602	531	5,382	1,902	0.20	205	213	0.37
Parents' earnings during the five calendar years after RA ($)	113,654	1,627	0.66	698	646	34,106	3,118	0.41	253	264	0.78
Either parent received SSA payments in Year 5 after RA	10.4	-2.4	0.12	698	646	88.3	1.8	0.52	253	264	0.18
Parents' total SSA payments received in Year 5 after RA ($)	1,072	-144	0.46	698	646	8,990	11	0.98	253	264	0.73
Parents' total SSA payments during the five years after RA ($)	3,524	-563	0.38	698	646	47,197	229	0.89	253	264	0.65
Parents' income in the past year ($)	21,694	-10	0.99	602	531	15,059	1,228	0.38	205	213	0.52
Parents' income during the five calendar years after RA ($)	117,986	1,146	0.75	698	646	84,610	3,287	0.39	253	264	0.68
Either parent is covered by health insurance	94.2	2.0	0.12	595	530	98.6	-2.6	0.11	203	212	0.02††
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	586	-24	0.31	698	646	1,523	62	0.40	253	264	0.26

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table G.23. NYS PROMISE: Impacts on primary outcomes, by youth's primary impairment (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Intellectual or developmental disabilities			Other mental impairments			Other impairments			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth enrolled in an educational or training program	62.5	-6.4**	0.03	37.7	-3.1	0.52	66.2	-1.5	0.78	0.68
Youth has a GED, high school diploma, or certificate of completion	53.4	2.3	0.47	60.4	-4.8	0.33	59.1	-7.1	0.21	0.24
Youth employed in a paid job in the past year	28.8	4.8	0.11	47.4	2.3	0.65	25.4	5.8	0.27	0.87
Youth earnings in the past year ($)	2,075	803**	0.04	5,058	-907	0.27	2,225	755	0.33	0.16
Youth earnings during the five calendar years after RA ($)	5,990	1,474*	0.06	12,266	-2,158	0.11	7,638	534	0.76	0.07†
Youth self-determination score (scale: 0 to 100)	77.6	-1.5	0.23	77.5	2.0	0.19	80.3	-0.4	0.83	0.19
Youth expects to be financially independent at age 25	61.9	5.5	0.19	70.9	7.3	0.16	68.3	0.9	0.90	0.79
Youth received SSA payments in Year 5 after RA	75.7	-1.1	0.66	47.2	2.8	0.51	71.4	10.0**	0.02	0.09†
Youth total SSA payments in Year 5 after RA ($)	6,175	-379	0.11	3,396	272	0.46	5,867	797*	0.06	0.04††
Youth total SSA payments during Years 1–5 after RA ($)	36,333	-887	0.19	29,786	846	0.45	34,795	1,578	0.17	0.12
Youth covered by any health insurance	94.3	1.9	0.17	91.9	-1.2	0.67	97.9	-1.7	0.42	0.28
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,398	-92**	0.03	1,037	23	0.64	1,623	-97	0.29	0.17
Youth income in the past year ($)	8,353	349	0.39	8,646	-980	0.23	8,335	1,433*	0.06	0.10
Youth total income during the five calendar years after RA ($)	44,349	299	0.73	42,394	-1,200	0.45	44,269	2,761	0.13	0.25
Either parent worked for pay in the past year	55.2	4.6	0.12	54.9	2.7	0.55	63.2	-5.6	0.31	0.25

Outcome	Intellectual or developmental disabilities			Other mental impairments			Other impairments			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Parents' earnings in the past year ($)	16,546	403	0.77	15,076	295	0.87	16,194	548	0.82	1.00
Parents' earnings during the five calendar years after RA ($)	87,344	1,898	0.63	87,238	2,463	0.62	106,610	2,112	0.78	1.00
Either parent received SSA payments in Year 5 after RA	33.5	-0.7	0.71	36.0	-2.3	0.38	26.6	-1.9	0.60	0.87
Parents' total SSA payments received in Year 5 after RA ($)	3,423	-45	0.85	3,611	-288	0.36	2,817	-5	0.99	0.80
Parents' total SSA payments during the five years after RA ($)	16,748	-42	0.96	17,507	-805	0.52	12,296	-667	0.68	0.86
Parents' income in the past year ($)	20,316	312	0.82	19,480	-516	0.78	18,557	1,476	0.54	0.80
Parents' income during the five calendar years after RA ($)	105,659	2,092	0.59	106,244	1,357	0.78	120,377	1,380	0.85	0.99
Either parent is covered by health insurance	92.2	2.8**	0.04	95.8	-3.3	0.14	89.1	0.7	0.84	0.06†
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	859	-13	0.70	855	24	0.61	859	-5	0.95	0.81

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table G.24. NYS PROMISE: Sample sizes for primary outcomes, by youth's primary impairment

Outcome	Intellectual or developmental disabilities		Other mental impairments		Other impairments	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Youth enrolled in an educational or training program	478	464	204	190	144	143
Youth has a GED, high school diploma, or certificate of completion	477	470	210	193	143	142
Youth employed in a paid job in the past year	490	476	210	194	147	145
Youth earnings in the past year ($)	490	476	210	194	147	145
Youth earnings during the five calendar years after RA ($)	566	567	258	246	162	168
Youth self-determination score (scale: 0 to 100)	270	269	148	144	71	74
Youth expects to be financially independent at age 25	272	270	153	145	69	75
Youth received SSA payments in Year 5 after RA	566	567	258	246	162	168
Youth total SSA payments in Year 5 after RA ($)	566	567	258	246	162	168
Youth total SSA payments during Years 1–5 after RA ($)	566	567	258	246	162	168
Youth covered by any health insurance	482	466	199	184	146	143
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	566	567	258	246	162	168
Youth income in the past year ($)	490	476	210	194	147	145
Youth total income during the five calendar years after RA ($)	566	567	258	246	162	168
Either parent worked for pay in the past year	478	471	211	191	147	143
Parents' earnings in the past year ($)	479	471	211	191	147	143
Parents' earnings during the five calendar years after RA ($)	540	517	257	239	154	154
Either parent received SSA payments in Year 5 after RA	540	517	257	239	154	154

Outcome	Intellectual or developmental disabilities		Other mental impairments		Other impairments	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Parents' total SSA payments received in Year 5 after RA ($)	540	517	257	239	154	154
Parents' total SSA payments during the five years after RA ($)	540	517	257	239	154	154
Parents' income in the past year ($)	457	427	211	186	139	131
Parents' income during the five calendar years after RA ($)	540	517	257	239	154	154
Either parent is covered by health insurance	477	468	206	191	145	143
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	540	517	257	239	154	154

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the sample size by subgroup for the estimates reported in Appendix Table G.23.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table G.25. NYS PROMISE: Impacts on primary outcomes, by whether the survey respondent completed the five-year survey before or during the pandemic (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Before pandemic					During pandemic					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	85.5	-15.2	0.18	26	27	56.1	-4.1*	0.08	798	767	0.33
Youth has a GED, high school diploma, or certificate of completion	30.1	4.8	0.71	25	27	56.9	-1.3	0.60	803	775	0.64
Youth employed in a paid job in the past year	18.2	20.1*	0.09	26	27	33.1	4.0*	0.09	819	785	0.18
Youth earnings in the past year ($)	1,375	126	0.90	26	27	2,865	392	0.26	819	785	0.81
Youth self-determination score (scale: 0 to 100)	78.3	1.6	0.72	14	10	78.0	-0.4	0.69	475	477	0.66
Youth expects to be financially independent at age 25	61.3	21.4	0.21	14	10	65.6	5.0	0.10	480	480	0.34
Youth covered by any health insurance	96.4	0.6	0.90	25	26	94.3	0.6	0.62	802	767	0.99
Youth income in the past year ($)	9,088	784	0.52	26	27	8,405	197	0.57	819	785	0.64
Either parent worked for pay in the past year	51.5	21.2*	0.06	28	33	56.7	1.7	0.48	808	772	0.09†
Parents' earnings in the past year ($)	13,267	4,912	0.22	28	33	16,247	225	0.83	809	772	0.25
Parents' income in the past year ($)	14,965	5,757	0.15	27	31	20,004	79	0.94	780	713	0.17
Either parent is covered by health insurance	88.4	2.8	0.67	28	33	92.7	0.8	0.47	800	769	0.77

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE on outcomes derived from survey data. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We weighted statistics to adjust for survey nonresponse. We defined before the pandemic as before March 13, 2020.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size.

C. Findings from the benefit-cost analysis

In this section, we present findings from the benefit-cost analysis of NYS PROMISE. First, we present benefits and costs estimated through the main model. Second, we present the results of sensitivity analyses. Third, we present the projected accrual of net benefits beyond the five-year evaluation period.

1. Benefit-cost estimates

Appendix Table G.26 provides estimates of the program's benefits and indirect costs, the costs of program components, and benefit-cost statistics estimated using the main model as described in Appendix B.

Appendix Table G.26. NYS PROMISE: Benefits and costs ($) over the five-year evaluation time period, by accounting perspective

Benefit or cost measure	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Panel 1: Quantitative outcome measures						
Youth outcomes						
Earnings	398	0	0	0	0	398
Fringe benefits	101	0	0	0	0	101
Income, payroll, and sales taxes	-77	49	0	63	13	0
Work-related and child care costs	-47	0	0	0	0	-47
SSI benefits	140	-140	0	-140	0	0
OASDI benefits	-165	165	0	165	0	0
SSI administrative costs	0	-11	0	-11	0	-11
SSDI administrative costs	0	3	0	3	0	3
Medicaid and Medicare expenditures and administrative costs	-4,039	0	0	2,604	1,778	343
Education-related costs	52	0	0	0	0	52
Incarceration	0	0	0	0	-804	-804
Parent outcomes						
Earnings	2,148	0	0	0	0	2,148
Fringe benefits	544	0	0	0	0	544
Income, payroll, and sales taxes	-418	266	0	341	77	0
Work-related and child care costs	-372	0	0	0	0	-372
SSI benefits	-61	61	0	61	0	0
OASDI benefits	-300	300	0	300	0	0
SSI administrative costs	0	5	0	5	0	5
SSDI administrative costs	0	6	0	6	0	6
Medicaid and Medicare expenditures and administrative costs	12	0	0	-1,305	1,291	-1

Benefit or cost measure	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Household outcomes						
TANF, SNAP, housing assistance, and related administrative costs	1,037	0	0	-1,080	0	-43
Total	-1,047	704	0	1,013	2,356	2,322
Panel 2: Costs of program components						
Program administration	0	0	-11,775	-11,775	-153	-11,928
Employment services	0	0	-2,842	-2,842	-58	-2,901
Education services	0	0	-548	-548	-16	-564
Case management services	0	0	-8,478	-8,478	-425	-8,903
Financial and benefits counseling	0	0	-49	-49	-2	-51
Parent training and information services	0	0	-4,339	-4,339	-38	-4,377
Youth self-determination services	0	0	-249	-249	-17	-266
Total	0	0	-28,280	-28,280	-709	-28,989
Panel 3: Benefit-cost statistics						
Net benefits (benefits minus costs)	-1,047	704	-28,280	-27,267	1,647	-26,666
Net benefit ratio[b]	n.a.	n.a.	0	0.04	3.32	0.08

Source: See Appendix Table B.4 for details on the sources and imputation methods for each benefit or cost component.

Note: To construct each component of the benefit-cost analysis, we used the estimated impacts on key outcomes (regardless of whether they were statistically significant), or imputation methods that combined the impact estimates with data from external sources**.** To construct program costs, we used data from program administrative records, financial documents, staff activity logs, and staff interviews. All benefits and costs are dollars per treatment group family over five years and are inflation-adjusted to 2020 dollars and discounted to 2020 present value.

[a] The perspective of the federal government as a whole incorporates the perspectives of SSA, ED, and other federal agencies that might experience benefits or costs because of PROMISE.

[b] Calculated for all key stakeholders as the sum of all quantitative measures in Panel 1, which include benefits and indirect costs, divided by the program costs.

ED = U.S. Department of Education; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; SSDI = Social Security Disability Insurance; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families.

2. Sensitivity analyses

As noted in Appendix B, we conducted three analyses to assess the sensitivity of the benefit-cost estimates to changes in the underlying assumptions and methodological choices. First, we sampled with replacement from the study population 1,000 times to create 1,000 random samples with an equal size as the true sample. For each sample, we calculated the net benefit for each accounting perspective. In Appendix Table G.27, we show the sampling distribution of the net benefit estimates from the perspective of the different stakeholders. The estimated net benefits for all key stakeholders were negative across the entire distribution, suggesting that the main conclusion (that NYS PROMISE did not generate net benefits across all key stakeholders) is robust to sampling variability. The confidence interval on the net benefit estimate for all key stakeholders (-$26,666) ranged from -$33,402 to -$20,002.

Second, we recalculated the net benefits using only the impact estimates that were significant at the 10 percent level (Appendix Table G.28). From the perspective of all stakeholders, the net benefit was within 8 percent of the estimate from the main analysis and continued to be negative and sizeable.

Appendix Table G.28 shows whether the benefit-cost results were sensitive to the assumptions we used to estimate some of the individual components. From the perspective of all key stakeholders, net benefits under the alternative assumptions were always within 5 percent of the net benefits estimated under the main analysis, and net benefits were sizeable and negative under each scenario. For the most part, net benefits were not sensitive to alterative assumptions. There were exceptions for particular stakeholders, For example, the net benefits for NYS PROMISE youth and families fell from -$1,047 in our main mode to –$1,775 when we used only statistically significant estimates; these results were sensitive because both youth and families had earnings estimates that were not statistically significant. Also, the net benefits for state and local governments changed from $1,647 in our main model to $564 when assuming higher incarceration costs.

Appendix Table G.27. NYS PROMISE: Sensitivity of net benefits to sampling variability

Estimate of net benefit	PROMISE youth and families	Federal government			State and local government, including PROMISE partners	All key stakeholders
		SSA	ED	Federal government as a whole[a]		
Original estimate	-1,047	704	-28,280	-27,267	1,647	-26,666
Min	-14,763	-4,125	-28,395	-37,537	-2,401	-37,525
2.5th percentile	-8,309	-1,506	-28,365	-33,525	-1,092	-33,402
25th percentile	-3,315	-124	-28,308	-29,370	696	-29,044
50th percentile	-1,008	582	-28,278	-27,441	1,614	-26,763
75th percentile	1,526	1,331	-28,249	-25,358	2,513	-24,326
97.5th percentile	6,397	2,817	-28,196	-21,453	4,472	-20,002
Max	11,973	4,509	-28,161	-18,466	6,716	-15,447

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: We quantified uncertainty in the estimated net benefits by constructing non-parametric bootstrap confidence intervals. We sampled with replacement from the study population 1,000 times and then re-estimated all cost and benefit parameters for these 1,000 random samples. We then calculated the net benefits for each bootstrap sample. The 2.5th percentile and 97.5th percentile of the resulting values represent the 95 percent confidence interval of the net benefit estimate.

Appendix Table G.28. NYS PROMISE: Sensitivity of net benefits to different assumptions in the benefit cost analysis

Assumption	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Assumption change						
Main benefit-cost analysis model	-1,047	704	-28,280	-27,267	1,647	-26,666
Excluded fringe benefits	-1,691	704	-28,280	-27,267	1,647	-27,311
Excluded education tuition costs	-1,083	704	-28,280	-27,267	1,647	-26,703
Used higher incarceration costs[b]	-1,047	704	-28,280	-27,267	564	-27,750
Used a fixed work-related cost measure (non-child care)[c]	-1,660	704	-28,280	-27,267	1,647	-27,280
Used a low discount rate[d]	-1,034	666	-28,280	-27,298	1,525	-26,807
Used a high discount rate[d]	-1,056	739	-28,280	-27,239	1,756	-26,539
Used only statistically significant estimates in the calculation[e]	-1,775	0	-28,237	-28,029	1,021	-28,784

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: The inputs for the benefit-cost analysis are based on (1) program costs drawn from program administrative records, financial documents, staff activity logs and staff interviews (2) the estimated impacts on key outcomes (regardless of whether they were statistically significant), or (3) imputation methods that combined the impact estimates with data from external sources. All benefits and costs are dollars per treatment group family over five years and are inflation-adjusted to 2020 dollars and discounted to 2020 present value.

[a] The perspective of the federal government as a whole incorporates the perspectives of SSA, ED, and other federal agencies that might experience benefits or costs because of PROMISE.

[b] We changed incarceration costs from the national average ($97/day) to the highest state-specific cost (California, $228/day).

[c] We changed work-related costs from a multiplier of 10.6% to a fixed cost of $51 dollars per week.

[d] The low discount rate is 1 percent, and the high discount rate is 5 percent.

[e] This sensitivity analysis assigns a value of zero to impact estimates to impacts estimates that were not were significant at the .10 level. (The main analysis and all other sensitivity tests include impact estimates regardless of whether they were statistically significant).

ED = U.S. Department of Education; SSA = Social Security Administration.

3. Long-term forecast

As described in Appendix B, we projected the accrual of net benefits over 10 and 20 years after RA to assess how costs and benefits may change after the five-year evaluation period (Appendix Table G.29). Because NYS PROMISE caused a small and nonsignificant decrease in youth's years of education (-0.04 years), the scenario assuming "no returns" to education generates the highest net benefit estimate and the scenario assuming "high returns" to education generates the lowest estimate. Across all scenarios, the forecasted net benefits 10 and 20 years after RA are higher than the net benefits estimated at five years after RA. This is because treatment group youth had higher earnings that control group youth in the fourth and fifth years after RA, an advantage that gets compounded in the forecast as earnings grow by an annual percentage over time.

We also calculated how large the impact on youth earnings would have to be, assuming all other impacts were the same as in the five-year analysis, for NYS PROMISE's benefits to equal the costs in 10 and 20 years after RA (Appendix Figure G.1). The program would need to generate an average annual impact on youth earnings of $4,412 per year to be cost neutral 10 years after RA and $1,313 per year to be cost neutral by 20 years after RA. It is probably unlikely to generate impacts of these sizes because the point estimate of its impact on youth earnings in the fifth year after RA was $268.

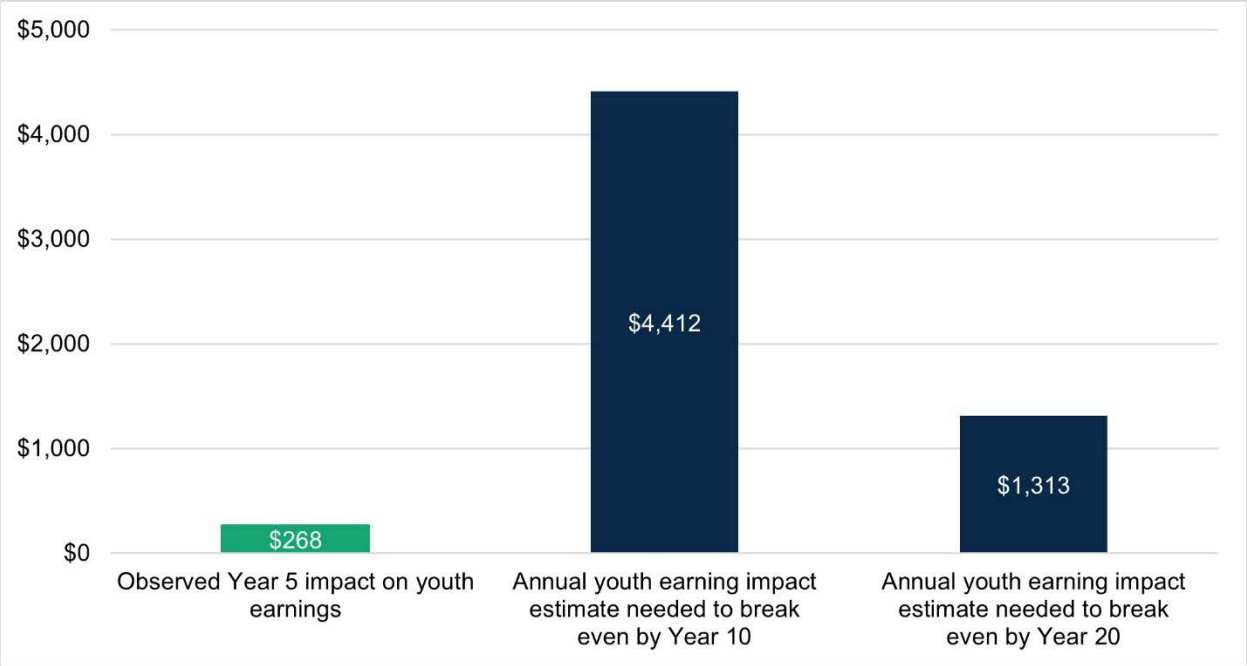
Appendix Table G.29. NYS PROMISE: Net benefits ($) to all stakeholders forecast over 10 and 20 years after RA, under different assumptions about the returns to education and using the upper and lower bound of the earnings impact

Assumption	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
10-year forecast						
Returns to education						
Persistent high return to education	-3,129	1,856	-28,280	-25,511	5,490	-23,149
Diminishing return to education	-3,096	1,867	-28,280	-25,498	5,492	-23,102
No return to education	-3,075	1,874	-28,280	-25,490	5,493	-23,073
Confidence interval bounds						
Using upper bound of earnings impact	837	2,875	-28,280	-24,330	5,645	-17,848
Using lower bound of earnings impact	-5,622	1,375	-28,280	-26,089	5,398	-26,313
20-year forecast						
Returns to education						
Persistent high return to education	-6,660	4,195	-28,280	-22,164	11,813	-17,010
Diminishing return to education	-6,502	4,246	-28,280	-22,106	11,820	-16,788
No return to education	-6,482	4,253	-28,280	-22,098	11,821	-16,759
Confidence interval bounds						
Using upper bound of earnings impact	6,206	7,647	-28,280	-18,180	12,318	344
Using lower bound of earnings impact	-15,203	3,041	-28,280	-23,637	11,511	-27,329

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: To construct each component of the benefit-cost analysis, we used either (1) the impact estimates themselves (regardless of whether they were statistically significant), or (2) imputation methods to combine the impact estimates with data from external sources. To construct program costs, we used data from program administrative records, financial documents, staff activity logs, and staff interviews. All benefits and costs are dollars per treatment group family and are inflation-adjusted to 2020 dollars and discounted to 2020 present value. The 10-year and 20-year projections are based on costs observed from the five-year evaluation period and a forecasting scenario for the five and fifteen following years, respectively, assuming that earnings grow over time. Additionally, the persistent high return to education forecasting scenario assumes a return to education of 10 percent per additional year of schooling; the diminishing returns to education scenario assumes the returns to education are 10 percent in Year 6 and then diminish over time to zero percent in Year 10; and the no return to education scenario assumes no increase over time in the return to education.

Appendix Figure G.1. NYS PROMISE: Impacts needed for cost-neutrality from the perspective of all key stakeholders



Note: The first bar shows the estimated impact on youth earnings in Year 5 after RA. The second bar shows the impact on youth earnings needed every year between Years 6 and 10 after RA for the program to be cost neutral 10 years after RA, assuming other benefits and costs are held constant between Years 6 and 10 after RA. The third bar shows the impact on youth earnings needed every year between Years 6 and 20 after RA for the program to be cost neutral 20 years after RA, assuming other benefits and costs are held constant between Years 6 and 20 after RA. All values are per treatment group family, inflation-adjusted to 2020 dollars, and discounted to 2020 present value.

NYS = New York State; RA = random assignment.

Appendix H. WI PROMISE Impacts, Benefits, and Costs

A. Enrollees and analysis samples

The full research sample for the evaluation of WI PROMISE consists of the 1,896 youth who enrolled in the evaluation and were randomly assigned, as well as their families. To assess the extent to which the findings might reflect the baseline characteristics of various samples, we compared differences between (1) the treatment and control groups, (2) survey respondents and nonrespondents, and (3) self-reporting and proxy youth respondents.

1. Differences between the treatment and control groups

We compared 25 baseline characteristics of the treatment and control groups for four samples: all youth survey respondents, all parent survey respondents, all enrollees, and all proxy youth respondents (Appendix Tables H.1–H.4). The similarity of samples across the characteristics examined suggest that RA created treatment and control groups that were equivalent in their baseline characteristics. Although we found statistically significant differences for a few characteristics, they are not concerning for two reasons. First, with a significance level of 10 percent, we expect to reject the null hypothesis that the groups were equivalent for 1 out of every 10 characteristics by chance alone, even when the two groups in fact had no underlying differences. Second, we included characteristics that were significantly different at baseline as covariates in our regression-adjusted impact analyses, allowing us to control for the observed differences.

Appendix Table H.1. WI PROMISE: Baseline characteristics of youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.3	32.4	34.2	-1.8	0.46
Youth age at RA					0.81
14	40.0	40.0	39.9	0.0	
15	26.3	26.9	25.6	1.3	
16	33.8	33.1	34.4	-1.3	
Average age at RA	15.4	15.4	15.4	-0.0	0.72
Youth language preference at SSI application					
Prefers English for written language	95.4	94.7	96.0	-1.3	0.24
Prefers English for spoken language	95.2	94.6	95.8	-1.2	0.29
Youth living arrangement at SSI application					0.32
In parents' household	88.1	87.8	88.5	-0.7	
Own household or alone	11.1	11.2	11.1	0.1	
Another household and receiving support	0.7	1.1	0.4	0.7	
Youth race and ethnicity					0.51
Non-Hispanic White	25.0	25.7	24.3	1.4	
Non-Hispanic Black	32.3	31.8	32.7	-0.9	
Hispanic	11.1	12.1	10.1	2.0	
Non-Hispanic American Indian	1.8	1.6	2.0	-0.3	
Non-Hispanic other or mixed race	6.7	5.8	7.7	-1.9	
Missing	23.0	23.0	23.1	-0.2	
Enrolling parent age at RA	41.4	41.4	41.4	0.0	0.95
Parent race and ethnicity				†	0.05
Non-Hispanic White	34.0	34.8	33.1	1.7	
Non-Hispanic Black	33.6	34.3	32.9	1.4	
Hispanic	8.4	9.1	7.7	1.4	
Non-Hispanic American Indian	1.6	1.8	1.3	0.6	
Non-Hispanic other or mixed race	4.9	3.3	6.5	-3.1	
Missing	17.6	16.7	18.6	-1.9	
Disability					
Youth primary impairment					0.71
Intellectual or developmental disability	38.4	39.3	37.6	1.7	
Speech, hearing, or visual impairment	1.3	1.4	1.2	0.3	
Physical disability	12.5	12.8	12.2	0.6	
Other mental impairment	43.8	42.1	45.4	-3.3	
Other or unknown disability	4.0	4.4	3.7	0.7	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	95.3	95.4	95.3	0.1	0.92
Received OASDI	12.5	11.6	13.3	-1.6	0.33
Years between youth's earliest SSI eligibility and RA	8.4	8.5	8.4	0.1	0.74
Youth age at most recent SSI application	7.4	7.4	7.5	-0.1	0.75
Youth payments in the year before RA ($)					
SSI	7,227	7,243	7,211	32	0.78
OASDI	316	302	330	-28	0.60
Total SSI and OASDI	7,543	7,545	7,541	4	0.97
Household had multiple SSI-eligible children	21.6	20.6	22.6	-2.0	0.34
Enrolling parent provided a valid SSN at RA	91.5	91.2	91.8	-0.5	0.71
Parents included in the administrative data					0.63
None	3.7	3.9	3.5	0.4	
One parent	59.5	60.5	58.6	1.9	
Two parents	36.8	35.7	37.9	-2.3	
Parent SSA payment status at RA					0.70
Any parent received SSI only	11.6	10.9	12.4	-1.5	
Any parent received OASDI only	8.4	7.7	9.0	-1.4	
Any parent received both SSI and OASDI	7.4	7.3	7.5	-0.2	
No parent received any SSA payments	68.9	70.3	67.6	2.7	
No parent was included in the SSA data analyses	3.7	3.9	3.5	0.4	
Earnings					
Youth had earnings in the calendar year before RA	4.0	4.3	3.8	0.4	0.66
Youth earnings in the calendar year before RA ($)	42	45	38	7	0.69
Parent had earnings in the calendar year before RA	72.2	72.4	72.1	0.4	0.88
Parent earnings in the calendar year before RA ($)	15,505	15,648	15,363	285	0.75
Number of youth	1,591	798	793		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who completed the PROMISE five-year youth survey. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table H.2. WI PROMISE: Baseline characteristics of parent survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.1	32.7	33.5	-0.9	0.72
Youth age at RA					0.55
14	40.0	39.5	40.6	-1.1	
15	26.1	27.4	24.9	2.4	
16	33.9	33.2	34.5	-1.4	
Average age at RA	15.4	15.4	15.4	-0.0	0.77
Youth language preference at SSI application					
Prefers English for written language	95.5	94.7	96.4	-1.7	0.10
Prefers English for spoken language	95.3	94.5	96.1	-1.6	0.13
Youth living arrangement at SSI application					0.44
In parents' household	88.8	88.0	89.5	-1.5	
Own household or alone	10.5	11.1	10.0	1.1	
Another household and receiving support	0.7	0.9	0.4	0.5	
Youth race and ethnicity					0.46
Non-Hispanic White	25.6	26.7	24.6	2.1	
Non-Hispanic Black	32.6	31.6	33.6	-2.0	
Hispanic	10.7	11.7	9.7	2.1	
Non-Hispanic American Indian	1.8	1.7	2.0	-0.3	
Non-Hispanic other or mixed race	7.1	6.2	8.0	-1.8	
Missing	22.2	22.2	22.3	-0.1	
Enrolling parent age at RA	41.3	41.5	41.2	0.3	0.40
Parent race and ethnicity				†	0.07
Non-Hispanic White	34.1	35.4	32.9	2.5	
Non-Hispanic Black	33.5	33.2	33.7	-0.5	
Hispanic	7.8	8.6	6.9	1.7	
Non-Hispanic American Indian	1.5	1.6	1.3	0.3	
Non-Hispanic other or mixed race	4.8	3.3	6.4	-3.1	
Missing	18.3	17.9	18.8	-0.8	
Disability					
Youth primary impairment					0.69
Intellectual or developmental disability	38.9	39.1	38.7	0.4	
Speech, hearing, or visual impairment	1.3	1.4	1.2	0.2	
Physical disability	12.4	13.0	11.7	1.3	
Other mental impairment	43.4	41.9	44.8	-2.9	
Other or unknown disability	4.0	4.5	3.6	0.9	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	95.1	95.2	95.1	0.2	0.87
Received OASDI	12.7	12.3	13.1	-0.8	0.64
Years between youth's earliest SSI eligibility and RA	8.4	8.4	8.4	0.0	0.94
Youth age at most recent SSI application	7.4	7.4	7.5	-0.0	0.90
Youth payments in the year before RA ($)					
SSI	7,221	7,238	7,204	34	0.77
OASDI	315	304	327	-23	0.68
Total SSI and OASDI	7,536	7,542	7,531	11	0.92
Household had multiple SSI-eligible children	21.6	20.2	23.0	-2.7	0.19
Enrolling parent provided a valid SSN at RA	92.0	91.0	92.9	-2.0	0.15
Parents included in the administrative data					0.36
None	3.1	3.6	2.7	0.9	
One parent	59.5	60.4	58.6	1.8	
Two parents	37.4	36.0	38.7	-2.8	
Parent SSA payment status at RA					0.33
Any parent received SSI only	11.9	10.8	13.0	-2.1	
Any parent received OASDI only	8.7	7.9	9.5	-1.6	
Any parent received both SSI and OASDI	7.3	7.9	6.7	1.3	
No parent received any SSA payments	69.0	69.7	68.2	1.5	
No parent was included in the SSA data analyses	3.1	3.6	2.7	0.9	
Earnings					
Youth had earnings in the calendar year before RA	4.2	4.5	3.8	0.7	0.50
Youth earnings in the calendar year before RA ($)	42	49	35	13	0.41
Parent had earnings in the calendar year before RA	71.9	71.6	72.2	-0.6	0.80
Parent earnings in the calendar year before RA ($)	15,451	15,291	15,609	-318	0.73
Number of youth	1,561	786	775		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth whose parent completed the PROMISE five-year youth survey. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table H.3. WI PROMISE: Baseline characteristics of all youth enrollees (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.2	33.1	33.3	-0.2	0.91
Youth age at RA					0.80
14	39.6	39.9	39.3	0.6	
15	26.3	26.7	25.9	0.8	
16	34.1	33.4	34.8	-1.4	
Average age at RA	15.4	15.4	15.4	-0.0	0.57
Youth language preference at SSI application					
Prefers English for written language	95.4	94.8	95.9	-1.0	0.28
Prefers English for spoken language	95.2	94.7	95.7	-0.9	0.34
Youth living arrangement at SSI application					0.15
In parents' household	88.3	88.1	88.6	-0.5	
Own household or alone	11.0	10.8	11.1	-0.3	
Another household and receiving support	0.7	1.1	0.3	0.7	
Youth race and ethnicity					0.50
Non-Hispanic White	24.8	25.8	23.8	2.0	
Non-Hispanic Black	32.0	31.7	32.3	-0.7	
Hispanic	11.1	12.0	10.1	1.9	
Non-Hispanic American Indian	2.0	2.0	1.9	0.1	
Non-Hispanic other or mixed race	6.6	6.0	7.3	-1.3	
Missing	23.5	22.5	24.5	-2.0	
Enrolling parent age at RA	41.2	41.2	41.2	-0.0	0.98
Parent race and ethnicity				††	0.03
Non-Hispanic White	33.2	34.3	32.0	2.3	
Non-Hispanic Black	32.8	33.1	32.5	0.6	
Hispanic	8.1	8.8	7.4	1.4	
Non-Hispanic American Indian	1.6	2.0	1.3	0.7	
Non-Hispanic other or mixed race	5.0	3.6	6.4	-2.9	
Missing	19.3	18.2	20.4	-2.2	
Disability					
Youth primary impairment					0.71
Intellectual or developmental disability	38.3	38.5	38.1	0.5	
Speech, hearing, or visual impairment	1.2	1.3	1.1	0.2	
Physical disability	12.6	13.2	11.9	1.2	
Other mental impairment	44.0	42.7	45.3	-2.6	
Other or unknown disability	4.0	4.3	3.6	0.7	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	95.5	95.6	95.3	0.2	0.81
Received OASDI	11.9	11.4	12.5	-1.1	0.46
Years between youth's earliest SSI eligibility and RA	8.4	8.4	8.4	0.0	0.90
Youth age at most recent SSI application	7.4	7.4	7.4	0.0	0.95
Youth payments in the year before RA ($)					
SSI	7,238	7,246	7,229	16	0.87
OASDI	306	295	316	-21	0.67
Total SSI and OASDI	7,543	7,541	7,546	-5	0.96
Household had multiple SSI-eligible children	21.9	20.8	23.1	-2.3	0.22
Enrolling parent provided a valid SSN at RA	91.3	90.8	91.8	-0.9	0.48
Parents included in the administrative data					0.92
None	3.4	3.5	3.4	0.1	
One parent	59.7	60.1	59.3	0.8	
Two parents	36.9	36.4	37.3	-0.9	
Parent SSA payment status at RA					0.62
Any parent received SSI only	11.9	11.2	12.6	-1.4	
Any parent received OASDI only	8.1	7.4	8.9	-1.5	
Any parent received both SSI and OASDI	7.6	7.7	7.5	0.2	
No parent received any SSA payments	69.0	70.3	67.7	2.7	
No parent was included in the SSA data analyses	3.4	3.5	3.4	0.1	
Earnings					
Youth had earnings in the calendar year before RA	3.9	4.0	3.8	0.2	0.83
Youth earnings in the calendar year before RA ($)	39	40	37	3	0.84
Parent had earnings in the calendar year before RA	72.0	72.0	72.0	-0.0	0.99
Parent earnings in the calendar year before RA ($)	15,293	15,256	15,329	-73	0.93
Number of youth	1,896	950	946		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who enrolled in PROMISE. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table H.4. WI PROMISE: Baseline characteristics of proxy youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	26.5	25.0	28.1	-3.1	0.43
Youth age at RA					0.93
14	40.6	40.2	40.9	-0.6	
15	27.5	28.2	26.8	1.5	
16	31.9	31.5	32.4	-0.8	
Average age at RA	15.4	15.3	15.4	-0.0	0.84
Youth language preference at SSI application					
Prefers English for written language	93.7	92.0	95.6	-3.6*	0.10
Prefers English for spoken language	93.1	91.5	94.8	-3.3	0.15
Youth living arrangement at SSI application					0.17
In parents' household	86.9	86.2	87.5	-1.3	
Own household or alone	12.4	12.4	12.5	-0.1	
Another household and receiving support	0.7	1.4	0.0	1.4	
Youth race and ethnicity					0.40
Non-Hispanic White	21.5	21.3	21.6	-0.3	
Non-Hispanic Black	28.2	27.0	29.5	-2.6	
Hispanic	10.2	10.1	10.3	-0.2	
Non-Hispanic American Indian	1.8	1.0	2.6	-1.6	
Non-Hispanic other or mixed race	5.2	4.1	6.3	-2.2	
Missing	33.2	36.4	29.6	6.8	
Enrolling parent age at RA	41.4	41.4	41.5	-0.1	0.86
Parent race and ethnicity					0.78
Non-Hispanic White	27.7	26.4	29.0	-2.6	
Non-Hispanic Black	31.1	32.1	30.1	1.9	
Hispanic	10.0	11.0	8.8	2.2	
Non-Hispanic American Indian	2.2	2.1	2.2	-0.1	
Non-Hispanic other or mixed race	3.5	2.5	4.5	-2.0	
Missing	25.6	25.9	25.3	0.6	
Disability					
Youth primary impairment					0.76
Intellectual or developmental disability	37.5	39.1	35.8	3.3	
Speech, hearing, or visual impairment	1.3	1.4	1.2	0.3	
Physical disability	12.8	13.5	12.1	1.5	
Other mental impairment	42.3	39.5	45.4	-6.0	
Other or unknown disability	6.0	6.4	5.6	0.9	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	95.1	94.6	95.6	-1.0	0.63
Received OASDI	11.5	10.1	13.1	-3.0	0.30
Years between youth's earliest SSI eligibility and RA	8.8	8.9	8.7	0.1	0.73
Youth age at most recent SSI application	7.2	7.1	7.2	-0.1	0.85
Youth payments in the year before RA ($)					
SSI	7,240	7,254	7,224	30	0.88
OASDI	288	253	327	-74	0.42
Total SSI and OASDI	7,528	7,507	7,551	-44	0.82
Household had multiple SSI-eligible children	21.7	18.3	25.3	-7.0*	0.06
Enrolling parent provided a valid SSN at RA	88.7	88.3	89.2	-0.9	0.75
Parents included in the administrative data					0.45
None	4.6	5.7	3.4	2.3	
One parent	59.4	58.3	60.6	-2.3	
Two parents	36.0	36.0	36.1	-0.0	
Parent SSA payment status at RA					0.65
Any parent received SSI only	12.3	12.9	11.7	1.2	
Any parent received OASDI only	8.4	7.3	9.5	-2.3	
Any parent received both SSI and OASDI	6.5	6.8	6.3	0.5	
No parent received any SSA payments	68.2	67.3	69.1	-1.7	
No parent was included in the SSA data analyses	4.6	5.7	3.4	2.3	
Earnings					
Youth had earnings in the calendar year before RA	4.1	4.4	3.8	0.6	0.72
Youth earnings in the calendar year before RA ($)	17	16	18	-3	0.82
Parent had earnings in the calendar year before RA	72.3	71.9	72.7	-0.8	0.85
Parent earnings in the calendar year before RA ($)	15,258	15,764	14,726	1,038	0.52
Number of youth	506	262	244		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who completed the PROMISE five-year youth survey by proxy. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

2. Differences between survey respondents and nonrespondents

We compared youth and parent survey respondents with nonrespondents across 25 baseline characteristics to assess the extent to which survey nonresponse might limit generalizability of the impact findings to all evaluation enrollees (Appendix Tables H.5 and H.6). Youth survey respondents differed from nonrespondents with respect to youth average age at RA and enrolling parent age at RA. Parent survey respondents differed from nonrespondents with respect to youth average age at RA, enrolling parent age at RA, the share of youth who received OASDI benefits at RA, and the share of enrolling parents who provided a valid SSN at RA. Overall, even when the differences were statistically significant, they generally were small. The extent and magnitude of the differences suggested that the respondents were not markedly different from the nonrespondents. To account for survey nonresponse, we calculated and used survey weights in all regression models to estimate impacts on the survey-based outcome measures.

Appendix Table H.5. WI PROMISE: Baseline characteristics of youth survey respondents and nonrespondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.2	33.4	32.1	1.2	0.67
Youth age at RA				†	0.10
14	39.6	40.4	35.7	4.6	
15	26.3	26.6	24.9	1.7	
16	34.1	33.1	39.3	-6.3	
Average age at RA	15.4	15.4	15.5	-0.1*	0.07
Youth language preference at SSI application					
Prefers English for written language	95.4	95.5	94.8	0.7	0.60
Prefers English for spoken language	95.2	95.3	94.8	0.5	0.70
Youth living arrangement at SSI application					0.47
In parents' household	88.3	88.0	90.2	-2.2	
Own household or alone	11.0	11.3	9.5	1.7	
Another household and receiving support	0.7	0.8	0.3	0.4	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	24.8	27.0	13.1	13.9	
Non-Hispanic Black	32.0	33.9	22.0	12.0	
Hispanic	11.1	11.4	9.5	1.9	
Non-Hispanic American Indian	2.0	1.9	2.0	-0.0	
Non-Hispanic other or mixed race	6.6	7.3	3.3	4.0	
Missing	23.5	18.4	50.2	-31.7	
Enrolling parent age at RA	41.2	41.4	40.1	1.3***	0.00
Parent race and ethnicity				†††	0.00
Non-Hispanic White	33.2	35.8	19.3	16.5	
Non-Hispanic Black	32.8	34.7	22.6	12.1	
Hispanic	8.1	8.4	6.6	1.9	
Non-Hispanic American Indian	1.6	1.6	2.0	-0.4	
Non-Hispanic other or mixed race	5.0	5.2	4.3	0.9	
Missing	19.3	14.3	45.2	-30.9	
Disability					
Youth primary impairment					0.32
Intellectual or developmental disability	38.3	38.8	35.4	3.4	
Speech, hearing, or visual impairment	1.2	1.3	0.3	1.0	
Physical disability	12.6	12.3	14.1	-1.8	
Other mental impairment	44.0	43.5	46.9	-3.4	
Other or unknown disability	4.0	4.1	3.3	0.8	

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	95.5	95.3	96.1	-0.7	0.56
Received OASDI	11.9	12.3	9.8	2.5	0.19
Years between youth's earliest SSI eligibility and RA	8.4	8.4	8.4	0.0	0.98
Youth age at most recent SSI application	7.4	7.4	7.5	-0.0	0.90
Youth payments in the year before RA ($)					
SSI	7,238	7,223	7,314	-91	0.52
OASDI	306	317	245	72	0.25
Total SSI and OASDI	7,543	7,540	7,559	-19	0.88
Household had multiple SSI-eligible children	21.9	21.6	23.8	-2.2	0.42
Enrolling parent provided a valid SSN at RA	91.3	91.6	89.5	2.1	0.26
Parents included in the administrative data					0.70
None	3.4	3.6	2.6	1.0	
One parent	59.7	59.6	60.0	-0.4	
Two parents	36.9	36.8	37.4	-0.6	
Parent SSA payment status at RA					0.79
Any parent received SSI only	11.9	11.8	12.5	-0.7	
Any parent received OASDI only	8.1	8.4	6.9	1.5	
Any parent received both SSI and OASDI	7.6	7.5	8.2	-0.7	
No parent received any SSA payments	69.0	68.8	69.8	-1.0	
No parent was included in the SSA data analyses	3.4	3.6	2.6	1.0	
Earnings					
Youth had earnings in the calendar year before RA	3.9	3.8	4.3	-0.4	0.73
Youth earnings in the calendar year before RA ($)	39	39	35	4	0.79
Parent had earnings in the calendar year before RA	72.0	72.0	72.1	-0.1	0.98
Parent earnings in the calendar year before RA ($)	15,293	15,413	14,673	740	0.51
Number of youth	1,896	1,591	305		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who enrolled in PROMISE. Nonrespondents include youth ineligible for the survey because they died or withdrew from the study. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table H.6. WI PROMISE: Baseline characteristics of parent survey respondents and nonrespondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.2	33.1	33.4	-0.3	0.91
Youth age at RA					0.11
14	39.6	40.5	35.5	5.0	
15	26.3	26.5	25.7	0.8	
16	34.1	33.1	38.8	-5.8	
Average age at RA	15.4	15.4	15.5	-0.1**	0.05
Youth language preference at SSI application					
Prefers English for written language	95.4	95.5	94.9	0.5	0.69
Prefers English for spoken language	95.2	95.3	94.9	0.3	0.80
Youth living arrangement at SSI application					0.71
In parents' household	88.3	88.6	87.2	1.4	
Own household or alone	11.0	10.8	11.9	-1.2	
Another household and receiving support	0.7	0.6	0.9	-0.3	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	24.8	26.8	15.2	11.6	
Non-Hispanic Black	32.0	34.3	21.5	12.8	
Hispanic	11.1	11.3	10.1	1.1	
Non-Hispanic American Indian	2.0	1.9	2.1	-0.2	
Non-Hispanic other or mixed race	6.6	7.3	3.6	3.7	
Missing	23.5	18.4	47.5	-29.1	
Enrolling parent age at RA	41.2	41.4	40.5	0.9**	0.05
Parent race and ethnicity				†††	0.00
Non-Hispanic White	33.2	35.7	21.5	14.2	
Non-Hispanic Black	32.8	35.5	20.0	15.5	
Hispanic	8.1	8.3	7.5	0.8	
Non-Hispanic American Indian	1.6	1.5	2.1	-0.6	
Non-Hispanic other or mixed race	5.0	5.0	5.1	-0.1	
Missing	19.3	14.0	43.9	-29.9	
Disability					
Youth primary impairment				††	0.02
Intellectual or developmental disability	38.3	39.7	31.9	7.7	
Speech, hearing, or visual impairment	1.2	1.3	0.3	1.0	
Physical disability	12.6	12.2	14.0	-1.8	
Other mental impairment	44.0	42.7	50.4	-7.8	
Other or unknown disability	4.0	4.1	3.3	0.8	

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	95.5	95.3	96.4	-1.2	0.31
Received OASDI	11.9	12.6	9.0	3.6**	0.04
Years between youth's earliest SSI eligibility and RA	8.4	8.4	8.5	-0.1	0.63
Youth age at most recent SSI application	7.4	7.4	7.5	-0.1	0.66
Youth payments in the year before RA ($)					
SSI	7,238	7,235	7,251	-16	0.90
OASDI	306	313	270	43	0.51
Total SSI and OASDI	7,543	7,548	7,521	27	0.83
Household had multiple SSI-eligible children	21.9	21.6	23.4	-1.8	0.48
Enrolling parent provided a valid SSN at RA	91.3	91.9	88.4	3.6*	0.06
Parents included in the administrative data					0.49
None	3.4	3.2	4.5	-1.3	
One parent	59.7	59.7	59.7	0.0	
Two parents	36.9	37.1	35.8	1.3	
Parent SSA payment status at RA					0.26
Any parent received SSI only	11.9	12.0	11.0	1.0	
Any parent received OASDI only	8.1	8.6	5.7	3.0	
Any parent received both SSI and OASDI	7.6	7.4	8.7	-1.3	
No parent received any SSA payments	69.0	68.7	70.1	-1.4	
No parent was included in the SSA data analyses	3.4	3.2	4.5	-1.3	
Earnings					
Youth had earnings in the calendar year before RA	3.9	3.9	3.9	0.0	0.98
Youth earnings in the calendar year before RA ($)	39	39	39	-1	0.97
Parent had earnings in the calendar year before RA	72.0	71.5	74.1	-2.5	0.35
Parent earnings in the calendar year before RA ($)	15,293	15,317	15,177	141	0.90
Number of youth	1,896	1,561	335		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes the parents who were eligible for the survey. Nonrespondents include parents ineligible for the survey because they died or withdrew from the study. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

3. Differences between self-reporting and proxy youth respondents

We compared the baseline characteristics of youth who self-responded to the survey to those who responded via proxies to assess whether systematically missing data from different survey modes might affect the estimated impacts on survey-based outcomes (Appendix Table H.7). We found differences in 7 of 25 baseline characteristics by survey response type. Compared with self-respondents, youth who responded by proxy were less likely to be female or prefer English as a spoken or written language; they had more years between earliest SSI eligibility and RA and were younger at the time of their most recent SSI application; they had lower average earnings in the year before RA; their enrolling parent was less likely to have provided an SSN at RA. Because of these differences, findings on survey-based outcomes that are available only for self-respondents might not generalize to all survey respondents.

Appendix Table H.7. WI PROMISE: Baseline characteristics of proxy and self-reporting youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Proxy respondent (B)	Self-reporting respondent (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.3	26.5	36.6	-10.1***	0.00
Youth age at RA					0.53
14	40.0	40.6	39.7	0.9	
15	26.3	27.5	25.6	1.9	
16	33.8	31.9	34.7	-2.7	
Average age at RA	15.4	15.4	15.4	-0.0	0.35
Youth language preference at SSI application					
Prefers English for written language	95.4	93.7	96.2	-2.5**	0.04
Prefers English for spoken language	95.2	93.1	96.2	-3.1**	0.02
Youth living arrangement at SSI application					0.53
In parents' household	88.1	86.9	88.7	-1.9	
Own household or alone	11.1	12.4	10.5	1.9	
Another household and receiving support	0.7	0.7	0.7	-0.0	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	25.0	21.5	26.8	-5.3	
Non-Hispanic Black	32.3	28.2	34.2	-6.0	
Hispanic	11.1	10.2	11.6	-1.4	
Non-Hispanic American Indian	1.8	1.8	1.8	-0.0	
Non-Hispanic other or mixed race	6.7	5.2	7.5	-2.3	
Missing	23.0	33.2	18.1	15.0	
Enrolling parent age at RA	41.4	41.4	41.4	0.1	0.86
Parent race and ethnicity				†††	0.00
Non-Hispanic White	34.0	27.7	37.0	-9.4	
Non-Hispanic Black	33.6	31.1	34.8	-3.7	
Hispanic	8.4	10.0	7.6	2.4	
Non-Hispanic American Indian	1.6	2.2	1.3	0.9	
Non-Hispanic other or mixed race	4.9	3.5	5.6	-2.1	
Missing	17.6	25.6	13.7	11.9	
Disability					
Youth primary impairment				†	0.08
Intellectual or developmental disability	38.4	37.5	38.9	-1.3	
Speech, hearing, or visual impairment	1.3	1.3	1.3	0.0	
Physical disability	12.5	12.8	12.3	0.5	
Other mental impairment	43.8	42.3	44.5	-2.2	
Other or unknown disability	4.0	6.0	3.0	3.0	

Baseline characteristic	All (A)	Proxy respondent (B)	Self-reporting respondent (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	95.3	95.1	95.4	-0.3	0.78
Received OASDI	12.5	11.5	12.9	-1.4	0.44
Years between youth's earliest SSI eligibility and RA	8.4	8.8	8.2	0.6**	0.02
Youth age at most recent SSI application	7.4	7.2	7.6	-0.4*	0.09
Youth payments in the year before RA ($)					
SSI	7,227	7,240	7,221	19	0.88
OASDI	316	288	330	-41	0.47
Total SSI and OASDI	7,543	7,528	7,550	-22	0.84
Household had multiple SSI-eligible children	21.6	21.7	21.5	0.1	0.95
Enrolling parent provided a valid SSN at RA	91.5	88.7	92.9	-4.2**	0.01
Parents included in the administrative data					0.42
None	3.7	4.6	3.3	1.3	
One parent	59.5	59.4	59.6	-0.2	
Two parents	36.8	36.0	37.2	-1.1	
Parent SSA payment status at RA					0.60
Any parent received SSI only	11.6	12.3	11.3	1.1	
Any parent received OASDI only	8.4	8.4	8.3	0.0	
Any parent received both SSI and OASDI	7.4	6.5	7.8	-1.3	
No parent received any SSA payments	68.9	68.2	69.3	-1.1	
No parent was included in the SSA data analyses	3.7	4.6	3.3	1.3	
Earnings					
Youth had earnings in the calendar year before RA	4.0	4.1	4.0	0.1	0.91
Youth earnings in the calendar year before RA ($)	42	17	54	-37***	0.00
Parent had earnings in the calendar year before RA	72.2	72.3	72.2	0.0	0.99
Parent earnings in the calendar year before RA ($)	15,505	15,258	15,623	-365	0.71
Number of youth	1,591	506	1,085		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all PROMISE five-year youth survey respondents. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

B. Findings from the impact analysis

In this section, we present findings from the impact analysis of WI PROMISE. First, we present impacts estimated through the main models. Second, we present the results of sensitivity analyses. Third, we present impacts for key subgroups of evaluation enrollees.

1. Impact estimates

Appendix Tables H.8–H.17 provide results and inference statistics for the regression-adjusted impacts estimated through the main models described in Appendix B. For each outcome measure, we report the estimated regression-adjusted impact; the control group mean (weighted, as applicable); and additional inference statistics, such as standard errors, effect sizes, and sample sizes by treatment status.

Appendix Table H.8. WI PROMISE: Impact on the youth's education and training (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group sample size	Control group sample size
Primary outcomes							
Enrolled in an educational or training program	35.4	-0.1	0.96	2.4	-0.003	767	754
Has a GED, high school diploma, or certificate of completion	67.2	1.6	0.50	2.4	0.044	792	785
Supplementary outcomes							
Enrolled in postsecondary education	9.8	0.9	0.56	1.5	0.059	786	779
Type of school attending							
High school serving a variety of students	10.6	0.7	0.65	1.6	0.044	786	779
High school serving only students with disabilities	2.2	1.0	0.21	0.8	0.240	786	779
GED program or other adult education program	2.2	-0.8	0.24	0.7	-0.278	786	779
Postsecondary vocational, trade, or technical school	4.7	-1.2	0.22	1.0	-0.192	786	779
Postsecondary college or advanced degree program	5.2	2.1*	0.08	1.2	0.222	786	779
Other type of school	1.4	-0.2	0.76	0.6	-0.085	786	779
Not attending school	73.8	-1.7	0.44	2.2	-0.051	786	779
Highest grade completed							
Lower than 12th grade	27.9	-2.3	0.29	2.2	-0.072	798	793
12th grade or senior in high school	64.2	2.0	0.40	2.4	0.054	798	793
Some or all of college or university	5.5	0.9	0.44	1.2	0.101	798	793
Other or do not know	2.4	-0.7	0.36	0.7	-0.198	798	793
Enrolled in a training program	12.4	-1.7	0.31	1.6	-0.099	760	743
Received any training credential in the past year	7.2	4.8***	0.00	1.5	0.340	784	789
Any school suspensions or expulsions in the past year	4.6	-1.7*	0.07	1.0	-0.300	761	744

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group sample size	Control group sample size
Accommodations							
Receives educational accommodation	18.1	0.8	0.68	1.9	0.031	789	779
Receives training accommodation	7.6	-1.5	0.25	1.3	-0.138	758	743
Received supports or services for postsecondary education in the past year	21.1	1.1	0.59	2.1	0.040	786	785

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

GED = General Educational Development.

Appendix Table H.9. WI PROMISE: Impact on the youth's employment and earnings (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Employed in a paid job in the past year[a]	50.6	6.8***	0.01	2.5	0.166	798	793
Earnings in the past year ($)	4,904	668	0.15	467	0.073	798	793
Earnings during the five calendar years after RA ($)	13,302	887	0.32	894	0.045	950	946
Supplementary outcomes							
Employment in the past year							
Any employment	54.6	6.2**	0.01	2.5	0.154	798	793
Weekly hours worked	8.2	1.1	0.13	0.7	0.076	798	793
Employed in a paid job offering fringe benefits	27.7	1.7	0.47	2.3	0.050	798	793
Employment settings							
Integrated	42.5	6.5**	0.01	2.5	0.158	798	793
Outside of school-sponsored activities	47.6	4.7*	0.06	2.6	0.114	798	793
With coaching	11.3	3.6**	0.04	1.8	0.194	798	793
Received supports or services in getting or keeping a job	23.6	3.1	0.16	2.2	0.100	789	788
Employment at the time of the survey							
Any paid employment	30.6	4.8**	0.05	2.4	0.131	798	793
Average weekly earnings ($)	98	14	0.19	11	0.067	798	793
Weekly hours worked	8.4	1.0	0.20	0.8	0.065	798	793
Labor force participation	59.3	2.4	0.34	2.5	0.062	798	793
Employment and earnings in calendar years after RA							
Ever employed in Year 1	29.1	15.1***	0.00	2.1	0.398	950	946
Ever employed in Year 2	44.7	10.8***	0.00	2.2	0.264	950	946
Ever employed in Year 3	56.7	5.4**	0.02	2.2	0.136	950	946
Ever employed in Year 4	59.9	6.0***	0.01	2.2	0.157	950	946
Ever employed in Year 5	60.1	1.7	0.46	2.2	0.042	950	946
Ever employed during Years 1-5	78.3	5.6***	0.00	1.8	0.222	950	946
Earnings in Year 1 ($)	580	124*	0.06	66	0.081	950	946

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Earnings in Year 2 ($)	1,343	195	0.12	124	0.070	950	946
Earnings in Year 3 ($)	2,458	221	0.27	199	0.051	950	946
Earnings in Year 4 ($)	3,738	119	0.68	286	0.019	950	946
Earnings in Year 5 ($)	5,183	228	0.55	377	0.028	950	946
VR services during the 5 years after RA[a]							
Applied for VR services	38.6	57.5***	0.00	1.7	2.214	950	946
Received VR services	30.5	54.7***	0.00	1.8	1.562	950	946

Source: PROMISE five-year survey, RSA-911 data (VR service outcomes), and SSA administrative records (employment and earnings in years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] RSA-911 data are available only through 2020. VR services outcomes used only four years of data for youth who enrolled in PROMISE in 2016.

N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration; VR = vocational rehabilitation.

Appendix Table H.10. WI PROMISE: Impact on the youth's self-determination and expectations (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Self-determination score (scale: 0 to 100)[a]	78.2	-0.4	0.65	0.9	-0.028	508	513
Youth expects to be financially independent at age 25	58.4	4.4	0.15	3.0	0.112	517	537
Supplementary outcomes							
Scores on subdomains of self-determination[a]							
Autonomy (scale: 0 to 300)	141.9	-1.9	0.60	3.6	-0.033	510	517
Psychological empowerment (scale: 0 to 100)	86.1	-0.4	0.73	1.2	-0.022	508	514
Self-realization (scale: 0 to 100)	88.9	0.4	0.69	1.1	0.025	505	514
Agentic action (scale: 0 to 100)	90.6	-0.6	0.65	1.2	-0.028	506	513
Youth expects to:							
Get postsecondary education (beyond high school/GED)	52.4	3.2	0.30	3.1	0.079	506	507
Live independently at age 25	68.7	2.9	0.30	2.8	0.083	510	528
Be employed in a paid job at age 25	84.4	4.1**	0.05	2.1	0.215	520	538
Parent expects youth to:							
Get postsecondary education (beyond high school/GED)	34.5	0.1	0.98	2.5	0.002	731	726
Live independently at age 25	46.1	0.1	0.96	2.6	0.003	726	729
Be financially independent at age 25	40.9	1.3	0.60	2.5	0.033	739	737
Be employed in a paid job at age 25	76.3	6.6***	0.00	2.1	0.248	743	747
Parent believes it important that youth be employed eventually	92.1	-0.5	0.73	1.5	-0.041	728	723

Source: PROMISE five-year survey.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] Higher scores on the scales indicate higher levels of self-determination.

GED = General Educational Development; N = sample size.

Appendix Table H.11. WI PROMISE: Impact on the youth's SSA payments and knowledge (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Received SSA payments in Year 5 after RA	67.5	1.0	0.62	2.1	0.028	950	946
Total SSA payments in Year 5 after RA ($)	5,385	184	0.32	186	0.043	950	946
Total SSA payments during Years 1–5 after RA ($)	33,377	800	0.15	559	0.060	950	946
Supplementary outcomes							
Aware of the following SSA policies							
Children receiving SSI are not automatically eligible for SSI as adults	42.1	3.3	0.29	3.1	0.081	508	514
People receiving SSI can work for pay	76.9	-2.0	0.47	2.7	-0.065	508	514
People receiving SSI must report earnings to SSA	80.1	-3.1	0.22	2.5	-0.112	508	514
Aware of the following work supports							
SSI Student Earned Income Exclusion	8.4	2.6	0.15	1.8	0.183	508	514
SSI earned income exclusion	8.4	4.1**	0.04	2.0	0.267	508	514
SSI PASS plan	9.6	1.4	0.45	1.9	0.093	508	514
ABLE account	7.4	0.5	0.78	1.7	0.041	508	514
SSA payments in years after RA							
Received any in Year 1	97.5	0.1	0.92	0.7	0.017	950	946
Received any in Year 2	93.3	0.7	0.53	1.1	0.070	950	946
Received any in Year 3	88.4	0.0	0.98	1.4	0.002	950	946
Received any in Year 4	76.3	2.8	0.13	1.8	0.097	950	946
Received any in Years 1–5	98.4	-0.0	0.97	0.5	-0.007	950	946
Amount in Year 1 ($)	8,021	31	0.73	89	0.012	950	946
Amount in Year 2 ($)	7,403	152	0.20	120	0.052	950	946
Amount in Year 3 ($)	6,657	174	0.25	150	0.051	950	946
Amount in Year 4 ($)	5,911	260	0.13	173	0.066	950	946

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
SSI payments in years after RA							
Received any in Year 1	96.7	0.2	0.84	0.8	0.031	950	946
Received any in Year 2	91.2	1.1	0.35	1.2	0.091	950	946
Received any in Year 3	85.3	0.9	0.55	1.6	0.046	950	946
Received any in Year 4	73.9	2.8	0.14	1.9	0.092	950	946
Received any in Year 5	65.4	1.1	0.61	2.1	0.029	950	946
Received any in Years 1–5	97.7	0.4	0.52	0.6	0.122	950	946
Amount in Year 1 ($)	7,583	39	0.70	103	0.014	950	946
Amount in Year 2 ($)	6,918	200	0.12	129	0.063	950	946
Amount in Year 3 ($)	6,156	250	0.10	153	0.072	950	946
Amount in Year 4 ($)	5,440	249	0.15	174	0.064	950	946
Amount in Year 5 ($)	4,938	107	0.56	183	0.026	950	946
Total amount during Years 1–5 ($)	31,035	844	0.15	586	0.061	950	946
OASDI benefits in years after RA							
Received any in Year 1	13.8	-1.1	0.38	1.3	-0.060	950	946
Received any in Year 2	15.3	-2.0	0.14	1.4	-0.098	950	946
Received any in Year 3	14.9	-2.7*	0.05	1.4	-0.142	950	946
Received any in Year 4	12.6	-0.7	0.60	1.4	-0.042	950	946
Received any in Year 5	9.8	0.4	0.79	1.3	0.024	950	946
Received any in Years 1–5	18.7	-1.4	0.37	1.6	-0.057	950	946
Amount in Year 1 ($)	437	-9	0.90	66	-0.006	950	946
Amount in Year 2 ($)	485	-47	0.49	69	-0.030	950	946
Amount in Year 3 ($)	501	-75	0.32	76	-0.045	950	946
Amount in Year 4 ($)	471	11	0.89	80	0.006	950	946
Amount in Year 5 ($)	447	77	0.36	84	0.042	950	946
Total amount during Years 1–5 ($)	2,342	-44	0.89	326	-0.006	950	946

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Age-18 redetermination status five years after RA							
Final decision: benefits ceased	19.5	1.6	0.35	1.8	0.061	950	946
Final decision: benefits continued	36.5	-0.7	0.73	2.1	-0.019	950	946
Final decision is pending	11.2	-0.4	0.76	1.4	-0.027	950	946
Did not have an age-18 redetermination	32.9	-0.5	0.82	2.0	-0.013	950	946

Source: SSA administrative records and PROMISE five-year survey (awareness of work supports and SSA policies).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

ABLE = Achieving a Better Life Experience; OASDI = Old-Age, Survivors, and Disability Insurance; PASS = Plan for Achieving Self Support; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table H.12. WI PROMISE: Impact on the youth's health insurance coverage and expenditures (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Covered by any health insurance	86.8	0.9	0.60	1.7	0.048	761	772
Average monthly Medicaid and Medicare expenditures in the five years after RA ($)	814	29	0.38	33	0.030	950	946
Supplementary outcomes							
Covered by private health insurance	11.0	-0.5	0.73	1.6	-0.035	761	772
Covered by private health insurance purchased through an ACA health exchange	0.4	-0.3	0.29	0.3	-0.880	761	772
Medicaid and Medicare participation in years after RA							
Ever enrolled in Year 1	99.3	0.6*	0.08	0.3	0.840	950	946
Ever enrolled in Year 2	97.5	0.0	0.98	0.7	0.004	950	946
Ever enrolled in Year 3	96.4	-0.5	0.60	0.9	-0.077	950	946
Ever enrolled in Year 4	92.5	0.5	0.70	1.2	0.041	950	946
Ever enrolled in Year 5	90.2	-0.8	0.55	1.4	-0.054	950	946
Percentage of months enrolled in Years 1–5	88.6	-0.2	0.83	0.8	-0.010	950	946
Average monthly Medicaid and Medicare expenditures in years after RA							
Year 1 ($)	736	-5	0.84	27	-0.005	950	946
Year 2 ($)	737	16	0.65	37	0.016	950	946
Year 3 ($)	792	25	0.57	43	0.022	950	946
Year 4 ($)	876	59	0.23	49	0.047	950	946
Year 5 ($)	932	51	0.32	51	0.040	950	946
Medicaid participation in years after RA							
Ever enrolled in Year 1	99.3	0.6*	0.08	0.3	0.840	950	946
Ever enrolled in Year 2	97.5	0.0	0.98	0.7	0.004	950	946
Ever enrolled in Year 3	96.4	-0.5	0.60	0.9	-0.077	950	946
Ever enrolled in Year 4	92.4	0.6	0.64	1.2	0.050	950	946
Ever enrolled in Year 5	90.1	-0.8	0.55	1.4	-0.053	950	946
Percentage of months enrolled in Years 1–5	88.6	-0.2	0.81	0.8	-0.011	950	946

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Average monthly Medicaid expenditures in years after RA							
Year 1 ($)	736	-5	0.84	27	-0.005	950	946
Year 2 ($)	737	16	0.65	37	0.016	950	946
Year 3 ($)	792	25	0.56	43	0.022	950	946
Year 4 ($)	863	64	0.19	48	0.052	950	946
Year 5 ($)	905	61	0.22	50	0.050	950	946
Years 1–5 ($)	806	32	0.33	33	0.034	950	946
Medicare participation in years after RA							
Ever enrolled in Year 1	0.0	0.0	n.a.	0.0	n.a.	950	946
Ever enrolled in Year 2	0.0	0.0	n.a.	0.0	n.a.	950	946
Ever enrolled in Year 3	0.2	0.0	0.99	0.2	0.007	950	946
Ever enrolled in Year 4	3.4	0.0	0.99	0.8	0.001	950	946
Ever enrolled in Year 5	6.3	-0.8	0.47	1.0	-0.082	950	946
Percentage of months enrolled in Years 1–5	1.4	-0.1	0.70	0.3	-0.017	950	946
Average monthly Medicare expenditures in years after RA							
Year 1 ($)	0	0	n.a.	0	n.a.	950	946
Year 2 ($)	0	0	n.a.	0	n.a.	950	946
Year 3 ($)	0	-0	0.35	0	-0.046	950	946
Year 4 ($)	12	-5	0.27	5	-0.051	950	946
Year 5 ($)	27	-10	0.31	10	-0.046	950	946
Years 1–5 ($)	8	-3	0.23	3	-0.054	950	946

Source: CMS administrative records and PROMISE five-year survey (non-Medicare/Medicaid outcomes).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

ACA = Affordable Care Act; CMS = Centers for Medicare & Medicaid Services; N = sample size; RA = random assignment.

Appendix Table H.13. WI PROMISE: Impact on the youth's economic and social well-being (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Total income in the past year ($)	10,493	879**	0.04	434	0.103	798	793
Total income during the five calendar years after RA ($)	47,921	1,987**	0.02	879	0.102	950	946
Supplementary outcomes							
Engaging in productive market activities[a]	74.8	1.7	0.44	2.2	0.055	786	776
Income in calendar years after RA							
Year 1 ($)	8,868	236*	0.07	129	0.072	950	946
Year 2 ($)	8,933	433**	0.01	175	0.108	950	946
Year 3 ($)	9,274	489**	0.02	213	0.105	950	946
Year 4 ($)	10,008	313	0.25	270	0.054	950	946
Year 5 ($)	10,838	516	0.13	345	0.069	950	946
Household income in the past year ($)[b]	28,134	866	0.40	1,027	0.045	698	672
Household receives TANF, SNAP, or housing assistance[b]	51.6	0.8	0.77	2.6	0.019	717	700
Amount of public assistance in the past month							
TANF ($)[b]	6	5	0.22	4	0.066	715	698
SNAP benefits ($)[b]	147	-1	0.91	11	-0.006	723	707
Housing assistance ($)[b]	58	1	0.95	10	0.003	719	707
Family structure and living arrangements							
Living independently	19.0	2.0	0.33	2.0	0.074	797	790
Married or in a marriage-like relationship	4.8	1.2	0.30	1.1	0.141	760	745
Responsible for a child or children	12.4	2.6	0.13	1.8	0.135	756	746
Engagement with the criminal justice system							
Ever arrested	20.7	-0.0	0.98	2.0	-0.002	750	745
Number of times arrested	0.7	-0.1	0.29	0.1	-0.054	750	745
Arrested in the past year	7.0	1.4	0.31	1.4	0.120	747	744
Ever incarcerated	8.0	-1.3	0.35	1.4	-0.111	733	730
Length of incarceration (days)	42.2	-15.2	0.12	9.8	-0.082	733	730

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Self-reported health status							
Poor	4.8	0.7	0.55	1.2	0.087	755	743
Fair	18.9	-2.4	0.23	2.0	-0.101	755	743
Good	37.1	1.6	0.53	2.5	0.041	755	743
Very good or excellent	39.2	0.1	0.96	2.5	0.004	755	743
Received help in getting accommodations for school, work, or living independently in past year	22.0	2.4	0.26	2.1	0.083	785	786

Source: PROMISE five-year surveys and SSA administrative records (SSA payments and income in calendar years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] Productive market activities include engaging in any of the following at the time of the five-year survey: employment in paid or unpaid work, looking for work, or enrollment in school or a training program.

[b] This outcome is based on data from the parent survey about the parent's household if the youth lived with the parent at interview.

N = sample size; RA = random assignment; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; TANF = Temporary Assistance for Needy Families.

Appendix Table H.14. WI PROMISE: Impact on the parents' employment and earnings (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent worked for pay in the past year	69.7	1.6	0.44	2.1	0.047	785	774
Parents' earnings in the past year ($)	23,129	703	0.60	1,322	0.027	786	775
Parents' earnings during the five calendar years after RA ($)	107,697	945	0.76	3,062	0.009	917	914
Supplementary outcomes							
Highest educational attainment achieved by either parent							
Not a high school graduate	21.0	-3.0	0.12	1.9	-0.117	786	772
High school diploma or GED	34.5	0.4	0.86	2.4	0.012	786	772
Some postsecondary education or more	44.0	2.3	0.35	2.5	0.057	786	772
Other or do not know	0.5	0.3	0.50	0.4	0.282	786	772
Employment in the past year							
Number of parents that worked for pay	0.8	0.0	0.14	0.0	0.068	785	770
Number of weeks worked	39.1	1.8	0.24	1.5	0.055	785	770
Weekly hours worked	30.4	1.0	0.44	1.3	0.036	786	775
Either parent was offered fringe benefits through a job	47.7	-0.3	0.91	2.4	-0.006	785	772
Employment at the time of survey							
Either parent is in the labor force	71.4	-0.7	0.76	2.2	-0.020	753	733
Either parent is working for pay	58.2	2.1	0.38	2.4	0.052	754	741
Employment and earnings in calendar years after RA							
Ever employed in Year 1	76.4	-1.5	0.38	1.7	-0.050	917	914
Ever employed in Year 2	76.8	0.2	0.89	1.7	0.008	917	914
Ever employed in Year 3	78.8	-1.1	0.51	1.7	-0.040	917	914
Ever employed in Year 4	78.6	1.0	0.56	1.7	0.036	917	914
Ever employed in Year 5	77.1	0.9	0.62	1.8	0.031	917	914
Ever employed in Years 1-5	87.5	1.2	0.39	1.4	0.068	917	914
Earnings in Year 1 ($)	18,580	-11	0.98	531	-0.001	917	914
Earnings in Year 2 ($)	20,272	-92	0.88	627	-0.004	917	914
Earnings in Year 3 ($)	21,883	317	0.65	704	0.014	917	914

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Earnings in Year 4 ($)	23,414	-46	0.95	789	-0.002	917	914
Earnings in Year 5 ($)	23,547	778	0.38	878	0.030	917	914

Source: PROMISE five-year survey and SSA administrative records (employment and earnings in years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

GED = General Educational Development; N = sample size; RA = random assignment.

Appendix Table H.15. WI PROMISE: Impact on the parents' SSA payments (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent received SSA payments in Year 5	35.1	-1.2	0.41	1.5	-0.032	917	914
Total SSA payments received in Year 5 ($)	3,703	-114	0.55	191	-0.021	917	914
Total SSA payments during the five years after RA ($)	17,680	-323	0.66	722	-0.013	917	914
Supplementary outcomes							
SSA payments in years after RA							
Received any in Year 1	31.0	-0.2	0.82	0.7	-0.004	917	914
Received any in Year 2	32.1	-0.6	0.52	0.9	-0.017	917	914
Received any in Year 3	33.8	-1.6	0.16	1.2	-0.044	917	914
Received any in Year 4	34.5	-1.3	0.32	1.3	-0.036	917	914
Received any in Years 1–5	38.3	-1.2	0.38	1.3	-0.030	917	914
Amount in Year 1 ($)	3,292	23	0.86	133	0.004	917	914
Amount in Year 2 ($)	3,350	121	0.44	158	0.022	917	914
Amount in Year 3 ($)	3,672	-196	0.32	197	-0.034	917	914
Amount in Year 4 ($)	3,662	-156	0.42	192	-0.028	917	914
SSI payments in years after RA							
Received any in Year 1	21.0	-0.7	0.31	0.7	-0.026	917	914
Received any in Year 2	20.2	0.5	0.55	0.9	0.019	917	914
Received any in Year 3	21.2	-0.2	0.82	1.0	-0.009	917	914
Received any in Year 4	20.5	0.3	0.81	1.1	0.010	917	914
Received any in Year 5	20.6	0.5	0.68	1.2	0.018	917	914
Received any in Years 1–5	26.4	-0.7	0.59	1.2	-0.021	917	914
Amount in Year 1 ($)	1,509	-73	0.35	77	-0.022	917	914
Amount in Year 2 ($)	1,463	54	0.56	93	0.016	917	914
Amount in Year 3 ($)	1,611	-200*	0.06	108	-0.058	917	914
Amount in Year 4 ($)	1,539	-111	0.30	108	-0.033	917	914
Amount in Year 5 ($)	1,543	-115	0.28	105	-0.034	917	914
Total amount during Years 1–5 ($)	7,664	-445	0.26	397	-0.028	917	914

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
OASDI benefits in years after RA							
Received any in Year 1	17.9	0.2	0.79	0.6	0.007	917	914
Received any in Year 2	18.8	0.2	0.80	0.8	0.008	917	914
Received any in Year 3	19.8	-0.0	0.97	1.0	-0.001	917	914
Received any in Year 4	20.8	-0.4	0.74	1.2	-0.014	917	914
Received any in Year 5	21.2	-0.7	0.59	1.3	-0.025	917	914
Received any in Years 1–5	23.3	-0.4	0.76	1.2	-0.012	917	914
Amount in Year 1 ($)	1,783	95	0.36	105	0.022	917	914
Amount in Year 2 ($)	1,887	67	0.60	127	0.015	917	914
Amount in Year 3 ($)	2,061	5	0.98	154	0.001	917	914
Amount in Year 4 ($)	2,123	-45	0.78	160	-0.010	917	914
Amount in Year 5 ($)	2,160	0	1.00	166	0.000	917	914
Total amount during Years 1–5 ($)	10,016	122	0.84	610	0.006	917	914

Source: SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

N = sample size; OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table H.16. WI PROMISE: Impact on the parents' health insurance coverage and expenditures (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent is covered by health insurance	89.1	2.7*	0.07	1.5	0.187	782	765
Average monthly Medicaid and Medicare expenditures in the five years after RA ($)	738	28	0.31	28	0.030	917	914
Supplementary outcomes							
Covered by private health insurance	25.6	1.5	0.49	2.2	0.047	783	766
Medicaid and Medicare participation in years after RA							
Ever enrolled in Year 1	88.9	1.1	0.42	1.4	0.072	917	914
Ever enrolled in Year 2	87.2	-1.1	0.46	1.5	-0.059	917	914
Ever enrolled in Year 3	84.0	0.5	0.76	1.6	0.023	917	914
Ever enrolled in Year 4	81.5	0.4	0.84	1.7	0.014	917	914
Ever enrolled in Year 5	79.8	-0.7	0.68	1.8	-0.028	917	914
Percentage of months enrolled in Years 1–5	76.9	0.8	0.56	1.4	0.025	917	914
Average monthly Medicaid and Medicare expenditures in years after RA							
Year 1 ($)	663	12	0.59	22	0.013	917	914
Year 2 ($)	697	25	0.36	27	0.027	917	914
Year 3 ($)	744	36	0.30	35	0.034	917	914
Year 4 ($)	815	23	0.59	42	0.019	917	914
Year 5 ($)	770	45	0.29	43	0.039	917	914
Medicaid participation in years after RA							
Ever enrolled in Year 1	87.7	1.6	0.27	1.4	0.095	917	914
Ever enrolled in Year 2	85.7	-0.6	0.72	1.6	-0.028	917	914
Ever enrolled in Year 3	82.6	0.9	0.59	1.7	0.039	917	914
Ever enrolled in Year 4	79.5	0.5	0.79	1.8	0.018	917	914
Ever enrolled in Year 5	77.4	-0.2	0.93	1.9	-0.006	917	914
Percentage of months enrolled in Years 1–5	74.1	1.4	0.33	1.4	0.042	917	914

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Average monthly Medicaid expenditures in years after RA							
Year 1 ($)	524	3	0.89	18	0.005	917	914
Year 2 ($)	559	-7	0.74	22	-0.012	917	914
Year 3 ($)	580	17	0.51	26	0.024	917	914
Year 4 ($)	633	15	0.65	32	0.017	917	914
Year 5 ($)	621	36	0.31	35	0.040	917	914
Years 1–5 ($)	583	13	0.58	23	0.019	917	914
Medicare participation in years after RA							
Ever enrolled in Year 1	17.6	0.7	0.39	0.8	0.028	917	914
Ever enrolled in Year 2	19.0	-0.3	0.73	0.8	-0.011	917	914
Ever enrolled in Year 3	19.8	-0.1	0.95	0.9	-0.002	917	914
Ever enrolled in Year 4	20.7	-0.3	0.75	1.1	-0.013	917	914
Ever enrolled in Year 5	21.2	-0.7	0.57	1.2	-0.025	917	914
Percentage of months enrolled in Years 1–5	18.9	-0.1	0.92	0.8	-0.002	917	914
Average monthly Medicare expenditures in years after RA							
Year 1 ($)	139	9	0.61	18	0.016	917	914
Year 2 ($)	137	32*	0.08	19	0.058	917	914
Year 3 ($)	164	19	0.43	24	0.029	917	914
Year 4 ($)	182	8	0.76	27	0.012	917	914
Year 5 ($)	149	10	0.68	23	0.016	917	914
Years 1–5 ($)	154	16	0.38	18	0.029	917	914

Source: CMS administrative records and PROMISE five-year survey (non-Medicare/Medicaid outcomes).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

CMS = Centers for Medicare & Medicaid Services; N = sample size.

Appendix Table H.17. WI PROMISE: Impact on the parents' economic well-being (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Parents' total income in the past year ($)	26,977	267	0.84	1,301	0.011	757	754
Parents' total income during the five calendar years after RA ($)	127,022	579	0.85	2,981	0.006	917	914
Supplementary outcomes							
Parents' income in calendar years after RA							
Year 1 ($)	22,065	138	0.80	536	0.007	917	914
Year 2 ($)	24,110	-159	0.80	629	-0.008	917	914
Year 3 ($)	25,859	147	0.83	693	0.007	917	914
Year 4 ($)	27,314	-98	0.90	769	-0.004	917	914
Year 5 ($)	27,675	551	0.52	852	0.023	917	914
Household receives TANF, SNAP, or housing assistance	54.5	-0.5	0.83	2.5	-0.013	773	758
Household income in the past year ($)	31,100	1,329	0.19	1,015	0.067	755	742

Source: PROMISE five-year survey and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

N = sample size; RA = random assignment; SSA = Social Security Administration.

2. Sensitivity analyses

We assessed the sensitivity of the estimated impacts on primary outcomes to methodological choices we incorporated in the main impact estimates. In Appendix Table H.18, we show the impact estimated by the main regression model for each outcome, as well as by alternative models that do not (1) use the survey weights, (2) include covariate adjustment, and (3) use imputed data for outcomes that underwent multiple imputation. The alternative models produced broadly similar results, suggesting that the main model's estimates of program impacts were not sensitive to the choice of estimation method.

We also assessed the extent to which the lack of survey data for some enrollees would influence the estimates of program impacts. In Appendix Table H.19, we compare how the estimated impacts on primary outcomes varied when nonrespondents were included and excluded from analyses of outcomes measured using administrative data. For all outcomes, the impact estimated using the weighted survey respondent sample did not significantly differ from the impact estimated using the administrative analysis sample. The findings suggest that use of the analysis weights minimized the potential for nonresponse bias because the estimated impacts for the survey respondent sample were comparable to those for the full research sample.

Appendix Table H.18. WI PROMISE: Impact on primary outcomes, by estimation approach (values measured at the time of the survey and shown in in percentages, unless otherwise noted)

Outcome	Main model	No weighting for non-response	No covariate adjustment	No imputation
Enrolled in an educational or training program	-0.1	-0.0	0.4	n.a.
Has a GED, high school diploma, or certificate of completion	1.6	1.7	1.3	n.a.
Youth employed in a paid job in the past year	6.8***	6.9***	6.2**	5.2**
Youth earnings in the past year ($)	668	713	608	167
Youth earnings during the five calendar years after RA ($)	887	n.a.	699	n.a.
Youth self-determination score (scale: 0 to 100)[a]	-0.4	-0.5	-0.2	n.a.
Youth expects to be financially independent at age 25	4.4	3.6	4.3	n.a.
Youth received SSA payments in Year 5 after RA	1.0	n.a.	1.8	n.a.
Youth total SSA payments in Year 5 after RA ($)	184	n.a.	237	n.a.
Youth total SSA payments during Years 1–5 after RA ($)	800	n.a.	884	n.a.
Youth covered by any health insurance	0.9	0.7	1.2	n.a.
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	29	n.a.	29	n.a.
Youth total income in the past year ($)	879**	941**	862**	465
Youth total income during the five calendar years after RA ($)	1,987**	n.a.	1,902**	n.a.
Either parent worked for pay in the past year	1.6	2.1	2.7	n.a.
Parents' earnings in the past year ($)	703	944	1,391	1,320
Parents' earnings during the five calendar years after RA ($)	945	n.a.	1,492	n.a.
Either parent received SSA payments in Year 5 after RA	-1.2	n.a.	-3.2	n.a.
Parents' total SSA payments received in Year 5 after RA ($)	-114	n.a.	-325	n.a.
Parents' total SSA payments during the five years after RA ($)	-323	n.a.	-1,538	n.a.
Parents' total income in the past year ($)	267	500	796	1,016
Parents' income during the five calendar years after RA ($)	579	n.a.	-92	n.a.
Either parent is covered by health insurance	2.7*	2.4	1.9	n.a.
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	28	n.a.	28	n.a.

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the impact estimates of WI PROMISE, using different modeling approaches. In the main model, we used covariate adjustment and, for outcomes derived from survey data, we weighted statistics to adjust for survey nonresponse and used multiple imputation when an outcome had a

missing value conditional on the value of another variable. In the model with "No weighting for non-response", we followed the main model but did not apply weights to adjust for non-response. In the model with "No covariate adjustment", we followed the main model but did not include covariates. For the model with "No multiple imputation", we followed the main model except that we excluded cases with outcomes that had a missing value conditional on the value of another variable.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; n.a.= not applicable; RA = random assignment; SSA = Social Security Administration.

Appendix Table H.19. WI PROMISE: Impact on primary outcomes measured using administrative data, including and excluding five-year survey nonrespondents (percentage, unless otherwise noted)

Outcome	Administrative analysis samples			Five-year survey respondents (weighted)			*p*-value for difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth earnings during the five calendar years after RA ($)	13,302	887	0.32	12,653	961	0.31	0.94
Youth received SSA payments in Year 5 after RA	67.5	1.0	0.62	70.9	1.9	0.38	0.66
Youth total SSA payments in Year 5 after RA ($)	5,385	184	0.32	5,723	177	0.38	0.97
Youth total SSA payments during Years 1–5 after RA ($)	33,377	800	0.15	34,172	913	0.13	0.85
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	814	29	0.38	846	24	0.52	0.89
Youth total income during the five calendar years after RA ($)	47,921	1,987**	0.02	48,273	2,200**	0.02	0.82
Parents' earnings during the five calendar years after RA ($)	107,697	945	0.76	110,228	313	0.93	0.85
Either parent received SSA payments in Year 5 after RA	35.1	-1.2	0.41	36.0	-2.4	0.13	0.42
Parents' total SSA payments received in Year 5 after RA ($)	3,703	-114	0.55	3,847	-224	0.29	0.59
Parents' total SSA payments during the five years after RA ($)	17,680	-323	0.66	17,890	-566	0.49	0.75
Parents' total income during the five calendar years after RA ($)	127,022	579	0.85	129,802	-248	0.94	0.79
Parents' average monthly Medicaid and Medicare expenditures in years after RA in Years 1-5 after RA ($)	738	28	0.31	757	-1	0.97	0.30

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE for administrative analysis samples and five-year survey respondents. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For the sample of five-year survey respondents, we weighted the statistics to adjust for survey nonresponse, applying youth weights for youths' outcomes and parent weights for parents' outcomes.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for the two samples are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; N = sample size; RA = random assignment. SSA = Social Security Administration.

3. Subgroup impact estimates

We estimated the five-year impacts for key subgroups of evaluation enrollees to understand whether the impacts of WI PROMISE differed by enrollee characteristics. We focused on subgroups defined by the following baseline characteristics of youth: age (ages 14 and 15, and age 16); sex (females and males); whether a youth's parent received SSA payments at the time of RA (yes or no); primary impairment (intellectual or developmental disabilities, other mental impairments, and other disabilities); and whether the survey respondent completed the five-year survey before or after the onset of the COVID-19 pandemic (yes or no). Appendix Tables H.20–H.25 present the subgroup impact estimates.

Appendix Table H.20. WI PROMISE: Impacts on primary outcomes, by youth's age (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Age 14 and 15					Age 16					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	42.4	0.9	0.77	523	495	22.3	-2.1	0.58	244	259	0.53
Youth has a GED, high school diploma, or certificate of completion	62.9	2.4	0.43	537	519	75.3	0.0	1.00	255	266	0.62
Youth employed in a paid job in the past year	49.9	6.6**	0.03	541	524	51.8	7.1	0.11	257	269	0.92
Youth earnings in the past year ($)	4,240	1,053**	0.05	541	524	6,169	-87	0.93	257	269	0.29
Youth earnings during the five calendar years after RA ($)	11,294	1,149	0.23	633	617	17,066	396	0.83	317	329	0.72
Youth self-determination score (scale: 0 to 100)	79.1	-1.2	0.26	339	334	76.7	1.1	0.46	169	179	0.20
Youth expects to be financially independent at age 25	60.6	3.9	0.29	348	354	54.2	5.3	0.32	169	183	0.83
Youth received SSA payments in Year 5 after RA	71.6	0.4	0.87	633	617	59.9	2.2	0.55	317	329	0.68
Youth total SSA payments in Year 5 after RA ($)	5,652	81	0.72	633	617	4,886	383	0.26	317	329	0.45
Youth total SSA payments during Years 1–5 after RA ($)	34,086	329	0.63	633	617	32,047	1,713*	0.08	317	329	0.25
Youth covered by any health insurance	87.4	0.2	0.92	517	512	85.7	2.2	0.46	244	260	0.57
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	780	58	0.14	633	617	878	-28	0.66	317	329	0.24
Youth total income in the past year ($)	10,009	1,247**	0.01	541	524	11,415	157	0.85	257	269	0.26
Youth total income during the five calendar years after RA ($)	46,690	1,719*	0.09	633	617	50,232	2,516	0.14	317	329	0.68

Outcome	Age 14 and 15					Age 16					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Either parent worked for pay in the past year	69.2	3.8	0.12	532	511	70.7	-2.8	0.45	253	263	0.13
Parents' earnings in the past year ($)	22,697	1,599	0.30	533	512	23,947	-1,054	0.65	253	263	0.33
Parents' earnings during the five calendar years after RA ($)	107,414	1,833	0.62	609	596	108,226	-776	0.89	308	318	0.69
Either parent received SSA payments in Year 5 after RA	34.9	-0.8	0.64	609	596	35.5	-1.9	0.46	308	318	0.73
Parents' total SSA payments received in Year 5 after RA ($)	3,677	-136	0.55	609	596	3,752	-73	0.83	308	318	0.88
Parents' total SSA payments during the five years after RA ($)	17,562	-565	0.49	609	596	17,900	145	0.91	308	318	0.65
Parents' total income in the past year ($)	26,825	640	0.67	512	497	27,262	-459	0.84	245	257	0.68
Parents' total income during the five calendar years after RA ($)	126,626	1,247	0.73	609	596	127,764	-714	0.89	308	318	0.76
Either parent is covered by health insurance	88.7	3.1*	0.09	531	504	89.9	1.8	0.48	251	261	0.70
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	733	36	0.29	609	596	747	14	0.77	308	318	0.72

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; RA = random assignment; SSA = Social Security Administration.

Appendix Table H.21. WI PROMISE: Impacts on primary outcomes, by youth's sex (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Male					Female					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	32.8	1.5	0.61	514	497	40.6	-3.3	0.45	253	257	0.35
Youth has a GED, high school diploma, or certificate of completion	66.0	1.9	0.52	533	518	69.4	1.0	0.80	259	267	0.86
Youth employed in a paid job in the past year	53.3	5.3*	0.09	536	524	45.3	9.7**	0.03	262	269	0.41
Youth earnings in the past year ($)	5,242	714	0.25	536	524	4,253	575	0.40	262	269	0.88
Youth earnings during the five calendar years after RA ($)	13,960	672	0.55	636	631	11,983	1,319	0.35	314	315	0.72
Youth self-determination score (scale: 0 to 100)	78.7	-1.1	0.30	322	324	77.4	0.9	0.58	186	189	0.29
Youth expects to be financially independent at age 25	60.3	3.8	0.31	332	338	55.1	5.4	0.29	185	199	0.80
Youth received SSA payments in Year 5 after RA	66.6	1.0	0.70	636	631	69.5	1.1	0.75	314	315	0.98
Youth total SSA payments in Year 5 after RA ($)	5,195	223	0.33	636	631	5,766	105	0.75	314	315	0.77
Youth total SSA payments during Years 1–5 after RA ($)	32,907	1,004	0.14	636	631	34,320	391	0.68	314	315	0.60
Youth covered by any health insurance	83.1	3.9*	0.08	507	513	94.2	-5.1**	0.04	254	259	0.01†††
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	718	69*	0.08	636	631	1,007	-50	0.40	314	315	0.10†
Youth income in the past year ($)	10,682	991*	0.08	536	524	10,128	655	0.30	262	269	0.69
Youth total income during the five calendar years after RA ($)	47,974	2,066*	0.06	636	631	47,816	1,828	0.20	314	315	0.89
Either parent worked for pay in the past year	69.4	5.2**	0.04	528	516	70.4	-5.7	0.12	257	258	0.01††

Outcome	Male					Female					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Parents' earnings in the past year ($)	23,487	1,488	0.35	528	516	22,420	-879	0.68	258	259	0.36
Parents' earnings during the five calendar years after RA ($)	109,629	1,219	0.75	615	612	103,781	388	0.94	302	302	0.90
Either parent received SSA payments in Year 5 after RA	33.7	-2.3	0.21	615	612	38.1	1.0	0.67	302	302	0.27
Parents' total SSA payments received in Year 5 after RA ($)	3,556	-339	0.14	615	612	4,002	342	0.31	302	302	0.09†
Parents' total SSA payments during the five years after RA ($)	17,072	-1,151	0.20	615	612	18,911	1,361	0.24	302	302	0.09†
Parents' income in the past year ($)	27,376	703	0.66	508	503	26,180	-614	0.77	249	251	0.61
Parents' income during the five calendar years after RA ($)	128,263	25	0.99	615	612	124,508	1,704	0.74	302	302	0.79
Either parent is covered by health insurance	89.0	4.0**	0.02	524	511	89.3	-0.1	0.96	258	254	0.19
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	739	23	0.49	615	612	734	39	0.42	302	302	0.79

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table H.22. WI PROMISE: Impacts on primary outcomes, by whether parent received SSA payments before RA (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	No parent received SSA payments					At least one parent received SSA payments					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	34.9	2.1	0.47	535	502	34.7	-4.6	0.30	202	226	0.20
Youth has a GED, high school diploma, or certificate of completion	69.7	-0.3	0.91	555	529	62.1	4.9	0.28	207	229	0.32
Youth employed in a paid job in the past year	53.4	6.3**	0.04	560	535	43.5	10.4**	0.03	208	231	0.47
Youth earnings in the past year ($)	5,267	790	0.18	560	535	4,253	314	0.70	208	231	0.64
Youth earnings during the five calendar years after RA ($)	12,901	1,556	0.13	668	640	13,762	12	0.99	249	274	0.45
Youth self-determination score (scale: 0 to 100)	79.2	-0.9	0.42	363	336	76.9	0.6	0.72	130	159	0.45
Youth expects to be financially independent at age 25	59.3	5.1	0.16	368	357	57.6	3.2	0.58	134	162	0.77
Youth received SSA payments in Year 5 after RA	66.6	1.0	0.70	668	640	69.3	0.4	0.92	249	274	0.90
Youth total SSA payments in Year 5 after RA ($)	5,166	262	0.23	668	640	5,819	12	0.97	249	274	0.56
Youth total SSA payments during Years 1–5 after RA ($)	32,005	1,027	0.13	668	640	36,057	209	0.84	249	274	0.50
Youth covered by any health insurance	87.0	2.1	0.30	537	521	85.8	-0.8	0.82	195	224	0.47
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	785	33	0.40	668	640	820	26	0.67	249	274	0.92
Youth income in the past year ($)	10,673	1,059*	0.05	560	535	10,189	474	0.54	208	231	0.53
Youth total income during the five calendar years after RA ($)	46,097	2,969***	0.00	668	640	51,206	455	0.78	249	274	0.19

Outcome	No parent received SSA payments					At least one parent received SSA payments					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Either parent worked for pay in the past year	82.2	2.5	0.28	545	527	39.8	-2.1	0.66	211	226	0.38
Parents' earnings in the past year ($)	29,257	903	0.60	546	527	8,683	-415	0.80	211	227	0.58
Parents' earnings during the five calendar years after RA ($)	132,504	315	0.94	668	640	49,752	2,473	0.56	249	274	0.71
Either parent received SSA payments in Year 5 after RA	11.6	-1.3	0.46	668	640	90.1	-0.7	0.80	249	274	0.84
Parents' total SSA payments received in Year 5 after RA ($)	1,294	-248	0.23	668	640	9,330	214	0.62	249	274	0.33
Parents' total SSA payments during the five years after RA ($)	4,282	-667	0.36	668	640	48,973	514	0.77	249	274	0.54
Parents' income in the past year ($)	30,706	446	0.79	546	527	18,238	-207	0.90	211	227	0.78
Parents' income during the five calendar years after RA ($)	137,643	-497	0.90	668	640	102,214	3,190	0.45	249	274	0.52
Either parent is covered by health insurance	89.4	2.7	0.13	545	523	92.1	2.0	0.44	209	221	0.80
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	463	1	0.98	668	640	1,378	97	0.20	249	274	0.22

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table H.23. WI PROMISE: Impacts on primary outcomes, by youth's primary impairment (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Intellectual or developmental disabilities			Other mental impairments			Other impairments			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth enrolled in an educational or training program	44.8	-4.4	0.27	24.8	1.3	0.71	42.7	6.1	0.31	0.29
Youth has a GED, high school diploma, or certificate of completion	69.6	0.0	1.00	62.8	4.7	0.21	73.2	-2.7	0.61	0.47
Youth employed in a paid job in the past year	49.0	7.0*	0.09	55.3	4.0	0.29	41.1	12.9**	0.03	0.45
Youth earnings in the past year ($)	3,903	5	0.99	5,711	1,196	0.13	4,962	759	0.51	0.49
Youth earnings during the five calendar years after RA ($)	12,172	-468	0.72	14,049	2,867**	0.04	13,850	-1,168	0.59	0.13
Youth self-determination score (scale: 0 to 100)	78.4	-1.4	0.31	77.9	-0.8	0.57	78.8	3.1	0.14	0.18
Youth expects to be financially independent at age 25	55.9	1.9	0.70	62.3	2.5	0.58	53.1	15.0**	0.04	0.28
Youth received SSA payments in Year 5 after RA	76.1	2.0	0.53	57.3	2.2	0.51	75.8	-3.8	0.41	0.52
Youth total SSA payments in Year 5 after RA ($)	6,281	237	0.43	4,333	261	0.37	6,207	-117	0.79	0.74
Youth total SSA payments during Years 1–5 after RA ($)	35,893	579	0.50	31,610	777	0.37	32,438	1,416	0.31	0.88
Youth covered by any health insurance	89.2	2.5	0.30	81.0	1.0	0.75	96.9	-2.9	0.27	0.30
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	811	51	0.35	696	-9	0.86	1,145	74	0.40	0.59
Youth income in the past year ($)	10,456	208	0.71	10,189	1,524**	0.05	11,388	702	0.50	0.38
Youth total income during the five calendar years after RA ($)	50,126	272	0.83	46,072	4,054***	0.00	47,920	585	0.77	0.12
Either parent worked for pay in the past year	67.3	5.6*	0.09	69.0	-1.9	0.56	77.3	1.0	0.82	0.26

Outcome	Intellectual or developmental disabilities			Other mental impairments			Other impairments			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Parents' earnings in the past year ($)	19,884	5,931***	0.00	22,838	-2,093	0.27	31,542	-4,202	0.23	0.00†††
Parents' earnings during the five calendar years after RA ($)	103,869	5,105	0.31	98,753	-2,427	0.57	142,286	547	0.95	0.52
Either parent received SSA payments in Year 5 after RA	36.9	-0.6	0.79	35.2	-0.6	0.79	30.6	-4.1	0.19	0.61
Parents' total SSA payments received in Year 5 after RA ($)	3,717	190	0.54	3,787	-275	0.34	3,433	-382	0.39	0.44
Parents' total SSA payments during the five years after RA ($)	18,796	454	0.70	17,395	-596	0.58	15,856	-1,379	0.39	0.62
Parents' income in the past year ($)	23,718	5,241***	0.01	27,039	-2,719	0.14	34,438	-3,337	0.34	0.01†††
Parents' income during the five calendar years after RA ($)	124,097	5,983	0.22	117,864	-3,253	0.44	160,095	-1,448	0.86	0.34
Either parent is covered by health insurance	88.0	3.2	0.17	90.3	3.1	0.15	88.4	0.2	0.97	0.76
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	765	1	0.99	748	56	0.18	644	18	0.75	0.66

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table H.24. WI PROMISE: Sample sizes for primary outcomes, by youth's primary impairment

Outcome	Intellectual or developmental disabilities		Other mental impairments		Other impairments	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Youth enrolled in an educational or training program	302	292	320	340	145	122
Youth has a GED, high school diploma, or certificate of completion	316	298	328	355	148	132
Youth employed in a paid job in the past year	317	301	332	360	149	132
Youth earnings in the past year ($)	317	301	332	360	149	132
Youth earnings during the five calendar years after RA ($)	366	360	406	429	178	157
Youth self-determination score (scale: 0 to 100)	200	204	218	229	90	80
Youth expects to be financially independent at age 25	205	206	222	244	90	87
Youth received SSA payments in Year 5 after RA	366	360	406	429	178	157
Youth total SSA payments in Year 5 after RA ($)	366	360	406	429	178	157
Youth total SSA payments during Years 1–5 after RA ($)	366	360	406	429	178	157
Youth covered by any health insurance	303	292	311	350	147	130
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	366	360	406	429	178	157
Youth income in the past year ($)	317	301	332	360	149	132
Youth total income during the five calendar years after RA ($)	366	360	406	429	178	157
Either parent worked for pay in the past year	313	305	323	342	149	127
Parents' earnings in the past year ($)	313	306	324	342	149	127
Parents' earnings during the five calendar years after RA ($)	351	347	401	420	165	147
Either parent received SSA payments in Year 5 after RA	351	347	401	420	165	147
Parents' total SSA payments received in Year 5 after RA ($)	351	347	401	420	165	147

Outcome	Intellectual or developmental disabilities		Other mental impairments		Other impairments	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Parents' total SSA payments during the five years after RA ($)	351	347	401	420	165	147
Parents' income in the past year ($)	299	294	321	338	137	122
Parents' income during the five calendar years after RA ($)	351	347	401	420	165	147
Either parent is covered by health insurance	311	300	323	339	148	126
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	351	347	401	420	165	147

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the sample size by subgroup for the estimates reported in Appendix Table H.23.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table H.25. WI PROMISE: Impacts on primary outcomes, by whether the survey respondent completed the five-year survey before or during the pandemic (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Before pandemic					During pandemic					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	31.4	2.7	0.54	211	211	36.9	-1.1	0.70	553	542	0.47
Youth has a GED, high school diploma, or certificate of completion	63.3	7.5*	0.09	219	219	68.7	-0.6	0.84	570	565	0.12
Youth employed in a paid job in the past year	49.8	13.1***	0.01	219	220	50.9	4.8	0.11	575	572	0.14
Youth earnings in the past year ($)	4,270	1,795*	0.05	219	220	5,148	287	0.60	575	572	0.16
Youth self-determination score (scale: 0 to 100)	77.8	-0.8	0.65	164	172	78.4	-0.2	0.82	344	341	0.79
Youth expects to be financially independent at age 25	51.9	10.2*	0.06	167	179	61.5	1.6	0.67	350	358	0.19
Youth covered by any health insurance	84.0	2.9	0.38	205	215	87.9	0.1	0.95	556	557	0.46
Youth income in the past year ($)	10,297	1,516*	0.08	219	220	10,571	689	0.17	575	572	0.41
Either parent worked for pay in the past year	69.1	1.6	0.68	220	217	69.9	1.6	0.52	564	557	1.00
Parents' earnings in the past year ($)	23,616	1,551	0.54	220	217	22,946	410	0.79	565	558	0.69
Parents' income in the past year ($)	27,130	1,527	0.53	218	209	26,920	-212	0.89	538	545	0.53
Either parent is covered by health insurance	88.1	2.4	0.40	220	214	89.5	2.7	0.11	561	551	0.93

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE on outcomes derived from survey data. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We weighted statistics to adjust for survey nonresponse. We defined before the pandemic as before March 13, 2020.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size.

C. Findings from the benefit-cost analysis

In this section, we present findings from the benefit-cost analysis of WI PROMISE. First, we present benefits and costs estimated through the main model. Second, we present the results of sensitivity analyses. Third, we present the projected accrual of net benefits beyond the five-year evaluation period.

1. Benefit-cost estimates

Appendix Table H.26 provides estimates of the program's benefits and indirect costs, the costs of program components, and benefit-cost statistics estimated using the main model as described in Appendix B.

Appendix Table H.26. WI PROMISE: Benefits and costs ($) over the five-year evaluation time period, by accounting perspective

Benefit or cost measure	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Panel 1: Quantitative outcome measures						
Youth outcomes						
Earnings	932	0	0	0	0	932
Fringe benefits	236	0	0	0	0	236
Income, payroll, and sales taxes	-168	116	0	148	20	0
Work-related and child care costs	-111	0	0	0	0	-111
SSI benefits	885	-885	0	-885	0	0
OASDI benefits	-52	52	0	52	0	0
SSI administrative costs	0	-69	0	-69	0	-69
SSDI administrative costs	0	1	0	1	0	1
Medicaid and Medicare expenditures and administrative costs	1,790	0	0	-1,054	-889	-152
Education-related costs	-69	0	0	0	0	-69
Incarceration	0	0	0	0	1,486	1,486
Parent outcomes						
Earnings	952	0	0	0	0	952
Fringe benefits	241	0	0	0	0	241
Income, payroll, and sales taxes	-217	118	0	151	66	0
Work-related and child care costs	-165	0	0	0	0	-165
SSI benefits	-462	462	0	462	0	0
OASDI benefits	138	-138	0	-138	0	0
SSI administrative costs	0	36	0	36	0	36
SSDI administrative costs	0	-3	0	-3	0	-3
Medicaid and Medicare expenditures and administrative costs	1,768	0	0	-1,574	-344	-150

Benefit or cost measure	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Household outcomes						
TANF, SNAP, housing assistance, and related administrative costs	637	0	0	-510	-192	-65
Total	6,334	-309	0	-3,381	147	3,100
Panel 2: Costs of program components						
Program administration	0	0	-5,603	-5,603	0	-5,603
Employment services	0	0	-2,991	-2,991	-340	-3,331
Education services	0	0	-450	-450	0	-450
Case management services	0	0	-4,056	-4,056	0	-4,056
Financial and benefits counseling	0	0	-1,402	-1,402	0	-1,402
Parent training and information services	0	0	-4,032	-4,032	0	-4,032
Youth self-determination services	0	0	-494	-494	0	-494
Total	0	0	-19,029	-19,029	-340	-19,369
Panel 3: Benefit-cost statistics						
Net benefits (benefits minus costs)	6,334	-309	-19,029	-22,410	-193	-16,269
Net benefit ratio[b]	n.a.	n.a.	0	-0.18	0.43	0.16

Source: See Appendix Table B.4 for details on the sources and imputation methods for each benefit or cost component.

Note: To construct each component of the benefit-cost analysis, we used the estimated impacts on key outcomes (regardless of whether they were statistically significant), or imputation methods that combined the impact estimates with data from external sources**.** To construct program costs, we used data from program administrative records, financial documents, staff activity logs, and staff interviews. All benefits and costs are dollars per treatment group family over five years and are inflation-adjusted to 2020 dollars and discounted to 2020 present value.

[a] The perspective of the federal government as a whole incorporates the perspectives of SSA, ED, and other federal agencies that might experience benefits or costs because of PROMISE.

[b] Calculated for all key stakeholders as the sum of all quantitative measures in Panel 1, which include benefits and indirect costs, divided by the program costs.

ED = U.S. Department of Education; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; SSDI = Social Security Disability Insurance; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families.

2. Sensitivity analyses

As noted in Appendix B, we conducted three analyses to assess the sensitivity of the benefit-cost estimates to changes in the underlying assumptions and methodological choices. First, we sampled with replacement from the study population 1,000 times to create 1,000 random samples with an equal size as the true sample. For each sample, we calculated the net benefit for each accounting perspective. In Appendix Table H.27, we show the sampling distribution of the net benefit estimates from the perspective of the different stakeholders. The estimated net benefits for all key stakeholders were negative across the entire distribution, suggesting that the main conclusion (that WI PROMISE did not generate net benefits across all key stakeholders) is robust to sampling variability. The confidence interval on the net benefit estimate for all key stakeholders (-$16,269) ranged from -$23,686 (the 2.5th percentile) to -$9,009 (the 97.5th percentile).

Second, we recalculated the net benefits using only the impact estimates that were significant at the 10 percent level (Appendix Table H.28). From the perspective of all stakeholders, the net benefit was within 19 percent of the estimate from the main analysis and continued to be negative and sizeable.

Appendix Table H.28 shows whether the benefit-cost results were sensitive to the assumptions we used to estimate some of the individual components. From the perspective of all key stakeholders, net benefits under the alternative assumptions were always within 14 percent of the net benefits estimated under the main analysis, and net benefits were sizeable and negative under each scenario. For the most part, net benefits were not sensitive to alterative assumptions. However, there were some exceptions for particular stakeholders. First, the net benefit for youth and families fell from $6,334 under the main model to $856 in the model that includes only statistically significant estimates. This difference between the two net benefits estimates were driven by sizeable earnings estimates for youth that were not statistically significant. Second, the net benefit for state and local governments increased from -$193 to $1,809 when we used a higher value for incarceration costs. Taken together, these results suggest that the main conclusion for all key stakeholders is robust, but the conclusions for two of the perspectives are sensitive to the assumptions we used.

Appendix Table H.27. WI PROMISE: Sensitivity of net benefits to sampling variability

Estimate of net benefit	PROMISE youth and families	Federal government			State and local government, including PROMISE partners	All key stakeholders
		SSA	ED	Federal government as a whole[a]		
Original estimate	6,334	-309	-19,029	-22,410	-193	-16,269
Min	-4,618	-4,762	-19,165	-31,570	-5,820	-28,049
2.5th percentile	-909	-2,769	-19,106	-28,168	-3,042	-23,686
25th percentile	3,741	-1,148	-19,057	-24,437	-1,128	-18,883
50th percentile	6,482	-283	-19,030	-22,465	-214	-16,323
75th percentile	8,837	578	-19,004	-20,450	678	-13,658
97.5th percentile	13,583	1,982	-18,949	-16,762	2,490	-9,009
Max	20,548	3,933	-18,872	-12,774	3,631	-4,120

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: We quantified uncertainty in the estimated net benefits by constructing non-parametric bootstrap confidence intervals. We sampled with replacement from the study population 1,000 times and then re-estimated all cost and benefit parameters for these 1,000 random samples. We then calculated the net benefits for each bootstrap sample. The 2.5th percentile and 97.5th percentile of the resulting values represent the 95 percent confidence interval of the net benefit estimate.

Appendix Table H.28. WI PROMISE: Sensitivity of net benefits to different assumptions in the benefit cost analysis

Assumption	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
Main benefit-cost analysis model	6,334	-309	-19,029	-22,410	-193	-16,269
Excluded fringe benefits	5,857	-309	-19,029	-22,410	-193	-16,746
Excluded education tuition costs	6,380	-309	-19,029	-22,410	-193	-16,223
Used higher incarceration costs[b]	6,334	-309	-19,029	-22,410	1,809	-14,266
Used a fixed work-related cost measure (non-child care)[c]	5,386	-309	-19,029	-22,410	-193	-17,217
Used a low discount rate[d]	6,106	-283	-19,029	-22,259	-158	-16,311
Used a high discount rate[d]	6,536	-332	-19,029	-22,543	-224	-16,231
Used only statistically significant estimates in the calculation [e]	856	245	-19,029	-19,805	-337	-19,286

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: The inputs for the benefit-cost analysis are based on (1) program costs drawn from program administrative records, financial documents, staff activity logs and staff interviews (2) the estimated impacts on key outcomes (regardless of whether they were statistically significant), or (3) imputation methods that combined the impact estimates with data from external sources. All benefits and costs are dollars per treatment group family over five years and are inflation-adjusted to 2020 dollars and discounted to 2020 present value.

[a] The perspective of the federal government as a whole incorporates the perspectives of SSA, ED, and other federal agencies that might experience benefits or costs because of PROMISE.

[b] We changed incarceration costs from the national average ($97/day) to the highest state-specific cost (California, $228/day).

[c] We changed work-related costs from a multiplier of 10.6% to a fixed cost of $51 dollars per week.

[d] The low discount rate is 1 percent, and the high discount rate is 5 percent.

[e] This sensitivity analysis assigns a value of zero to impact estimates to impacts estimates that were not were significant at the .10 level. (The main analysis and all other sensitivity tests include impact estimates regardless of whether they were statistically significant).

ED = U.S. Department of Education; SSA = Social Security Administration.

3. Long-term forecast

We projected the accrual of net benefits over 10 and 20 years after RA to assess how costs and benefits may change after the five-year evaluation period. We projected the net benefits under three scenarios that varied in their potential returns to youth's education: high returns, diminishing returns, and no returns (Appendix Table H.29). Because WI PROMISE caused a small and nonsignificant increase in youth's years of education (0.04 years), the scenario assuming "no returns" to education generates the lowest net benefit estimate and the scenario assuming "high returns" to education generates the highest estimate. Across all scenarios, the forecasted net benefits 10 and 20 years after RA are higher than the net benefits estimated at five years after RA. This is because treatment group youth had higher earnings than control group youth in the fourth and fifth years after RA, an advantage that gets compounded in the forecast as earnings grow by an annual percentage over time.

We also calculated how large the impact on youth earnings would have to be, assuming all other impacts were the same as in the five-year analysis, for WI PROMISE's benefits to equal the costs in 10 and 20 years after RA (Appendix Figure H.1). The program would need to generate an average annual impact on youth earnings of $2,553 per year to be cost neutral 10 years after RA and $679 per year to be cost neutral 20 years after RA. The point estimates of the program's impact on youth earnings were $451 in the fifth year after RA and $668 in the year before the five-year survey. If it continues to generate similarly sized annual impacts, cost neutrality 20 years after RA could be within reach.

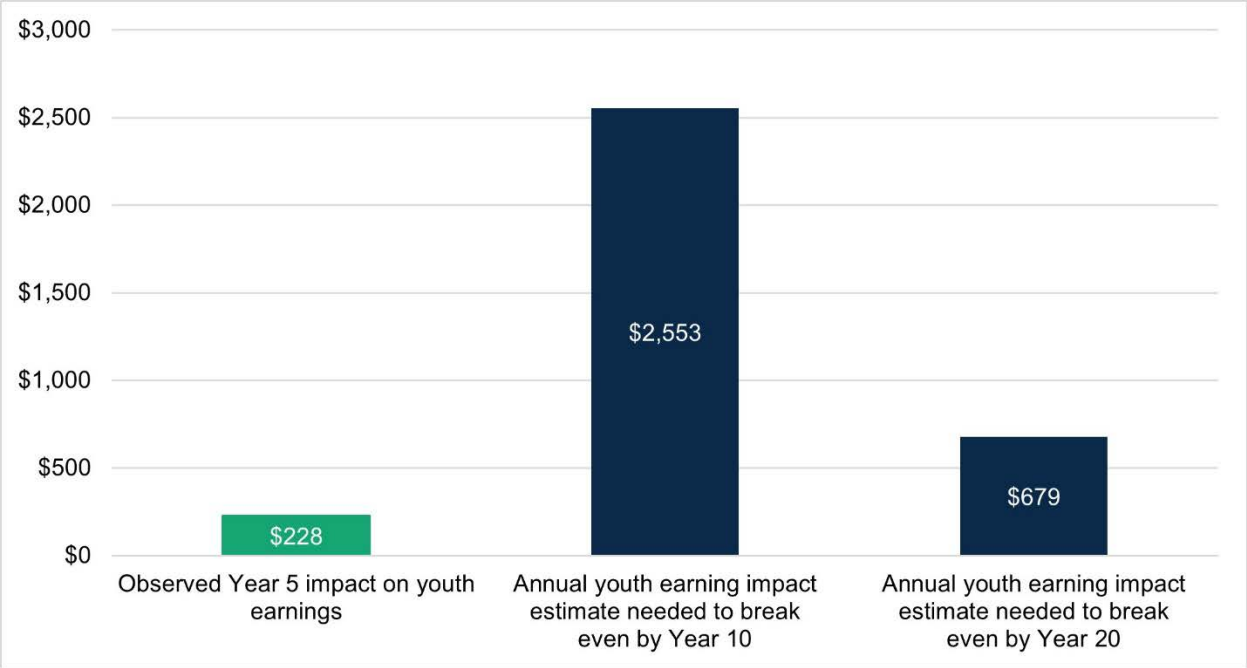
Appendix Table H.29. WI PROMISE: Net benefits ($) to all stakeholders forecast over 10 and 20 years after RA, under different assumptions about the returns to education and using the upper and lower bound of the earnings impact

Assumption	PROMISE youth and families (A)	Federal government			State and local government, including PROMISE partners (E)	All key stakeholders (F = A + D + E)
		SSA (B)	ED (C)	Federal government as a whole[a] (D)		
10-year forecast						
Returns to education						
Persistent high return to education	14,074	319	-19,029	-25,300	-2,403	-13,630
Diminishing return to education	14,019	300	-19,029	-25,322	-2,404	-13,707
No return to education	13,985	287	-19,029	-25,336	-2,405	-13,756
Confidence interval bounds						
Using upper bound of earnings impact	18,086	1,507	-19,029	-23,945	-2,302	-8,161
Using lower bound of earnings impact	10,240	-534	-19,029	-26,304	-2,495	-18,559
20-year forecast						
Returns to education						
Persistent high return to education	26,863	2,239	-19,029	-29,130	-6,014	-8,281
Diminishing return to education	26,609	2,146	-19,029	-29,233	-6,021	-8,645
No return to education	26,576	2,133	-19,029	-29,248	-6,022	-8,694
Confidence interval bounds						
Using upper bound of earnings impact	40,474	5,619	-19,029	-25,202	-5,683	9,590
Using lower bound of earnings impact	14,379	-610	-19,029	-32,475	-6,314	-24,410

Source: See Appendix Table B.4 for details on the sources and methods for the net-benefit calculation.

Note: To construct each component of the benefit-cost analysis, we used either (1) the impact estimates themselves (regardless of whether they were statistically significant), or (2) imputation methods to combine the impact estimates with data from external sources. To construct program costs, we used data from program administrative records, financial documents, staff activity logs, and staff interviews. All benefits and costs are dollars per treatment group family and are inflation-adjusted to 2020 dollars and discounted to 2020 present value. The 10-year and 20-year projections are based on costs observed from the five-year evaluation period and a forecasting scenario for the five and fifteen following years, respectively, assuming that earnings grow over time. Additionally, the persistent high return to education forecasting scenario assumes a return to education of 10 percent per additional year of schooling; the diminishing returns to education scenario assumes the returns to education are 10 percent in Year 6 and then diminish over time to zero percent in Year 10; and the no return to education scenario assumes no increase over time in the return to education.

Appendix Figure H.1. WI PROMISE: Impacts needed for cost-neutrality from the perspective of all key stakeholders



Note: The first bar shows the estimated impact on youth earnings in Year 5 after RA. The second bar shows the impact on youth earnings needed every year between Years 6 and 10 after RA for the program to be cost neutral 10 years after RA, assuming other benefits and costs are held constant between Years 6 and 10 after RA. The third bar shows the impact on youth earnings needed every year between Years 6 and 20 after RA for the program to be cost neutral 20 years after RA, assuming other benefits and costs are held constant between Years 6 and 20 after RA. All values are per treatment group family, inflation-adjusted to 2020 dollars, and discounted to 2020 present value.

WI = Wisconsin; RA = random assignment.

Appendix I. Average Impacts of the PROMISE Program

A. Enrollees and analysis samples

Pooling data across the six PROMISE programs yields a full research sample for the evaluation consisting of the 12,084 youth who enrolled in the evaluation and were randomly assigned, as well as their families. To assess the extent to which the findings might reflect the baseline characteristics of various samples, we compared differences between (1) the treatment and control groups, (2) survey respondents and nonrespondents, and (3) self-reporting and proxy youth respondents.

1. Differences between the treatment and control groups

We compared 25 baseline characteristics of the treatment and control groups for four samples: all youth survey respondents, all parent survey respondents, all enrollees, and all proxy youth respondents (Appendix Tables I.1–I.4). The similarity of samples across the characteristics examined suggest that RA created treatment and control groups that were equivalent in their baseline characteristics. Although we found statistically significant differences for a few characteristics, they are not concerning for two reasons. First, with a significance level of 10 percent, we expect to reject the null hypothesis that the groups were equivalent for 1 out of every 10 characteristics by chance alone, even when the two groups in fact had no underlying differences. Second, we included characteristics that were significantly different at baseline as covariates in our regression-adjusted impact analyses, allowing us to control for the observed differences.

Appendix Table I.1. All PROMISE programs: Baseline characteristics of youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.4	32.6	34.3	-1.7*	0.08
Youth age at RA					0.97
14	35.9	35.9	35.9	-0.0	
15	29.1	29.0	29.2	-0.2	
16	35.0	35.1	34.9	0.2	
Average age at RA	15.5	15.5	15.5	0.0	0.91
Youth language preference at SSI application					
Prefers English for written language	88.6	88.1	89.0	-0.9	0.18
Prefers English for spoken language	88.4	88.0	88.7	-0.7	0.28
Youth living arrangement at SSI application					0.68
In parents' household	84.5	84.5	84.4	0.1	
Own household or alone	13.5	13.5	13.4	0.2	
Another household and receiving support	2.1	1.9	2.2	-0.3	
Youth race and ethnicity					0.22
Non-Hispanic White	18.0	18.2	17.7	0.5	
Non-Hispanic Black	31.9	31.3	32.5	-1.1	
Hispanic	25.0	26.0	24.1	1.9	
Non-Hispanic American Indian	1.8	1.8	1.9	-0.0	
Non-Hispanic other or mixed race	7.0	7.0	6.9	0.1	
Missing	16.3	15.6	16.9	-1.3	
Enrolling parent age at RA	43.2	43.2	43.2	-0.0	0.87
Parent race and ethnicity					0.10
Non-Hispanic White	23.3	23.5	23.2	0.4	
Non-Hispanic Black	33.9	33.6	34.2	-0.6	
Hispanic	22.9	23.7	22.2	1.5	
Non-Hispanic American Indian	1.7	1.6	1.8	-0.2	
Non-Hispanic other or mixed race	5.5	5.8	5.2	0.6	
Missing	12.6	11.8	13.4	-1.6	
Disability					
Youth primary impairment					0.83
Intellectual or developmental disability	45.0	45.3	44.7	0.6	
Speech, hearing, or visual impairment	1.8	1.8	1.8	-0.1	
Physical disability	13.9	13.9	14.0	-0.1	
Other mental impairment	35.1	34.6	35.5	-0.8	
Other or unknown disability	4.2	4.4	4.0	0.4	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.2	93.8	94.6	-0.8*	0.09
Received OASDI	10.9	11.1	10.6	0.5	0.42
Years between youth's earliest SSI eligibility and RA	8.8	8.8	8.8	0.0	0.99
Youth age at most recent SSI application	7.1	7.1	7.1	-0.0	0.80
Youth payments in the year before RA ($)					
SSI	7,287	7,289	7,285	4	0.93
OASDI	310	311	310	2	0.95
Total SSI and OASDI	7,597	7,600	7,594	6	0.89
Household had multiple SSI-eligible children	19.5	19.0	20.0	-1.0	0.23
Enrolling parent provided a valid SSN at RA	76.5	76.8	76.2	0.7	0.46
Parents included in the administrative data					0.40
None	6.6	6.3	6.9	-0.6	
One parent	60.0	59.9	60.0	-0.1	
Two parents	33.4	33.8	33.0	0.8	
Parent SSA payment status at RA					0.48
Any parent received SSI only	9.3	9.0	9.5	-0.5	
Any parent received OASDI only	8.7	9.1	8.4	0.7	
Any parent received both SSI and OASDI	5.4	5.5	5.4	0.1	
No parent received any SSA payments	70.0	70.1	69.8	0.3	
No parent was included in the SSA data analyses	6.6	6.3	6.9	-0.6	
Earnings					
Youth had earnings in the calendar year before RA	3.3	3.5	3.1	0.3	0.35
Youth earnings in the calendar year before RA ($)	33	39	27	11	0.12
Parent had earnings in the calendar year before RA	70.0	69.8	70.3	-0.5	0.61
Parent earnings in the calendar year before RA ($)	16,722	16,870	16,704	166	0.68
Number of youth	9,377	4,723	4,654		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who completed the PROMISE five-year youth survey. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table I.2. All PROMISE programs: Baseline characteristics of parent survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.4	32.6	34.1	-1.5	0.13
Youth age at RA					0.85
14	35.9	35.6	36.1	-0.5	
15	29.2	29.2	29.1	0.1	
16	35.0	35.2	34.7	0.5	
Average age at RA	15.5	15.5	15.4	0.0	0.66
Youth language preference at SSI application					
Prefers English for written language	88.3	87.9	88.7	-0.8	0.23
Prefers English for spoken language	88.1	87.7	88.4	-0.6	0.33
Youth living arrangement at SSI application					0.30
In parents' household	84.9	85.0	84.9	0.1	
Own household or alone	13.0	13.2	12.9	0.3	
Another household and receiving support	2.0	1.8	2.3	-0.4	
Youth race and ethnicity					0.31
Non-Hispanic White	18.0	18.2	17.8	0.4	
Non-Hispanic Black	32.3	31.5	33.0	-1.5	
Hispanic	25.5	26.4	24.6	1.8	
Non-Hispanic American Indian	1.9	1.9	1.8	0.1	
Non-Hispanic other or mixed race	7.1	7.1	7.0	0.1	
Missing	15.3	14.8	15.8	-0.9	
Enrolling parent age at RA	43.1	43.1	43.1	0.0	0.95
Parent race and ethnicity					0.37
Non-Hispanic White	23.3	23.4	23.1	0.3	
Non-Hispanic Black	33.6	33.2	34.0	-0.8	
Hispanic	23.1	23.8	22.5	1.2	
Non-Hispanic American Indian	1.7	1.6	1.8	-0.2	
Non-Hispanic other or mixed race	5.4	5.6	5.1	0.5	
Missing	13.0	12.4	13.5	-1.1	
Disability					
Youth primary impairment					0.75
Intellectual or developmental disability	45.0	45.2	44.8	0.3	
Speech, hearing, or visual impairment	1.8	1.7	1.8	-0.1	
Physical disability	14.0	14.1	14.0	0.1	
Other mental impairment	35.0	34.6	35.4	-0.8	
Other or unknown disability	4.2	4.5	4.0	0.5	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.2	93.8	94.6	-0.8*	0.09
Received OASDI	10.7	10.9	10.5	0.5	0.48
Years between youth's earliest SSI eligibility and RA	8.8	8.8	8.8	-0.0	0.59
Youth age at most recent SSI application	7.1	7.1	7.1	0.0	0.94
Youth payments in the year before RA ($)					
SSI	7,286	7,296	7,276	20	0.67
OASDI	303	303	304	-2	0.94
Total SSI and OASDI	7,589	7,598	7,580	18	0.67
Household had multiple SSI-eligible children	19.8	19.2	20.4	-1.2	0.15
Enrolling parent provided a valid SSN at RA	76.6	76.8	76.3	0.5	0.61
Parents included in the administrative data					0.59
None	6.5	6.2	6.7	-0.5	
One parent	59.7	59.8	59.5	0.4	
Two parents	33.9	34.0	33.8	0.2	
Parent SSA payment status at RA					0.56
Any parent received SSI only	9.1	8.8	9.4	-0.5	
Any parent received OASDI only	8.5	8.8	8.2	0.6	
Any parent received both SSI and OASDI	5.5	5.6	5.4	0.2	
No parent received any SSA payments	70.4	70.5	70.3	0.2	
No parent was included in the SSA data analyses	6.5	6.2	6.7	-0.5	
Earnings					
Youth had earnings in the calendar year before RA	3.3	3.5	3.2	0.3	0.41
Youth earnings in the calendar year before RA ($)	35	39	30	9	0.22
Parent had earnings in the calendar year before RA	70.6	70.3	71.1	-0.8	0.39
Parent earnings in the calendar year before RA ($)	16,943	17,010	16,997	13	0.97
Number of youth	9,202	4,649	4,553		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth whose parent completed the PROMISE five-year youth survey. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table I.3. All PROMISE programs: Baseline characteristics of all youth enrollees (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.2	32.7	33.6	-0.9	0.31
Youth age at RA					0.88
14	35.6	35.7	35.4	0.3	
15	29.0	28.8	29.2	-0.4	
16	35.4	35.5	35.4	0.1	
Average age at RA	15.5	15.5	15.5	-0.0	0.88
Youth language preference at SSI application					
Prefers English for written language	88.6	88.4	88.8	-0.3	0.54
Prefers English for spoken language	88.4	88.3	88.5	-0.2	0.70
Youth living arrangement at SSI application					0.61
In parents' household	84.5	84.6	84.3	0.3	
Own household or alone	13.5	13.5	13.5	-0.1	
Another household and receiving support	2.0	1.9	2.2	-0.2	
Youth race and ethnicity					0.29
Non-Hispanic White	17.6	17.8	17.5	0.3	
Non-Hispanic Black	30.7	30.5	30.9	-0.4	
Hispanic	21.7	22.4	21.1	1.3	
Non-Hispanic American Indian	1.9	1.9	1.8	0.1	
Non-Hispanic other or mixed race	6.4	6.5	6.3	0.1	
Missing	21.7	21.0	22.5	-1.5	
Enrolling parent age at RA	43.0	43.0	43.1	-0.0	0.88
Parent race and ethnicity					0.36
Non-Hispanic White	22.5	22.7	22.4	0.3	
Non-Hispanic Black	32.3	32.5	32.1	0.4	
Hispanic	19.5	19.8	19.2	0.6	
Non-Hispanic American Indian	1.8	1.7	1.8	-0.1	
Non-Hispanic other or mixed race	4.9	5.1	4.7	0.4	
Missing	19.0	18.3	19.8	-1.5	
Disability					
Youth primary impairment					0.90
Intellectual or developmental disability	44.5	44.8	44.2	0.6	
Speech, hearing, or visual impairment	1.7	1.6	1.8	-0.1	
Physical disability	13.8	13.9	13.8	0.1	
Other mental impairment	35.8	35.5	36.2	-0.7	
Other or unknown disability	4.2	4.2	4.2	0.1	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.2	94.0	94.5	-0.5	0.28
Received OASDI	10.8	11.1	10.5	0.6	0.29
Years between youth's earliest SSI eligibility and RA	8.8	8.8	8.8	0.0	0.99
Youth age at most recent SSI application	7.1	7.1	7.1	-0.0	0.83
Youth payments in the year before RA ($)					
SSI	7,299	7,302	7,295	7	0.86
OASDI	308	309	307	2	0.92
Total SSI and OASDI	7,607	7,612	7,602	9	0.80
Household had multiple SSI-eligible children	19.7	19.4	20.0	-0.6	0.39
Enrolling parent provided a valid SSN at RA	76.3	76.3	76.3	0.0	0.99
Parents included in the administrative data					0.25
None	6.7	6.4	7.0	-0.6	
One parent	60.0	59.9	60.2	-0.3	
Two parents	33.2	33.7	32.8	0.9	
Parent SSA payment status at RA					0.53
Any parent received SSI only	9.4	9.3	9.5	-0.1	
Any parent received OASDI only	8.6	8.8	8.4	0.3	
Any parent received both SSI and OASDI	5.4	5.6	5.2	0.4	
No parent received any SSA payments	69.9	69.9	69.9	0.0	
No parent was included in the SSA data analyses	6.7	6.4	7.0	-0.6	
Earnings					
Youth had earnings in the calendar year before RA	3.3	3.3	3.2	0.2	0.60
Youth earnings in the calendar year before RA ($)	34	34	33	1	0.87
Parent had earnings in the calendar year before RA	70.1	69.8	70.5	-0.7	0.45
Parent earnings in the calendar year before RA ($)	16,730	16,765	16,845	-80	0.82
Number of youth	12,584	6,302	6,282		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who enrolled in PROMISE. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table I.4. All PROMISE programs: Baseline characteristics of proxy youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	28.8	28.0	29.7	-1.7	0.28
Youth age at RA					0.71
14	35.8	36.4	35.1	1.3	
15	30.3	29.7	30.8	-1.1	
16	33.9	33.8	34.1	-0.2	
Average age at RA	15.4	15.4	15.5	-0.0	0.39
Youth language preference at SSI application					
Prefers English for written language	86.2	85.8	86.6	-0.9	0.45
Prefers English for spoken language	85.8	85.6	86.0	-0.4	0.71
Youth living arrangement at SSI application					0.23
In parents' household	84.5	85.0	84.0	1.0	
Own household or alone	13.7	13.6	13.8	-0.2	
Another household and receiving support	1.9	1.4	2.3	-0.8	
Youth race and ethnicity					0.28
Non-Hispanic White	17.1	16.9	17.3	-0.4	
Non-Hispanic Black	28.2	26.8	29.6	-2.8	
Hispanic	26.5	27.5	25.6	2.0	
Non-Hispanic American Indian	1.7	1.4	2.0	-0.6	
Non-Hispanic other or mixed race	6.4	6.5	6.3	0.2	
Missing	20.1	20.9	19.3	1.6	
Enrolling parent age at RA	43.4	43.3	43.5	-0.2	0.50
Parent race and ethnicity					0.30
Non-Hispanic White	21.5	21.4	21.6	-0.2	
Non-Hispanic Black	30.8	29.5	32.1	-2.6	
Hispanic	25.2	26.6	23.7	2.9	
Non-Hispanic American Indian	1.7	1.6	1.9	-0.3	
Non-Hispanic other or mixed race	5.6	6.0	5.1	0.9	
Missing	15.3	14.9	15.6	-0.7	
Disability					
Youth primary impairment					0.55
Intellectual or developmental disability	45.9	46.4	45.5	1.0	
Speech, hearing, or visual impairment	2.0	1.8	2.1	-0.3	
Physical disability	15.5	16.2	14.8	1.4	
Other mental impairment	31.7	30.6	32.8	-2.3	
Other or unknown disability	4.9	5.0	4.8	0.2	

Baseline characteristic	All (A)	Treatment (B)	Control (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.9	94.6	95.1	-0.5	0.54
Received OASDI	10.1	10.5	9.8	0.7	0.52
Years between youth's earliest SSI eligibility and RA	9.3	9.2	9.4	-0.2	0.30
Youth age at most recent SSI application	6.7	6.8	6.7	0.1	0.53
Youth payments in the year before RA ($)					
SSI	7,296	7,341	7,253	88	0.27
OASDI	286	278	294	-16	0.67
Total SSI and OASDI	7,582	7,619	7,547	71	0.33
Household had multiple SSI-eligible children	18.4	18.1	18.6	-0.4	0.76
Enrolling parent provided a valid SSN at RA	74.7	75.5	73.9	1.6	0.30
Parents included in the administrative data					0.36
None	6.8	6.5	7.0	-0.4	
One parent	58.2	57.2	59.1	-1.9	
Two parents	35.1	36.3	33.9	2.4	
Parent SSA payment status at RA					0.57
Any parent received SSI only	8.1	8.2	8.0	0.2	
Any parent received OASDI only	8.1	8.4	7.7	0.8	
Any parent received both SSI and OASDI	4.9	5.4	4.4	1.1	
No parent received any SSA payments	72.2	71.4	73.0	-1.6	
No parent was included in the SSA data analyses	6.8	6.5	7.0	-0.4	
Earnings					
Youth had earnings in the calendar year before RA	2.5	2.6	2.4	0.2	0.72
Youth earnings in the calendar year before RA ($)	27	37	18	19	0.26
Parent had earnings in the calendar year before RA	71.4	71.0	71.9	-1.0	0.56
Parent earnings in the calendar year before RA ($)	17,507	17,367	17,790	-423	0.56
Number of youth	3,243	1,611	1,632		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who completed the PROMISE five-year youth survey by proxy. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

2. Differences between survey respondents and nonrespondents

We compared youth and parent survey respondents with nonrespondents across 25 baseline characteristics to assess the extent to which survey nonresponse might limit generalizability of the impact findings to all evaluation enrollees (Appendix Tables I.5 and I.6). Youth survey respondents differed from nonrespondents with respect to youth sex, youth average age at RA, youth's written and spoken language preferences, enrolling parent age at RA, the share of youth who received OASDI benefits at RA, the years between youth's earliest SSI eligibility and RA, youth age at most recent SSI application, youth's SSI and OASDI benefits in the year before RA, the share of enrolling parents who provided a valid SSN at RA, and the share of parents who had earnings in the year before RA. Parent survey respondents differed from nonrespondents with respect to youth average age at RA, youth's written and spoken language preferences, the years between youth's earliest SSI eligibility and RA, youth age at most recent SSI application, youth's SSI and total benefits in the year before RA, and the share of enrolling parents who provided a valid SSN at RA. Overall, even when the differences were statistically significant, they generally were small. The extent and magnitude of the differences suggested that the respondents were not markedly different from the nonrespondents. To account for survey nonresponse, we calculated and used survey weights in all regression models to estimate impacts on the survey-based outcome measures.

Appendix Table I.5. All PROMISE programs: Baseline characteristics of youth survey respondents and nonrespondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.2	33.8	30.9	2.9***	0.00
Youth age at RA				†††	0.00
14	35.6	36.4	32.8	3.5	
15	29.0	29.0	29.0	0.0	
16	35.4	34.6	38.2	-3.6	
Average age at RA	15.5	15.4	15.5	-0.1***	0.00
Youth language preference at SSI application					
Prefers English for written language	88.6	89.8	84.6	5.2***	0.00
Prefers English for spoken language	88.4	89.6	84.6	4.9***	0.00
Youth living arrangement at SSI application					0.40
In parents' household	84.5	84.7	83.9	0.8	
Own household or alone	13.5	13.3	14.2	-0.9	
Another household and receiving support	2.0	2.1	1.9	0.1	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	17.6	19.6	11.2	8.4	
Non-Hispanic Black	30.7	34.2	18.9	15.3	
Hispanic	21.7	24.1	13.8	10.3	
Non-Hispanic American Indian	1.9	2.0	1.5	0.5	
Non-Hispanic other or mixed race	6.4	7.3	3.5	3.7	
Missing	21.7	12.9	51.1	-38.3	
Enrolling parent age at RA	43.0	43.2	42.4	0.9***	0.00
Parent race and ethnicity				†††	0.00
Non-Hispanic White	22.5	25.1	14.1	11.0	
Non-Hispanic Black	32.3	35.7	21.0	14.7	
Hispanic	19.5	21.7	12.2	9.5	
Non-Hispanic American Indian	1.8	1.8	1.6	0.3	
Non-Hispanic other or mixed race	4.9	5.6	2.5	3.1	
Missing	19.0	10.1	48.7	-38.6	
Disability					
Youth primary impairment					0.13
Intellectual or developmental disability	44.5	45.1	42.4	2.7	
Speech, hearing, or visual impairment	1.7	1.7	1.7	0.0	
Physical disability	13.8	13.7	14.3	-0.6	
Other mental impairment	35.8	35.4	37.2	-1.9	
Other or unknown disability	4.2	4.1	4.4	-0.2	

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.2	94.3	94.2	0.1	0.88
Received OASDI	10.8	11.2	9.4	1.8***	0.00
Years between youth's earliest SSI eligibility and RA	8.8	8.9	8.6	0.2**	0.01
Youth age at most recent SSI application	7.1	7.1	7.4	-0.3***	0.00
Youth payments in the year before RA ($)					
SSI	7,299	7,271	7,390	-119**	0.01
OASDI	308	321	266	55**	0.01
Total SSI and OASDI	7,607	7,592	7,656	-64	0.13
Household had multiple SSI-eligible children	19.7	19.7	19.8	-0.1	0.90
Enrolling parent provided a valid SSN at RA	76.3	77.7	71.7	6.0***	0.00
Parents included in the administrative data				†††	0.00
None	6.7	6.2	8.5	-2.4	
One parent	60.0	60.2	59.5	0.7	
Two parents	33.2	33.6	31.9	1.7	
Parent SSA payment status at RA				†††	0.00
Any parent received SSI only	9.4	9.5	9.0	0.5	
Any parent received OASDI only	8.6	9.0	7.2	1.8	
Any parent received both SSI and OASDI	5.4	5.7	4.6	1.1	
No parent received any SSA payments	69.9	69.6	70.7	-1.0	
No parent was included in the SSA data analyses	6.7	6.2	8.5	-2.4	
Earnings					
Youth had earnings in the calendar year before RA	3.3	3.3	3.1	0.3	0.48
Youth earnings in the calendar year before RA ($)	34	32	37	-5	0.55
Parent had earnings in the calendar year before RA	70.1	69.7	71.7	-2.0**	0.04
Parent earnings in the calendar year before RA ($)	16,730	16,693	17,177	-484	0.24
Number of youth	12,584	9,377	3,207		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all youth who enrolled in PROMISE. Nonrespondents include youth ineligible for the survey because they died or withdrew from the study or were not sampled for the survey. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table I.6. All PROMISE programs: Baseline characteristics of parent survey respondents and nonrespondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.2	33.5	32.3	1.1	0.24
Youth age at RA				†††	0.00
14	35.6	36.3	33.2	3.2	
15	29.0	29.1	28.7	0.5	
16	35.4	34.5	38.2	-3.6	
Average age at RA	15.5	15.4	15.5	-0.1***	0.00
Youth language preference at SSI application					
Prefers English for written language	88.6	89.5	85.7	3.8***	0.00
Prefers English for spoken language	88.4	89.3	85.8	3.5***	0.00
Youth living arrangement at SSI application				†††	0.01
In parents' household	84.5	85.0	82.7	2.3	
Own household or alone	13.5	13.0	15.1	-2.1	
Another household and receiving support	2.0	2.0	2.2	-0.2	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	17.6	19.2	12.8	6.5	
Non-Hispanic Black	30.7	34.6	18.6	16.0	
Hispanic	21.7	24.4	13.5	10.9	
Non-Hispanic American Indian	1.9	2.0	1.6	0.3	
Non-Hispanic other or mixed race	6.4	7.3	3.7	3.6	
Missing	21.7	12.5	49.7	-37.2	
Enrolling parent age at RA	43.0	43.1	42.9	0.2	0.38
Parent race and ethnicity				†††	0.00
Non-Hispanic White	22.5	24.8	15.6	9.2	
Non-Hispanic Black	32.3	36.3	20.2	16.0	
Hispanic	19.5	21.9	12.0	9.9	
Non-Hispanic American Indian	1.8	1.8	1.8	0.0	
Non-Hispanic other or mixed race	4.9	5.5	3.1	2.4	
Missing	19.0	9.7	47.4	-37.6	
Disability					
Youth primary impairment				††	0.04
Intellectual or developmental disability	44.5	45.2	42.2	3.0	
Speech, hearing, or visual impairment	1.7	1.7	1.8	-0.1	
Physical disability	13.8	13.8	13.8	-0.0	
Other mental impairment	35.8	35.2	37.8	-2.6	
Other or unknown disability	4.2	4.1	4.4	-0.3	

Baseline characteristic	All (A)	Respondents (B)	Nonrespondents (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.2	94.3	94.1	0.2	0.74
Received OASDI	10.8	10.9	10.4	0.5	0.43
Years between youth's earliest SSI eligibility and RA	8.8	8.9	8.7	0.2**	0.02
Youth age at most recent SSI application	7.1	7.1	7.3	-0.3***	0.00
Youth payments in the year before RA ($)					
SSI	7,299	7,279	7,361	-82*	0.07
OASDI	308	311	301	10	0.67
Total SSI and OASDI	7,607	7,589	7,662	-73*	0.08
Household had multiple SSI-eligible children	19.7	19.7	19.6	0.1	0.86
Enrolling parent provided a valid SSN at RA	76.3	77.8	71.7	6.1***	0.00
Parents included in the administrative data				†††	0.00
None	6.7	6.1	8.6	-2.5	
One parent	60.0	60.2	59.7	0.5	
Two parents	33.2	33.8	31.7	2.1	
Parent SSA payment status at RA				†††	0.00
Any parent received SSI only	9.4	9.4	9.5	-0.1	
Any parent received OASDI only	8.6	8.8	8.1	0.7	
Any parent received both SSI and OASDI	5.4	5.6	4.7	1.0	
No parent received any SSA payments	69.9	70.1	69.1	1.0	
No parent was included in the SSA data analyses	6.7	6.1	8.6	-2.5	
Earnings					
Youth had earnings in the calendar year before RA	3.3	3.4	2.9	0.5	0.15
Youth earnings in the calendar year before RA ($)	34	34	32	2	0.73
Parent had earnings in the calendar year before RA	70.1	70.2	69.9	0.3	0.72
Parent earnings in the calendar year before RA ($)	16,730	16,851	16,664	187	0.64
Number of youth	12,584	9,202	3,382		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes the parents who were eligible for the survey. Nonrespondents include parents ineligible for the survey because they died or withdrew from the study or were not sampled for the survey. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

3. Differences between self-reporting and proxy youth respondents

We compared the baseline characteristics of youth who self-responded to the survey to those who responded via proxies to assess whether systematically missing data from different survey modes might affect the estimated impacts on survey-based outcomes (Appendix Table I.7). We found differences in 12 of 25 baseline characteristics by survey response type. Because of these differences, findings on survey-based outcomes that are available only for self-respondents might not generalize to all survey respondents.

Appendix Table I.7. All PROMISE programs: Baseline characteristics of proxy and self-reporting youth survey respondents (percentages, unless otherwise noted)

Baseline characteristic	All (A)	Proxy respondent (B)	Self-reporting respondent (C)	Difference (B – C)	*p*-value
Demographic characteristics					
Youth is female	33.4	29.0	35.8	-6.8***	0.00
Youth age at RA					0.13
14	35.9	35.8	36.0	-0.3	
15	29.1	30.3	28.4	1.9	
16	35.0	33.9	35.6	-1.6	
Average age at RA	15.5	15.4	15.5	-0.0	0.22
Youth language preference at SSI application					
Prefers English for written language	88.6	85.7	90.1	-4.4***	0.00
Prefers English for spoken language	88.4	85.3	90.0	-4.7***	0.00
Youth living arrangement at SSI application					0.58
In parents' household	84.5	84.4	84.5	-0.1	
Own household or alone	13.5	13.7	13.3	0.4	
Another household and receiving support	2.1	1.9	2.2	-0.3	
Youth race and ethnicity				†††	0.00
Non-Hispanic White	18.0	16.4	18.8	-2.4	
Non-Hispanic Black	31.9	28.2	33.9	-5.6	
Hispanic	25.0	27.0	23.9	3.1	
Non-Hispanic American Indian	1.8	1.6	2.0	-0.4	
Non-Hispanic other or mixed race	7.0	6.5	7.2	-0.7	
Missing	16.3	20.3	14.2	6.1	
Enrolling parent age at RA	43.2	43.5	43.1	0.4**	0.03
Parent race and ethnicity				†††	0.00
Non-Hispanic White	23.3	20.6	24.8	-4.1	
Non-Hispanic Black	33.9	30.9	35.5	-4.6	
Hispanic	22.9	25.7	21.5	4.3	
Non-Hispanic American Indian	1.7	1.6	1.8	-0.2	
Non-Hispanic other or mixed race	5.5	5.7	5.4	0.3	
Missing	12.6	15.4	11.1	4.3	
Disability					
Youth primary impairment				†††	0.00
Intellectual or developmental disability	45.0	46.4	44.2	2.2	
Speech, hearing, or visual impairment	1.8	2.0	1.7	0.4	
Physical disability	13.9	15.5	13.1	2.3	
Other mental impairment	35.1	31.3	37.1	-5.8	
Other or unknown disability	4.2	4.9	3.9	1.0	

Baseline characteristic	All (A)	Proxy respondent (B)	Self-reporting respondent (C)	Difference (B – C)	*p*-value
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.2	95.0	93.8	1.1**	0.02
Received OASDI	10.9	10.0	11.3	-1.3*	0.06
Years between youth's earliest SSI eligibility and RA	8.8	9.3	8.6	0.7***	0.00
Youth age at most recent SSI application	7.1	6.7	7.3	-0.6***	0.00
Youth payments in the year before RA ($)					
SSI	7,287	7,303	7,278	25	0.60
OASDI	310	285	324	-40*	0.10
Total SSI and OASDI	7,597	7,588	7,602	-14	0.75
Household had multiple SSI-eligible children	19.5	18.3	20.1	-1.8**	0.04
Enrolling parent provided a valid SSN at RA	76.5	74.7	77.5	-2.8***	0.00
Parents included in the administrative data				†	0.07
None	6.6	6.8	6.5	0.3	
One parent	60.0	58.4	60.8	-2.5	
Two parents	33.4	34.9	32.7	2.2	
Parent SSA payment status at RA				†††	0.00
Any parent received SSI only	9.3	8.1	9.9	-1.8	
Any parent received OASDI only	8.7	8.0	9.1	-1.1	
Any parent received both SSI and OASDI	5.4	4.8	5.7	-0.9	
No parent received any SSA payments	70.0	72.3	68.7	3.6	
No parent was included in the SSA data analyses	6.6	6.8	6.5	0.3	
Earnings					
Youth had earnings in the calendar year before RA	3.3	2.5	3.7	-1.2***	0.00
Youth earnings in the calendar year before RA ($)	33	29	35	-6	0.49
Parent had earnings in the calendar year before RA	70.0	71.4	69.4	2.0*	0.05
Parent earnings in the calendar year before RA ($)	16,722	17,566	16,373	1,193***	0.01
Number of youth	9,377	3,243	6,134		

Source: SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: The sample includes all PROMISE five-year youth survey respondents. We weighted the statistics to adjust for survey nonresponse. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

B. Findings from the impact analysis

In this section, we present findings from the impact analysis of the pooled PROMISE programs. First, we present impacts estimated through the main models. Second, we present the results of sensitivity analyses. Third, we present impacts for key subgroups of evaluation enrollees.

1. Impact estimates

Appendix Tables I.8–I.17 provide results and inference statistics for the regression-adjusted impacts estimated through the main models described in Appendix B. For each outcome measure, we report the estimated regression-adjusted impact; the control group mean (weighted, as applicable); and additional inference statistics, such as standard errors, effect sizes, and sample sizes by treatment status.

Appendix Table I.8. All PROMISE programs: Impact on the youth's education and training (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group sample size	Control group sample size
Primary outcomes							
Enrolled in an educational or training program	42.9	-1.3	0.18	1.0	-0.033	4,578	4,486
Has a GED, high school diploma, or certificate of completion	71.5	-2.0**	0.03	0.9	-0.059	4,683	4,620
Supplementary outcomes							
Enrolled in postsecondary education	14.4	-0.2	0.75	0.7	-0.011	4,636	4,578
Type of school attending							
High school serving a variety of students	8.8	-0.1	0.82	0.6	-0.010	4,636	4,578
High school serving only students with disabilities	7.4	0.1	0.77	0.5	0.013	4,636	4,578
GED program or other adult education program	2.9	-0.5	0.13	0.3	-0.119	4,636	4,578
Postsecondary vocational, trade, or technical school	3.2	-0.0	0.95	0.4	-0.005	4,636	4,578
Postsecondary college or advanced degree program	11.2	-0.2	0.75	0.6	-0.013	4,636	4,578
Other type of school	2.3	-0.3	0.32	0.3	-0.086	4,636	4,578
Not attending school	64.2	1.0	0.27	0.9	0.027	4,636	4,578
Highest grade completed							
Lower than 12th grade	22.7	1.0	0.23	0.9	0.035	4,723	4,654
12th grade or senior in high school	65.0	-2.1**	0.04	1.0	-0.055	4,723	4,654
Some or all of college or university	8.8	0.7	0.26	0.6	0.049	4,723	4,654
Other or do not know	3.5	0.4	0.33	0.4	0.064	4,723	4,654
Enrolled in a training program	11.0	-0.1	0.92	0.7	-0.004	4,503	4,425
Received any training credential in the past year	8.6	1.5**†	0.02	0.6	0.106	4,666	4,612
Any school suspensions or expulsions in the past year	2.2	0.5	0.14	0.3	0.121	4,508	4,433

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group sample size	Control group sample size
Accommodations							
Receives educational accommodation	24.7	-0.4	0.63	0.8	-0.013	4,635	4,566
Receives training accommodation	6.7	-0.3	0.56	0.5	-0.030	4,496	4,420
Received supports or services for postsecondary education in the past year	24.1	1.0	0.26	0.9	0.033	4,671	4,606

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

† Impacts for the six programs are significantly different from each other at the .10 level using an adjusted Wald test.

GED = General Educational Development.

Appendix Table I.9. All PROMISE programs: Impact on the youth's employment and earnings (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Employed in a paid job in the past year[a]	42.2	2.9***	0.01	1.0	0.071	4,723	4,654
Earnings in the past year ($)	4,426	301	0.10	183	0.034	4,723	4,654
Earnings during the five calendar years after RA ($)	11,626	711**	0.03	331	0.037	6,302	6,282
Supplementary outcomes							
Employment in the past year							
Any employment	46.3	3.0***	0.00	1.0	0.072	4,723	4,654
Weekly hours worked	6.9	0.5*	0.06	0.3	0.039	4,723	4,654
Employed in a paid job offering fringe benefits	23.8	1.1	0.23	0.9	0.035	4,723	4,654
Employment settings							
Integrated	34.6	2.3**†	0.02	1.0	0.060	4,723	4,654
Outside of school-sponsored activities	37.3	2.2**	0.03	1.0	0.057	4,723	4,654
With coaching	8.1	1.9***	0.00	0.6	0.143	4,723	4,654
Received supports or services in getting or keeping a job	18.6	3.3***	0.00	0.8	0.122	4,688	4,617
Employment at the time of the survey							
Any paid employment	24.9	2.5***	0.01	0.9	0.079	4,723	4,654
Average weekly earnings ($)	86	10**	0.02	4	0.050	4,723	4,654
Weekly hours worked	7.0	0.8**	0.01	0.3	0.054	4,723	4,654
Labor force participation	50.3	3.4***	0.00	1.0	0.084	4,723	4,654
Employment and earnings in calendar years after RA							
Ever employed in Year 1	18.9	15.6***†	0.00	0.7	0.494	6,302	6,282
Ever employed in Year 2	31.2	12.7***†	0.00	0.8	0.330	6,302	6,282
Ever employed in Year 3	42.3	8.2***†	0.00	0.9	0.200	6,302	6,282
Ever employed in Year 4	48.4	4.2***	0.00	0.9	0.103	6,302	6,282
Ever employed in Year 5	49.7	1.5*	0.08	0.9	0.037	6,302	6,282
Ever employed during Years 1-5	65.4	11.2***†	0.00	0.8	0.332	6,302	6,282
Earnings in Year 1 ($)	362	204***†	0.00	22	0.165	6,302	6,282

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Earnings in Year 2 ($)	981	151***	0.00	43	0.061	6,302	6,282
Earnings in Year 3 ($)	2,123	114	0.13	76	0.026	6,302	6,282
Earnings in Year 4 ($)	3,469	75	0.50	111	0.012	6,302	6,282
Earnings in Year 5 ($)	4,691	167	0.25	144	0.020	6,302	6,282
VR services during the 5 years after RA[a]							
Applied for VR services	22.4	24.7***†	0.00	0.8	0.683	6,302	6,282
Received VR services	17.1	22.6***†	0.00	0.7	0.705	6,302	6,282

Source: PROMISE five-year survey, RSA-911 data (VR service outcomes), and SSA administrative records (employment and earnings in years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

† Impacts for the six programs are significantly different from each other at the .10 level using an adjusted Wald test.

[a] RSA-911 data are available only through 2020. VR services outcomes used only four years of data for youth who enrolled in PROMISE in 2016.

N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration; VR = vocational rehabilitation.

Appendix Table I.10. All PROMISE programs: Impact on the youth's self-determination and expectations (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Self-determination score (scale: 0 to 100)[a]	78.5	-0.3	0.44	0.4	-0.020	2,961	2,865
Youth expects to be financially independent at age 25	60.5	2.6**	0.04	1.3	0.067	3,025	2,943
Supplementary outcomes							
Scores on subdomains of self-determination[a]							
Autonomy (scale: 0 to 300)	138.3	-1.2	0.45	1.5	-0.020	2,967	2,872
Psychological empowerment (scale: 0 to 100)	87.2	0.2	0.65	0.5	0.012	2,953	2,868
Self-realization (scale: 0 to 100)	91.0	-0.5	0.21	0.4	-0.033	2,958	2,864
Agentic action (scale: 0 to 100)	89.6	-0.3	0.63	0.6	-0.013	2,956	2,858
Youth expects to:							
Get postsecondary education (beyond high school/GED)	59.8	-2.2*	0.08	1.3	-0.055	2,968	2,860
Live independently at age 25	63.9	0.8	0.49	1.2	0.022	2,982	2,900
Be employed in a paid job at age 25	87.0	1.7**	0.04	0.8	0.099	3,049	2,965
Parent expects youth to:							
Get postsecondary education (beyond high school/GED)	42.3	1.0	0.33	1.1	0.025	4,350	4,240
Live independently at age 25	40.3	-1.6	0.12	1.0	-0.040	4,333	4,273
Be financially independent at age 25	44.5	0.7	0.51	1.0	0.017	4,437	4,345
Be employed in a paid job at age 25	78.1	2.6***	0.00	0.9	0.097	4,429	4,380
Parent believes it important that youth be employed eventually	90.0	1.5**	0.01	0.6	0.110	4,324	4,265

Source: PROMISE five-year survey.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

† Impacts for the six programs are significantly different from each other at the .10 level using an adjusted Wald test.

[a] Higher scores on the scales indicate higher levels of self-determination.

GED = General Educational Development; N = sample size.

Appendix Table I.11. All PROMISE programs: Impact on the youth's SSA payments and knowledge (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Received SSA payments in Year 5 after RA	64.0	1.6**†	0.05	0.8	0.043	6,302	6,282
Total SSA payments in Year 5 after RA ($)	5,232	100	0.18	75	0.022	6,302	6,282
Total SSA payments during Years 1–5 after RA ($)	33,225	401*	0.08	226	0.028	6,302	6,282
Supplementary outcomes							
Aware of the following SSA policies							
Children receiving SSI are not automatically eligible for SSI as adults	42.3	1.2	0.35	1.3	0.030	2,955	2,861
People receiving SSI can work for pay	71.5	-1.1	0.37	1.2	-0.031	2,956	2,861
People receiving SSI must report earnings to SSA	77.8	0.3†	0.81	1.1	0.009	2,954	2,861
Aware of the following work supports							
SSI Student Earned Income Exclusion	7.3	4.4***	0.00	0.8	0.316	2,957	2,862
SSI earned income exclusion	6.8	2.5***	0.00	0.7	0.206	2,956	2,862
SSI PASS plan	7.1	2.9***	0.00	0.7	0.231	2,957	2,862
ABLE account	6.6	14.4***†	0.00	0.8	0.807	2,955	2,862
SSA payments in years after RA							
Received any in Year 1	97.0	-0.2	0.44	0.2	-0.033	6,302	6,282
Received any in Year 2	91.8	-0.1	0.76	0.4	-0.011	6,302	6,282
Received any in Year 3	85.1	0.3	0.62	0.6	0.014	6,302	6,282
Received any in Year 4	73.4	2.4***†	0.00	0.7	0.078	6,302	6,282
Received any in Years 1–5	97.8	-0.0	0.83	0.2	-0.012	6,302	6,282
Amount in Year 1 ($)	8,099	-30	0.37	33	-0.011	6,302	6,282
Amount in Year 2 ($)	7,461	1	0.98	48	0.000	6,302	6,282
Amount in Year 3 ($)	6,639	130**	0.03	61	0.035	6,302	6,282
Amount in Year 4 ($)	5,795	199***	0.00	70	0.048	6,302	6,282

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
SSI payments in years after RA							
Received any in Year 1	96.2	-0.1	0.46	0.2	-0.023	6,302	6,282
Received any in Year 2	90.0	-0.0	0.98	0.5	-0.001	6,302	6,282
Received any in Year 3	82.2	1.0	0.11	0.6	0.044	6,302	6,282
Received any in Year 4	71.0	2.7***†	0.00	0.8	0.081	6,302	6,282
Received any in Year 5	62.1	1.9**	0.02	0.8	0.049	6,302	6,282
Received any in Years 1–5	97.1	0.1	0.60	0.2	0.025	6,302	6,282
Amount in Year 1 ($)	7,682	-27	0.47	38	-0.009	6,302	6,282
Amount in Year 2 ($)	7,006	12	0.81	51	0.004	6,302	6,282
Amount in Year 3 ($)	6,207	138**	0.03	62	0.037	6,302	6,282
Amount in Year 4 ($)	5,390	223***	0.00	69	0.054	6,302	6,282
Amount in Year 5 ($)	4,853	100	0.17	73	0.023	6,302	6,282
Total amount during Years 1–5 ($)	31,137	446*	0.06	234	0.030	6,302	6,282
OASDI benefits in years after RA							
Received any in Year 1	11.6	-0.0	1.00	0.5	-0.000	6,302	6,282
Received any in Year 2	12.6	-0.2	0.70	0.5	-0.012	6,302	6,282
Received any in Year 3	11.5	-0.4	0.49	0.5	-0.022	6,302	6,282
Received any in Year 4	9.8	-0.5	0.37	0.5	-0.032	6,302	6,282
Received any in Year 5	7.8	0.1	0.82	0.5	0.009	6,302	6,282
Received any in Years 1–5	15.2	0.2	0.77	0.6	0.008	6,302	6,282
Amount in Year 1 ($)	417	-2	0.93	26	-0.002	6,302	6,282
Amount in Year 2 ($)	455	-11	0.70	28	-0.007	6,302	6,282
Amount in Year 3 ($)	432	-8	0.79	29	-0.005	6,302	6,282
Amount in Year 4 ($)	404	-24	0.42	29	-0.014	6,302	6,282
Amount in Year 5 ($)	379	0	1.00	31	0.000	6,302	6,282
Total amount during Years 1–5 ($)	2,088	-45	0.72	123	-0.006	6,302	6,282

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Age-18 redetermination status five years after RA							
Final decision: benefits ceased	23.3	0.3	0.69	0.7	0.010	6,302	6,282
Final decision: benefits continued	41.6	-0.4	0.66	0.8	-0.009	6,302	6,282
Final decision is pending	7.6	-0.1	0.86	0.5	-0.007	6,302	6,282
Did not have an age-18 redetermination	27.5	0.2	0.84	0.7	0.005	6,302	6,282

Source: SSA administrative records and PROMISE five-year survey (awareness of work supports and SSA policies).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

† Impacts for the six programs are significantly different from each other at the .10 level using an adjusted Wald test.

ABLE = Achieving a Better Life Experience; OASDI = Old-Age, Survivors, and Disability Insurance; PASS = Plan for Achieving Self Support; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table I.12. All PROMISE programs: Impact on the youth's health insurance coverage and expenditures (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Covered by any health insurance	89.0	-0.9†	0.16	0.7	-0.056	4,559	4,525
Average monthly Medicaid and Medicare expenditures in the five years after RA ($)	1,176	-24*	0.10	14	-0.019	6,302	6,282
Supplementary outcomes							
Covered by private health insurance	9.6	0.3	0.69	0.6	0.018	4,559	4,525
Covered by private health insurance purchased through an ACA health exchange	0.4	-0.0	0.83	0.1	-0.045	4,559	4,525
Medicaid and Medicare participation in years after RA							
Ever enrolled in Year 1	98.7	0.5***	0.00	0.2	0.330	6,302	6,282
Ever enrolled in Year 2	97.6	-0.1	0.72	0.3	-0.025	6,302	6,282
Ever enrolled in Year 3	95.9	0.1	0.75	0.4	0.018	6,302	6,282
Ever enrolled in Year 4	92.8	0.2	0.62	0.5	0.021	6,302	6,282
Ever enrolled in Year 5	89.5	0.1	0.82	0.5	0.008	6,302	6,282
Percentage of months enrolled in Years 1–5	90.9	0.2	0.44	0.3	0.013	6,302	6,282
Average monthly Medicaid and Medicare expenditures in years after RA							
Year 1 ($)	1,114	3	0.79	11	0.003	6,302	6,282
Year 2 ($)	1,241	-22	0.15	15	-0.017	6,302	6,282
Year 3 ($)	1,191	-21	0.25	18	-0.015	6,302	6,282
Year 4 ($)	1,174	-29	0.16	21	-0.019	6,302	6,282
Year 5 ($)	1,161	-49**	0.03	22	-0.032	6,302	6,282
Medicaid participation in years after RA							
Ever enrolled in Year 1	98.7	0.5***	0.00	0.2	0.330	6,302	6,282
Ever enrolled in Year 2	97.6	-0.1	0.72	0.3	-0.025	6,302	6,282
Ever enrolled in Year 3	95.9	0.1	0.75	0.4	0.018	6,302	6,282
Ever enrolled in Year 4	92.7	0.3	0.58	0.5	0.024	6,302	6,282
Ever enrolled in Year 5	89.3	0.2	0.77	0.6	0.010	6,302	6,282

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Percentage of months enrolled in Years 1–5	90.8	0.3	0.43	0.3	0.014	6,302	6,282
Average monthly Medicaid expenditures in years after RA							
Year 1 ($)	1,111	2	0.86	11	0.002	6,302	6,282
Year 2 ($)	1,239	-24	0.13	15	-0.018	6,302	6,282
Year 3 ($)	1,189	-23	0.21	18	-0.016	6,302	6,282
Year 4 ($)	1,162	-24	0.22	20	-0.017	6,302	6,282
Year 5 ($)	1,133	-36*	0.09	21	-0.024	6,302	6,282
Years 1–5 ($)	1,167	-21	0.14	14	-0.017	6,302	6,282
Medicare participation in years after RA							
Ever enrolled in Year 1	0.1	-0.0	0.79	0.0	-0.114	6,302	6,282
Ever enrolled in Year 2	0.1	-0.0	0.77	0.0	-0.125	6,302	6,282
Ever enrolled in Year 3	0.3	-0.1	0.46	0.1	-0.159	6,302	6,282
Ever enrolled in Year 4	2.4	-0.1	0.79	0.3	-0.019	6,302	6,282
Ever enrolled in Year 5	4.7	-0.5	0.18	0.4	-0.069	6,302	6,282
Percentage of months enrolled in Years 1–5	1.1	-0.1	0.41	0.1	-0.014	6,302	6,282
Average monthly Medicare expenditures in years after RA							
Year 1 ($)	2	1	0.68	2	0.007	6,302	6,282
Year 2 ($)	2	1	0.50	2	0.011	6,302	6,282
Year 3 ($)	2	2	0.40	2	0.015	6,302	6,282
Year 4 ($)	12	-4	0.40	5	-0.016	6,302	6,282
Year 5 ($)	29	-13*	0.06	7	-0.034	6,302	6,282
Years 1–5 ($)	9	-3	0.31	3	-0.018	6,302	6,282

Source: CMS administrative records and PROMISE five-year survey (non-Medicare/Medicaid outcomes).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

† Impacts for the six programs are significantly different from each other at the .10 level using an adjusted Wald test.

ACA = Affordable Care Act; CMS = Centers for Medicare & Medicaid Services; N = sample size; RA = random assignment.

Appendix Table I.13. All PROMISE programs: Impact on the youth's economic and social well-being (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Total income in the past year ($)	9,858	373**	0.03	173	0.046	4,723	4,654
Total income during the five calendar years after RA ($)	46,184	1,136***†	0.00	338	0.057	6,302	6,282
Supplementary outcomes							
Engaging in productive market activities[a]	76.4	0.8	0.34	0.9	0.029	4,656	4,562
Income in calendar years after RA							
Year 1 ($)	8,746	190***	0.00	49	0.056	6,302	6,282
Year 2 ($)	8,642	210***†	0.00	66	0.053	6,302	6,282
Year 3 ($)	8,907	313***†	0.00	86	0.064	6,302	6,282
Year 4 ($)	9,594	213*	0.05	109	0.035	6,302	6,282
Year 5 ($)	10,294	210	0.12	135	0.028	6,302	6,282
Household income in the past year ($)[b]	30,410	352	0.41	431	0.018	4,099	4,047
Household receives TANF, SNAP, or housing assistance[b]	47.6	1.2	0.26	1.0	0.029	4,234	4,183
Amount of public assistance in the past month							
TANF ($)[b]	18	4*	0.07	2	0.039	4,245	4,203
SNAP benefits ($)[b]	138	8*	0.09	5	0.036	4,273	4,221
Housing assistance ($)[b]	136	8	0.29	8	0.022	4,256	4,216
Family structure and living arrangements							
Living independently	13.0	0.7	0.33	0.7	0.035	4,713	4,642
Married or in a marriage-like relationship	4.7	0.3	0.49	0.5	0.042	4,502	4,429
Responsible for a child or children	9.1	1.2*	0.06	0.6	0.080	4,488	4,424
Engagement with the criminal justice system							
Ever arrested	12.3	1.2*	0.07	0.7	0.067	4,473	4,413
Number of times arrested	0.3	-0.0	0.93	0.0	-0.002	4,473	4,413
Arrested in the past year	4.1	0.7	0.11	0.4	0.100	4,465	4,407
Ever incarcerated	4.2	-0.6†	0.16	0.4	-0.094	4,433	4,382
Length of incarceration (days)	21.9	-7.0**†	0.02	3.1	-0.050	4,433	4,382

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Self-reported health status							
Poor	4.5	0.3	0.56	0.4	0.035	4,473	4,415
Fair	15.1	0.6	0.45	0.8	0.027	4,473	4,415
Good	38.7	-0.4	0.71	1.0	-0.010	4,473	4,415
Very good or excellent	41.7	-0.5	0.66	1.1	-0.011	4,473	4,415
Received help in getting accommodations for school, work, or living independently in past year	17.3	1.9**	0.02	0.8	0.078	4,673	4,618

Source: PROMISE five-year surveys and SSA administrative records (SSA payments and income in calendar years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

† Impacts for the six programs are significantly different from each other at the .10 level using an adjusted Wald test.

[a] Productive market activities include engaging in any of the following at the time of the five-year survey: employment in paid or unpaid work, looking for work, or enrollment in school or a training program.

[b] This outcome is based on data from the parent survey about the parent's household if the youth lived with the parent at interview.

N = sample size; RA = random assignment; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; TANF = Temporary Assistance for Needy Families.

Appendix Table I.14. All PROMISE programs: Impact on the parents' employment and earnings (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent worked for pay in the past year	66.7	0.7	0.42	0.9	0.020	4,641	4,543
Parents' earnings in the past year ($)	22,469	344	0.51	519	0.013	4,644	4,547
Parents' earnings during the five calendar years after RA ($)	109,330	57	0.96	1,254	0.001	5,844	5,790
Supplementary outcomes							
Highest educational attainment achieved by either parent							
Not a high school graduate	23.2	-0.3	0.68	0.8	-0.012	4,646	4,550
High school diploma or GED	35.6	-0.6	0.53	1.0	-0.017	4,646	4,550
Some postsecondary education or more	40.1	0.5	0.59	1.0	0.013	4,646	4,550
Other or do not know	1.1	0.4*	0.07	0.2	0.205	4,646	4,550
Employment in the past year							
Number of parents that worked for pay	0.8	0.0	0.53	0.0	0.012	4,630	4,535
Number of weeks worked	37.2	0.3	0.67	0.6	0.008	4,630	4,535
Weekly hours worked	29.0	0.3	0.59	0.5	0.011	4,644	4,547
Either parent was offered fringe benefits through a job	47.6	0.3	0.75	1.0	0.008	4,635	4,540
Employment at the time of survey							
Either parent is in the labor force	68.0	0.7	0.44	0.9	0.020	4,447	4,371
Either parent is working for pay	56.5	0.2	0.84	1.0	0.005	4,454	4,391
Employment and earnings in calendar years after RA							
Ever employed in Year 1	72.5	0.0	0.99	0.7	0.000	5,844	5,790
Ever employed in Year 2	72.3	1.1	0.11	0.7	0.035	5,844	5,790
Ever employed in Year 3	73.4	0.4†	0.58	0.7	0.012	5,844	5,790
Ever employed in Year 4	73.5	0.5	0.48	0.7	0.016	5,844	5,790
Ever employed in Year 5	71.7	0.4	0.58	0.7	0.012	5,844	5,790
Ever employed in Years 1-5	82.8	0.5†	0.43	0.6	0.021	5,844	5,790
Earnings in Year 1 ($)	19,686	37	0.87	219	0.002	5,844	5,790
Earnings in Year 2 ($)	20,858	-14	0.96	258	-0.001	5,844	5,790
Earnings in Year 3 ($)	22,199	42	0.88	289	0.002	5,844	5,790

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Earnings in Year 4 ($)	23,316	-161	0.62	324	-0.006	5,844	5,790
Earnings in Year 5 ($)	23,272	154	0.67	364	0.006	5,844	5,790

Source: PROMISE five-year survey and SSA administrative records (employment and earnings in years after RA).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

† Impacts for the six programs are significantly different from each other at the .10 level using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment.

Appendix Table I.15. All PROMISE programs: Impact on the parents' SSA payments (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent received SSA payments in Year 5	29.7	-0.8	0.16	0.6	-0.023	5,844	5,790
Total SSA payments received in Year 5 ($)	3,240	-26	0.75	79	-0.005	5,844	5,790
Total SSA payments during the five years after RA ($)	15,233	-51	0.86	282	-0.002	5,844	5,790
Supplementary outcomes							
SSA payments in years after RA							
Received any in Year 1	26.0	-0.1	0.76	0.3	-0.003	5,844	5,790
Received any in Year 2	27.3	-0.5	0.15	0.4	-0.016	5,844	5,790
Received any in Year 3	28.4	-0.9*	0.05	0.4	-0.026	5,844	5,790
Received any in Year 4	29.1	-1.1**	0.03	0.5	-0.033	5,844	5,790
Received any in Years 1–5	32.5	-0.4	0.43	0.5	-0.011	5,844	5,790
Amount in Year 1 ($)	2,842	36	0.49	52	0.007	5,844	5,790
Amount in Year 2 ($)	2,957	42	0.51	64	0.008	5,844	5,790
Amount in Year 3 ($)	3,079	-62	0.37	70	-0.011	5,844	5,790
Amount in Year 4 ($)	3,114	-41	0.57	72	-0.007	5,844	5,790
SSI payments in years after RA							
Received any in Year 1	16.1	-0.3†	0.32	0.3	-0.011	5,844	5,790
Received any in Year 2	16.3	-0.4	0.27	0.3	-0.017	5,844	5,790
Received any in Year 3	16.7	-0.6	0.11	0.4	-0.028	5,844	5,790
Received any in Year 4	16.5	-0.7	0.12	0.4	-0.030	5,844	5,790
Received any in Year 5	16.4	-0.4	0.38	0.5	-0.018	5,844	5,790
Received any in Years 1–5	20.6	-0.2	0.67	0.5	-0.007	5,844	5,790
Amount in Year 1 ($)	1,207	-2†	0.94	31	-0.001	5,844	5,790
Amount in Year 2 ($)	1,223	-10	0.79	37	-0.003	5,844	5,790
Amount in Year 3 ($)	1,230	-72*	0.06	39	-0.023	5,844	5,790
Amount in Year 4 ($)	1,199	-49	0.23	40	-0.015	5,844	5,790
Amount in Year 5 ($)	1,230	-60	0.16	43	-0.019	5,844	5,790

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Total amount during Years 1–5 ($)	6,089	-193	0.21	154	-0.013	5,844	5,790
OASDI benefits in years after RA							
Received any in Year 1	15.8	0.1	0.80	0.3	0.003	5,844	5,790
Received any in Year 2	16.8	-0.1	0.87	0.3	-0.002	5,844	5,790
Received any in Year 3	17.8	-0.4	0.25	0.4	-0.019	5,844	5,790
Received any in Year 4	18.6	-0.5	0.29	0.4	-0.019	5,844	5,790
Received any in Year 5	19.0	-0.3	0.58	0.5	-0.011	5,844	5,790
Received any in Years 1–5	20.8	-0.1	0.77	0.5	-0.005	5,844	5,790
Amount in Year 1 ($)	1,635	38	0.36	42	0.009	5,844	5,790
Amount in Year 2 ($)	1,734	52	0.31	51	0.012	5,844	5,790
Amount in Year 3 ($)	1,849	9	0.87	57	0.002	5,844	5,790
Amount in Year 4 ($)	1,915	8	0.90	61	0.002	5,844	5,790
Amount in Year 5 ($)	2,010	35	0.60	67	0.007	5,844	5,790
Total amount during Years 1–5 ($)	9,143	142	0.55	241	0.007	5,844	5,790

Source: SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

† Impacts for the six programs are significantly different from each other at the .10 level using an adjusted Wald test.

N = sample size; OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table I.16. All PROMISE programs: Impact on the parents' health insurance coverage and expenditures (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Either parent is covered by health insurance	89.9	0.4	0.46	0.6	0.030	4,609	4,522
Average monthly Medicaid and Medicare expenditures in the five years after RA ($)	648	20**	0.05	10	0.024	5,844	5,790
Supplementary outcomes							
Covered by private health insurance	25.6	0.5	0.59	0.9	0.015	4,613	4,523
Medicaid and Medicare participation in years after RA							
Ever enrolled in Year 1	84.6	0.7	0.24	0.6	0.034	5,844	5,790
Ever enrolled in Year 2	83.8	0.2	0.76	0.6	0.009	5,844	5,790
Ever enrolled in Year 3	82.2	-0.1	0.84	0.7	-0.006	5,844	5,790
Ever enrolled in Year 4	80.0	-0.2	0.82	0.7	-0.006	5,844	5,790
Ever enrolled in Year 5	77.7	0.2	0.80	0.7	0.007	5,844	5,790
Percentage of months enrolled in Years 1–5	76.8	0.3	0.66	0.6	0.007	5,844	5,790
Average monthly Medicaid and Medicare expenditures in years after RA							
Year 1 ($)	588	9	0.30	9	0.012	5,844	5,790
Year 2 ($)	639	24**	0.03	11	0.027	5,844	5,790
Year 3 ($)	660	24*	0.07	13	0.025	5,844	5,790
Year 4 ($)	671	29*	0.05	15	0.028	5,844	5,790
Year 5 ($)	682	14	0.39	16	0.013	5,844	5,790
Medicaid participation in years after RA							
Ever enrolled in Year 1	82.8	0.6	0.32	0.7	0.028	5,844	5,790
Ever enrolled in Year 2	81.8	0.2	0.79	0.7	0.007	5,844	5,790
Ever enrolled in Year 3	79.9	-0.0	0.98	0.7	-0.001	5,844	5,790
Ever enrolled in Year 4	77.1	0.1	0.94	0.7	0.002	5,844	5,790
Ever enrolled in Year 5	74.5	0.6	0.44	0.8	0.019	5,844	5,790
Percentage of months enrolled in Years 1–5	73.9	0.4	0.51	0.6	0.011	5,844	5,790

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Average monthly Medicaid expenditures in years after RA							
Year 1 ($)	473	1	0.88	7	0.002	5,844	5,790
Year 2 ($)	517	-3	0.73	9	-0.005	5,844	5,790
Year 3 ($)	524	4	0.67	10	0.006	5,844	5,790
Year 4 ($)	527	9	0.43	11	0.012	5,844	5,790
Year 5 ($)	532	1	0.96	12	0.001	5,844	5,790
Years 1–5 ($)	514	2	0.78	8	0.004	5,844	5,790
Medicare participation in years after RA							
Ever enrolled in Year 1	15.1	0.4	0.23	0.3	0.018	5,844	5,790
Ever enrolled in Year 2	16.1	0.2	0.64	0.3	0.007	5,844	5,790
Ever enrolled in Year 3	17.0	-0.0	0.98	0.4	-0.000	5,844	5,790
Ever enrolled in Year 4	18.1	-0.5	0.27	0.4	-0.019	5,844	5,790
Ever enrolled in Year 5	18.9	-0.7	0.14	0.5	-0.027	5,844	5,790
Percentage of months enrolled in Years 1–5	16.3	-0.2	0.59	0.3	-0.005	5,844	5,790
Average monthly Medicare expenditures in years after RA							
Year 1 ($)	114	8	0.28	8	0.015	5,844	5,790
Year 2 ($)	123	27***	0.00	9	0.047	5,844	5,790
Year 3 ($)	136	20**	0.03	9	0.033	5,844	5,790
Year 4 ($)	144	20**	0.05	10	0.031	5,844	5,790
Year 5 ($)	150	13	0.22	11	0.020	5,844	5,790
Years 1–5 ($)	134	18**	0.02	7	0.034	5,844	5,790

Source: CMS administrative records and PROMISE five-year survey (non-Medicare/Medicaid outcomes).

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

† Impacts for the six programs are significantly different from each other at the .10 level using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; N = sample size.

Appendix Table I.17. All PROMISE programs: Impact on the parents' economic well-being (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Control mean	Impact	*p*-value	Standard error	Effect size	Treatment group N	Control group N
Primary outcomes							
Parents' total income in the past year ($)	26,109	302	0.57	527	0.012	4,341	4,230
Parents' total income during the five calendar years after RA ($)	126,062	43	0.97	1,231	0.000	5,844	5,790
Supplementary outcomes							
Parents' income in calendar years after RA							
Year 1 ($)	22,820	76	0.73	222	0.004	5,844	5,790
Year 2 ($)	24,133	-24	0.93	259	-0.001	5,844	5,790
Year 3 ($)	25,553	38	0.89	286	0.002	5,844	5,790
Year 4 ($)	26,732	-153	0.63	317	-0.006	5,844	5,790
Year 5 ($)	26,824	105	0.77	356	0.004	5,844	5,790
Household receives TANF, SNAP, or housing assistance	49.4	0.5	0.63	1.0	0.012	4,561	4,474
Household income in the past year ($)	31,876	505	0.22	414	0.025	4,439	4,351

Source: PROMISE five-year survey and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

† Impacts for the six programs are significantly different from each other at the .10 level using an adjusted Wald test.

N = sample size; RA = random assignment; SSA = Social Security Administration.

2. Sensitivity analyses

We assessed the sensitivity of the estimated impacts on primary outcomes to methodological choices we incorporated in the main impact estimates. In Appendix Table I.18, we show the impact estimated by the main regression model for each outcome, as well as by alternative models that do not (1) use the survey weights, (2) include covariate adjustment, and (3) use imputed data for outcomes that underwent multiple imputation. The alternative models produced broadly similar results, suggesting that the main model's estimates of program impacts were not sensitive to the choice of estimation method.

We also assessed the extent to which the lack of survey data for some enrollees would influence the estimates of program impacts. In Appendix Table I.19, we compare how the estimated impacts on primary outcomes varied when nonrespondents were included and excluded from analyses of outcomes measured using administrative data. The findings suggest that use of the analysis weights minimized the potential for nonresponse bias because the estimated impacts for the survey respondent sample were comparable to those for the full research sample.

Appendix Table I.18. All PROMISE programs: Impact on primary outcomes, by estimation approach (values measured at the time of the survey and shown in in percentages, unless otherwise noted)

Outcome	Main model	No weighting for non-response	No covariate adjustment	No imputation
Enrolled in an educational or training program	-1.3	-1.0	-1.3	n.a.
Has a GED, high school diploma, or certificate of completion	-2.0**	-1.9**	-2.0**	n.a.
Youth employed in a paid job in the past year	2.9***	2.9***	2.8***	3.0***
Youth earnings in the past year ($)	301	346*	318*	279
Youth earnings during the five calendar years after RA ($)	711**	n.a.	685**	n.a.
Youth self-determination score (scale: 0 to 100)[a]	-0.3	-0.4	-0.3	n.a.
Youth expects to be financially independent at age 25	2.6**	2.6**	2.5*	n.a.
Youth received SSA payments in Year 5 after RA	1.6**	n.a.	1.8**	n.a.
Youth total SSA payments in Year 5 after RA ($)	100	n.a.	115	n.a.
Youth total SSA payments during Years 1–5 after RA ($)	401*	n.a.	410	n.a.
Youth covered by any health insurance	-0.9	-0.6	-0.9	n.a.
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	-24*	n.a.	-24*	n.a.
Youth total income in the past year ($)	373**	442***	397**	294*
Youth total income during the five calendar years after RA ($)	1,136***	n.a.	1,127***	n.a.
Either parent worked for pay in the past year	0.7	0.6	0.8	n.a.
Parents' earnings in the past year ($)	344	327	411	350
Parents' earnings during the five calendar years after RA ($)	57	n.a.	-187	n.a.
Either parent received SSA payments in Year 5 after RA	-0.8	n.a.	-0.3	n.a.
Parents' total SSA payments received in Year 5 after RA ($)	-26	n.a.	31	n.a.
Parents' total SSA payments during the five years after RA ($)	-51	n.a.	252	n.a.
Parents' total income in the past year ($)	302	301	373	300
Parents' income during the five calendar years after RA ($)	43	n.a.	117	n.a.
Either parent is covered by health insurance	0.4	0.4	0.5	n.a.
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	20**	n.a.	20**	n.a.

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the impact estimates of All PROMISE programs, using different modeling approaches. In the main model, we used covariate adjustment and, for outcomes derived from survey data, we weighted statistics to adjust for survey nonresponse and used multiple imputation when an

outcome had a missing value conditional on the value of another variable. In the model with "No weighting for non-response", we followed the main model but did not apply weights to adjust for non-response. In the model with "No covariate adjustment", we followed the main model but did not include covariates. For the model with "No multiple imputation", we followed the main model except that we excluded cases with outcomes that had a missing value conditional on the value of another variable.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; n.a.= not applicable; RA = random assignment; SSA = Social Security Administration.

Appendix Table I.19. All PROMISE programs: Impact on primary outcomes measured using administrative data, including and excluding five-year survey nonrespondents (percentage, unless otherwise noted)

Outcome	Administrative analysis samples			Five-year survey respondents (weighted)			*p*-value for difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth earnings during the five calendar years after RA ($)	11,626	711**	0.03	10,879	1,104***	0.00	0.26
Youth received SSA payments in Year 5 after RA	64.0	1.6**	0.05	67.0	2.0**	0.03	0.67
Youth total SSA payments in Year 5 after RA ($)	5,232	100	0.18	5,542	75	0.38	0.76
Youth total SSA payments during Years 1–5 after RA ($)	33,225	401*	0.08	34,021	343	0.19	0.81
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,176	-24*	0.10	1,204	-25	0.12	0.91
Youth total income during the five calendar years after RA ($)	46,184	1,136***	0.00	46,399	1,487***	0.00	0.33
Parents' earnings during the five calendar years after RA ($)	109,330	57	0.96	110,908	240	0.87	0.89
Either parent received SSA payments in Year 5 after RA	29.7	-0.8	0.16	30.5	-1.1*	0.09	0.63
Parents' total SSA payments received in Year 5 after RA ($)	3,240	-26	0.75	3,378	-92	0.31	0.43
Parents' total SSA payments during the five years after RA ($)	15,233	-51	0.86	15,533	-375	0.24	0.28
Parents' total income during the five calendar years after RA ($)	126,062	43	0.97	128,037	-108	0.94	0.91
Parents' average monthly Medicaid and Medicare expenditures in years after RA in Years 1-5 after RA ($)	648	20**	0.05	652	15	0.17	0.67

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs for administrative analysis samples and five-year survey respondents. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For the sample of five-year survey respondents, we weighted the statistics to adjust for survey nonresponse, applying youth weights for youths' outcomes and parent weights for parents' outcomes.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for the two samples are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; N = sample size; RA = random assignment. SSA = Social Security Administration.

3. Subgroup impact estimates

We estimated the five-year impacts for key subgroups of evaluation enrollees to understand whether the impacts of PROMISE differed by enrollee characteristics. We focused on subgroups defined by the following baseline characteristics of youth: age (ages 14 and 15, and age 16); sex (females and males); whether a youth's parent received SSA payments at the time of RA (yes or no); primary impairment (intellectual or developmental disabilities, other mental impairments, and other disabilities); and whether the survey respondent completed the five-year survey before or after the onset of the COVID-19 pandemic (yes or no). Appendix Tables I.20–I.25 present the subgroup impact estimates.

Appendix Table I.20. All PROMISE programs: Impacts on primary outcomes, by youth's age (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Age 14 and 15					Age 16					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	49.8	-1.8	0.15	3,004	2,956	29.9	-0.5	0.77	1,574	1,530	0.52
Youth has a GED, high school diploma, or certificate of completion	67.5	-2.0*	0.10	3,062	3,031	78.9	-2.1	0.15	1,621	1,589	0.92
Youth employed in a paid job in the past year	41.1	2.7**	0.03	3,093	3,054	44.3	3.1*	0.08	1,630	1,600	0.88
Youth earnings in the past year ($)	3,990	291	0.17	3,093	3,054	5,241	320	0.36	1,630	1,600	0.94
Youth earnings during the five calendar years after RA ($)	9,341	744**	0.03	4,083	4,060	15,797	616	0.37	2,219	2,222	0.87
Youth self-determination score (scale: 0 to 100)	78.7	-0.5	0.28	1,915	1,879	78.0	0.1	0.91	1,046	986	0.47
Youth expects to be financially independent at age 25	62.1	1.8	0.24	1,964	1,927	57.7	4.0*	0.06	1,061	1,016	0.41
Youth received SSA payments in Year 5 after RA	67.9	0.3	0.79	4,083	4,060	56.8	4.1***	0.00	2,219	2,222	0.03††
Youth total SSA payments in Year 5 after RA ($)	5,416	21	0.82	4,083	4,060	4,895	245*	0.06	2,219	2,222	0.16
Youth total SSA payments during Years 1–5 after RA ($)	33,803	126	0.65	4,083	4,060	32,170	902**	0.02	2,219	2,222	0.11
Youth covered by any health insurance	90.2	-1.2	0.14	2,993	2,974	86.8	-0.5	0.67	1,566	1,551	0.66
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,201	-19	0.28	4,083	4,060	1,130	-32	0.19	2,219	2,222	0.66
Youth total income in the past year ($)	9,546	294	0.14	3,093	3,054	10,440	520	0.11	1,630	1,600	0.55
Youth total income during the five calendar years after RA ($)	44,492	810**	0.03	4,083	4,060	49,271	1,707***	0.01	2,219	2,222	0.23

Outcome	Age 14 and 15					Age 16					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Either parent worked for pay in the past year	67.5	0.5	0.65	3,037	2,991	65.3	1.2	0.45	1,604	1,552	0.73
Parents' earnings in the past year ($)	22,676	14	0.98	3,039	2,994	22,081	957	0.29	1,605	1,553	0.39
Parents' earnings during the five calendar years after RA ($)	111,358	556	0.72	3,766	3,737	105,635	-842	0.69	2,078	2,053	0.59
Either parent received SSA payments in Year 5 after RA	29.0	-0.7	0.29	3,766	3,737	31.0	-0.9	0.36	2,078	2,053	0.89
Parents' total SSA payments received in Year 5 after RA ($)	3,181	-109	0.25	3,766	3,737	3,346	126	0.36	2,078	2,053	0.16
Parents' total SSA payments during the five years after RA ($)	14,872	-242	0.48	3,766	3,737	15,890	295	0.55	2,078	2,053	0.37
Parents' total income in the past year ($)	26,265	-138	0.83	2,826	2,780	25,818	1,112	0.22	1,515	1,450	0.25
Parents' total income during the five calendar years after RA ($)	127,705	330	0.83	3,766	3,737	123,066	-473	0.82	2,078	2,053	0.75
Either parent is covered by health insurance	89.5	0.8	0.28	3,012	2,979	90.6	-0.2	0.82	1,597	1,543	0.41
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	630	29**	0.02	3,766	3,737	680	4	0.84	2,078	2,053	0.25

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; RA = random assignment; SSA = Social Security Administration.

Appendix Table I.21. All PROMISE programs: Impacts on primary outcomes, by youth's sex (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Male					Female					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	40.9	-1.1	0.35	3,063	2,925	46.7	-1.7	0.32	1,515	1,561	0.79
Youth has a GED, high school diploma, or certificate of completion	69.9	-2.1*	0.07	3,141	3,022	74.5	-1.9	0.23	1,542	1,598	0.90
Youth employed in a paid job in the past year	42.8	3.4***	0.01	3,166	3,041	41.0	1.7	0.32	1,557	1,613	0.42
Youth earnings in the past year ($)	4,716	317	0.18	3,166	3,041	3,871	270	0.35	1,557	1,613	0.90
Youth earnings during the five calendar years after RA ($)	12,072	471	0.26	4,244	4,174	10,745	1,193**	0.03	2,058	2,108	0.29
Youth self-determination score (scale: 0 to 100)	78.3	-0.3	0.47	1,922	1,801	78.7	-0.2	0.74	1,039	1,064	0.88
Youth expects to be financially independent at age 25	61.9	1.6	0.31	1,967	1,851	58.2	4.4**	0.04	1,058	1,092	0.28
Youth received SSA payments in Year 5 after RA	62.3	2.0**	0.04	4,244	4,174	67.3	0.9	0.54	2,058	2,108	0.51
Youth total SSA payments in Year 5 after RA ($)	5,042	153*	0.10	4,244	4,174	5,606	-5	0.97	2,058	2,108	0.32
Youth total SSA payments during Years 1–5 after RA ($)	32,675	647**	0.02	4,244	4,174	34,312	-94	0.81	2,058	2,108	0.12
Youth covered by any health insurance	86.9	-0.7	0.39	3,033	2,956	93.1	-1.3	0.18	1,526	1,569	0.68
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,124	-27	0.11	4,244	4,174	1,279	-16	0.53	2,058	2,108	0.71
Youth income in the past year ($)	10,016	377*	0.09	3,166	3,041	9,555	366	0.18	1,557	1,613	0.98
Youth total income during the five calendar years after RA ($)	45,958	1,170***	0.01	4,244	4,174	46,629	1,067*	0.05	2,058	2,108	0.88

Outcome	Male					Female					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Either parent worked for pay in the past year	66.8	1.4	0.21	3,123	2,994	66.5	-0.6	0.70	1,518	1,549	0.30
Parents' earnings in the past year ($)	22,875	299	0.64	3,125	2,996	21,685	435	0.61	1,519	1,551	0.90
Parents' earnings during the five calendar years after RA ($)	111,564	499	0.74	3,941	3,841	104,942	-832	0.70	1,903	1,949	0.62
Either parent received SSA payments in Year 5 after RA	29.4	-1.0	0.13	3,941	3,841	30.4	-0.2	0.79	1,903	1,949	0.49
Parents' total SSA payments received in Year 5 after RA ($)	3,183	-81	0.40	3,941	3,841	3,351	85	0.54	1,903	1,949	0.32
Parents' total SSA payments during the five years after RA ($)	14,992	-389	0.26	3,941	3,841	15,706	629	0.20	1,903	1,949	0.09†
Parents' income in the past year ($)	26,515	124	0.85	2,924	2,776	25,331	657	0.45	1,417	1,454	0.62
Parents' income during the five calendar years after RA ($)	128,092	43	0.98	3,941	3,841	122,073	43	0.98	1,903	1,949	1.00
Either parent is covered by health insurance	89.7	0.6	0.43	3,096	2,983	90.2	0.2	0.88	1,513	1,539	0.74
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	647	16	0.20	3,941	3,841	651	29	0.11	1,903	1,949	0.55

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table I.22. All PROMISE programs: Impacts on primary outcomes, by whether parent received SSA payments before RA (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	No parent received SSA payments					At least one parent received SSA payments					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	44.9	-1.4	0.25	3,187	3,112	34.6	-1.4	0.49	1,087	1,049	0.99
Youth has a GED, high school diploma, or certificate of completion	72.4	-2.1*	0.06	3,274	3,212	69.3	-1.5	0.46	1,110	1,080	0.78
Youth employed in a paid job in the past year	43.1	2.5**	0.04	3,299	3,231	40.8	5.4**	0.01	1,119	1,089	0.25
Youth earnings in the past year ($)	4,553	214	0.34	3,299	3,231	4,135	560	0.13	1,119	1,089	0.43
Youth earnings during the five calendar years after RA ($)	11,523	627	0.11	4,399	4,388	11,947	1,080	0.13	1,445	1,402	0.58
Youth self-determination score (scale: 0 to 100)	79.1	-0.3	0.45	2,033	1,929	77.9	-0.2	0.77	734	730	0.89
Youth expects to be financially independent at age 25	61.5	1.6	0.30	2,091	1,987	59.1	5.0*	0.05	746	743	0.25
Youth received SSA payments in Year 5 after RA	63.2	2.5**	0.01	4,399	4,388	64.9	-0.4	0.83	1,445	1,402	0.15
Youth total SSA payments in Year 5 after RA ($)	5,091	207**	0.02	4,399	4,388	5,404	-158	0.33	1,445	1,402	0.05††
Youth total SSA payments during Years 1–5 after RA ($)	31,987	729***	0.01	4,399	4,388	35,564	-222	0.63	1,445	1,402	0.07†
Youth covered by any health insurance	89.4	-0.5	0.51	3,178	3,145	87.1	-1.7	0.25	1,083	1,048	0.48
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,165	-19	0.26	4,399	4,388	1,070	-20	0.48	1,445	1,402	0.98
Youth income in the past year ($)	9,854	372*	0.08	3,299	3,231	9,697	449	0.21	1,119	1,089	0.85
Youth total income during the five calendar years after RA ($)	44,838	1,418***	0.00	4,399	4,388	48,732	889	0.21	1,445	1,402	0.52
Either parent worked for pay in the past year	78.1	0.5	0.65	3,257	3,180	32.8	2.8	0.18	1,081	1,046	0.32

Outcome	No parent received SSA payments					At least one parent received SSA payments					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Parents' earnings in the past year ($)	27,457	327	0.62	3,260	3,181	8,290	631	0.42	1,081	1,049	0.77
Parents' earnings during the five calendar years after RA ($)	132,005	-271	0.86	4,399	4,388	40,786	1,069	0.55	1,445	1,402	0.57
Either parent received SSA payments in Year 5 after RA	9.7	-0.7	0.30	4,399	4,388	90.3	-1.0	0.37	1,445	1,402	0.77
Parents' total SSA payments received in Year 5 after RA ($)	1,113	-45	0.59	4,399	4,388	9,670	68	0.73	1,445	1,402	0.60
Parents' total SSA payments during the five years after RA ($)	3,520	-160	0.56	4,399	4,388	50,639	461	0.56	1,445	1,402	0.46
Parents' income in the past year ($)	28,637	269	0.68	3,260	3,181	18,394	484	0.52	1,081	1,049	0.83
Parents' income during the five calendar years after RA ($)	136,302	-363	0.81	4,399	4,388	95,105	1,486	0.42	1,445	1,402	0.44
Either parent is covered by health insurance	90.2	1.1	0.14	3,237	3,166	95.1	-0.7	0.45	1,072	1,039	0.14
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	432	6	0.52	4,399	4,388	1,302	63**	0.04	1,445	1,402	0.07†

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table I.23. All PROMISE programs: Impacts on primary outcomes, by youth's primary impairment (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Intellectual or developmental disabilities			Other mental impairments			Other impairments			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth enrolled in an educational or training program	49.1	-2.7*	0.06	29.9	-0.8	0.63	52.0	1.0	0.65	0.34
Youth has a GED, high school diploma, or certificate of completion	72.1	-1.5	0.28	67.5	-2.0	0.24	77.2	-3.4*	0.07	0.70
Youth employed in a paid job in the past year	35.8	3.8**	0.01	53.0	1.7	0.33	37.4	2.7	0.22	0.66
Youth earnings in the past year ($)	3,241	480**	0.04	6,012	355	0.33	4,261	-194	0.62	0.33
Youth earnings during the five calendar years after RA ($)	9,400	1,012**	0.02	14,882	636	0.30	10,638	167	0.82	0.60
Youth self-determination score (scale: 0 to 100)	77.9	-1.0*	0.07	77.8	0.4	0.51	81.2	0.0	0.99	0.22
Youth expects to be financially independent at age 25	57.2	4.0**	0.04	63.4	2.5	0.22	62.5	-0.8	0.79	0.37
Youth received SSA payments in Year 5 after RA	71.9	1.1	0.36	50.1	2.9*	0.05	71.7	0.6	0.71	0.54
Youth total SSA payments in Year 5 after RA ($)	6,066	-6	0.96	3,729	286**	0.02	6,119	-2	0.99	0.18
Youth total SSA payments during Years 1–5 after RA ($)	35,354	230	0.49	30,142	554	0.15	34,113	491	0.33	0.80
Youth covered by any health insurance	90.9	-0.7	0.46	83.4	-0.9	0.52	94.8	-1.6	0.16	0.81
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,218	-39*	0.06	875	-10	0.64	1,635	-13	0.75	0.59
Youth income in the past year ($)	9,484	473**	0.04	9,938	522	0.14	10,556	-119	0.73	0.31
Youth total income during the five calendar years after RA ($)	46,665	1,160**	0.01	45,364	1,352**	0.04	46,610	669	0.35	0.76
Either parent worked for pay in the past year	65.2	1.8	0.17	64.8	1.7	0.29	73.7	-3.4*	0.08	0.06†

Outcome	Intellectual or developmental disabilities			Other mental impairments			Other impairments			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Parents' earnings in the past year ($)	21,269	1,506**	0.05	21,679	70	0.94	26,609	-1,823	0.14	0.06†
Parents' earnings during the five calendar years after RA ($)	110,336	326	0.86	96,374	-698	0.72	132,123	880	0.79	0.89
Either parent received SSA payments in Year 5 after RA	29.8	-1.0	0.21	33.0	-1.2	0.20	23.2	0.7	0.59	0.42
Parents' total SSA payments received in Year 5 after RA ($)	3,180	21	0.86	3,615	-199	0.13	2,649	202	0.26	0.17
Parents' total SSA payments during the five years after RA ($)	14,995	295	0.48	17,196	-731	0.14	11,974	460	0.45	0.19
Parents' income in the past year ($)	24,977	1,480*	0.05	25,636	-330	0.70	29,584	-1,263	0.32	0.11
Parents' income during the five calendar years after RA ($)	126,782	747	0.69	115,234	-1,510	0.43	145,386	1,394	0.66	0.61
Either parent is covered by health insurance	88.7	1.7*	0.07	92.6	-0.6	0.50	87.5	-0.3	0.82	0.19
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	655	2	0.87	681	28	0.11	568	44**	0.03	0.23

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table I.24. All PROMISE programs: Sample sizes for primary outcomes, by youth's primary impairment

Outcome	Intellectual or developmental disabilities		Other mental impairments		Other impairments	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Youth enrolled in an educational or training program	2,093	2,037	1,544	1,544	941	905
Youth has a GED, high school diploma, or certificate of completion	2,131	2,084	1,598	1,603	954	933
Youth employed in a paid job in the past year	2,159	2,102	1,604	1,614	960	938
Youth earnings in the past year ($)	2,159	2,102	1,604	1,614	960	938
Youth earnings during the five calendar years after RA ($)	2,847	2,803	2,156	2,182	1,299	1,297
Youth self-determination score (scale: 0 to 100)	1,331	1,285	1,070	1,036	560	544
Youth expects to be financially independent at age 25	1,347	1,298	1,104	1,078	574	567
Youth received SSA payments in Year 5 after RA	2,847	2,803	2,156	2,182	1,299	1,297
Youth total SSA payments in Year 5 after RA ($)	2,847	2,803	2,156	2,182	1,299	1,297
Youth total SSA payments during Years 1–5 after RA ($)	2,847	2,803	2,156	2,182	1,299	1,297
Youth covered by any health insurance	2,100	2,051	1,517	1,553	942	921
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	2,847	2,803	2,156	2,182	1,299	1,297
Youth income in the past year ($)	2,159	2,102	1,604	1,614	960	938
Youth total income during the five calendar years after RA ($)	2,847	2,803	2,156	2,182	1,299	1,297
Either parent worked for pay in the past year	2,116	2,060	1,573	1,569	952	914
Parents' earnings in the past year ($)	2,118	2,063	1,574	1,570	952	914
Parents' earnings during the five calendar years after RA ($)	2,618	2,560	2,063	2,072	1,163	1,158
Either parent received SSA payments in Year 5 after RA	2,618	2,560	2,063	2,072	1,163	1,158

Outcome	Intellectual or developmental disabilities		Other mental impairments		Other impairments	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Parents' total SSA payments received in Year 5 after RA ($)	2,618	2,560	2,063	2,072	1,163	1,158
Parents' total SSA payments during the five years after RA ($)	2,618	2,560	2,063	2,072	1,163	1,158
Parents' income in the past year ($)	1,963	1,896	1,517	1,500	861	834
Parents' income during the five calendar years after RA ($)	2,618	2,560	2,063	2,072	1,163	1,158
Either parent is covered by health insurance	2,102	2,051	1,560	1,561	947	910
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	2,618	2,560	2,063	2,072	1,163	1,158

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the sample size by subgroup for the estimates reported in Appendix Table I.23.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table I.25. All PROMISE programs: Impacts on primary outcomes, by whether the survey respondent completed the five-year survey before or during the pandemic (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Before pandemic					During pandemic					*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Treatment group N	Control group N	Control mean	Impact	*p*-value	Treatment group N	Control group N	
Youth enrolled in an educational or training program	40.8	-3.2	0.13	938	925	43.5	-0.8	0.49	3,622	3,547	0.31
Youth has a GED, high school diploma, or certificate of completion	73.8	-0.7	0.71	949	941	70.9	-2.3**	0.03	3,716	3,665	0.49
Youth employed in a paid job in the past year	45.9	7.9***	0.00	954	944	41.3	1.5	0.17	3,750	3,696	0.01††
Youth earnings in the past year ($)	4,407	969**	0.02	954	944	4,443	128	0.53	3,750	3,696	0.07†
Youth self-determination score (scale: 0 to 100)	78.5	0.0	0.97	722	722	78.5	-0.4	0.35	2,239	2,143	0.63
Youth expects to be financially independent at age 25	58.6	4.2	0.10	719	725	61.2	2.1	0.15	2,306	2,218	0.47
Youth covered by any health insurance	87.8	-1.2	0.46	915	912	89.3	-0.9	0.23	3,644	3,613	0.87
Youth income in the past year ($)	10,238	1,117***	0.00	954	944	9,775	189	0.33	3,750	3,696	0.03††
Either parent worked for pay in the past year	67.1	1.3	0.51	988	990	66.6	0.6	0.57	3,652	3,553	0.75
Parents' earnings in the past year ($)	22,244	1,434	0.22	974	974	22,432	51	0.93	3,486	3,415	0.29
Parents' income in the past year ($)	26,033	1,424	0.22	939	921	26,051	-2	1.00	3,221	3,158	0.27
Either parent is covered by health insurance	91.0	-0.6	0.66	980	983	89.6	0.7	0.29	3,628	3,539	0.37

Source: PROMISE five-year surveys.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of All PROMISE programs on outcomes derived from survey data. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. We weighted statistics to adjust for survey nonresponse. We defined before the pandemic as before March 13, 2020.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size.

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Appendix J. Differences in Outcomes by Race and Ethnicity

In this appendix, we assess whether enrollees' outcomes and the impacts of PROMISE differed by youth's race and ethnicity. PROMISE enrolled a racially and ethnically diverse sample (Appendix Table J.1). Youth potentially could differ in their education and employment outcomes by race and ethnicity in the absence of PROMISE, as well as in the impacts they experienced from participating in PROMISE services. At best, the PROMISE programs might have mitigated some of the race-related structural barriers that youth from racial and ethnic minority groups might face during the transition to adulthood, thus reducing disparities in outcomes. At worst, the programs' might have disproportionately benefited youth and families who do not experience these structural barriers, and thus exacerbated disparities in outcomes. The analyses in this appendix aim to build evidence on the extent of disparities that existed among enrollees in the absence of PROMISE (that is, among the control group), and whether the impacts of PROMISE differed by youth's race and ethnicity.

Numerous studies provide evidence of disparities in the experiences and outcomes of Hispanic and non-Hispanic Black children and adults with disabilities compared with their non-Hispanic White peers. Children of racial and ethnic minority groups disproportionally attend special education programs (Salter 2021), are disciplined in school (Riddle and Sinclair 2019), and live in families that experience financial distress (National Disability Institute 2020). There also are documented differences by race and ethnicity in VR service outcomes (Yin et al. 2021), including rates of acceptance (Capella 2002; Chan et al. 2005), case closure (Moore et al. 2002; Wilson 2015), and competitive employment (LeBlanc and Smart 2007). Non-White young adults with disabilities are less likely to be employed (Hasnain and Balcazar 2009) and have fewer completed years of education (Lindsay et al. 2021) compared with their peers who are White. Among adults with disabilities, national data show that the unemployment rates for Hispanic and Black adults are higher than those for White adults (U.S. Bureau of Labor Statistics 2021c). However, there has been little research focused on racial disparities among adolescents receiving SSI. PROMISE families' use of support services in both treatment and control groups was higher for White youth than non-White youth (Levere et al. 2020), suggesting that control group enrollees' outcomes as well as the impacts of PROMISE on treatment group enrollees might differ by race.

In the sections that follow we describe the methods we used to assess outcomes by race and ethnicity. We then summarize the findings from the analyses of outcomes in the absence of PROMISE (that is, among control group enrollees) and the extent to which the PROMISE impacts differed by race and ethnicity. Overall, we did not find a consistent pattern of differences in youth outcomes or programs' impacts based on the youth's race and ethnicity.

A. Samples and methods

The analyses focused on the three racial and ethnic subgroups with the largest number of enrollees across the six PROMISE programs: non-Hispanic White, non-Hispanic Black, and Hispanic. We used information about youth's race and ethnicity from the PROMISE 18-month survey for all programs except ASPIRE, for which we used race and ethnicity data collected on the ASPIRE intake form. We excluded youth with missing race or ethnicity data from the analyses. Thus, in all programs except ASPIRE the analyses exclude youth and parents who did not respond to the 18-month survey or responded but did not provide race and ethnicity information. We also excluded youth belonging to race and ethnicity subgroups not represented by the three largest ones because the groups were too small and too varied in composition for us to define a set of additional subgroups that could be consistently

analyzed for each program. Future research can consider examining additional program-specific subgroups.. The excluded groups are non-Hispanic American Indian, non-Hispanic other, and mixed race.

1. Samples

Appendix Table J.1 shows the racial and ethnic subgroup sample sizes by PROMISE program. For some programs, the sample sizes for a particular subgroup are small. When we estimated the impacts of PROMISE for other subgroup analyses, we required each subgroup to represent at least 25 percent of the sample (Appendix B). In doing so, we ensured that we had enough statistical power to detect meaningful impacts. In the case of the three selected race and ethnicity subgroups, no program met the 25 percent requirement for all three subgroups. Thus, it is unlikely that the analyses could detect small differences in impacts across the subgroups.

2. Methods

We analyzed the primary outcomes in all youth and parent domains (see Appendix A) for the three race and ethnicity subgroups. We examined mean outcomes as well as programs' impacts on those outcomes, by subgroup. We did so separately for each program because the racial and ethnic composition of the samples varied considerably by program. Pooling data across programs would have made it difficult to isolate the effects by race and ethnicity from the effects of the programs.

To examine racial and ethnic differences in outcomes in the absence of PROMISE, we compared the unadjusted mean outcomes for the control group by subgroup. We used adjusted Wald tests to assess differences in the means across the three subgroups, applying survey weights for outcomes derived from survey data.

To estimate the impacts of PROMISE by race and ethnicity, we adapted the regression model described in Appendix B. For this model, we created an indicator variable for each race and ethnicity subgroup and estimated multivariate regression models that included an indicator for each of the relevant subgroups and interactions between the subgroup indicators and the treatment indicator. For each program we estimated the following:

$$Y_i = \beta_1 Treatment_i * Non - Hispanic\ White Treatment_i + \beta_2 Treatment_i * Non - Hispanic\ Black + \beta_3 Treatment_i * Hispanic + \beta_4 Non - Hispanic\ White + \beta_5 Non - Hispanic\ Black + \beta_6 Hispanic + \lambda X_i + \in_i,$$

where *Y* indicates the outcome, *i* denotes the individual observation; *Non-Hispanic White*, *Non-Hispanic Black,* and *Hispanic* represent the indicators for each of the comparison race and ethnic subgroups; $Treatment_i$ is the indicator for assignment to the treatment group; X_i contains the vector of covariates; and $\in_i$ denotes the error term. β_1, β_2, and β_3 are the parameters of primary interest because they reflect the estimated program impact for each of the respective subgroups.

We used two-sided *t*-tests to determine whether the estimated impacts for each subgroup were statistically significantly different from zero. We also tested whether the estimated impacts were significantly different from each other using adjusted Wald tests. Because a focus of this analysis was understanding variation in program impacts by race and ethnicity, in discussing the results we concentrated on statistically significant differences in a program's impacts across race and ethnicity subgroups rather than the impacts for each subgroup.

Appendix Table J.1. Sample sizes by youth's race and ethnicity

Program	Non-Hispanic White				Non-Hispanic Black				Hispanic				All other youth			
	Treatment group		Control group		Treatment group		Control group		Treatment group		Control group		Treatment group		Control group	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Arkansas PROMISE	162	9.0	165	9.1	441	24.4	414	22.9	57	3.2	63	3.5	244	13.5	259	14.4
ASPIRE	366	18.7	374	19.2	113	5.8	113	5.8	359	18.4	365	18.7	140	7.2	123	6.3
CaPROMISE	62	2.0	46	1.5	143	4.6	145	4.7	540	17.4	534	17.2	803	25.9	824	26.6
MD PROMISE	142	7.6	139	7.5	452	24.2	463	24.8	74	4.0	55	3.0	268	14.4	273	14.6
NYS PROMISE	64	3.3	64	3.3	328	16.7	355	18.1	359	18.3	307	15.6	235	12.0	255	13.0
WI PROMISE	245	12.9	225	11.9	301	15.9	306	16.1	114	6.0	96	5.1	290	15.3	319	16.8

Source: PROMISE 18-month youth survey and ASPIRE intake form.

Note: The "All other youth" group includes youth for whom we did not have data on race and ethnicity. Percentages represent share of all youth in that program that belong to each race and ethnicity group. Percentages may not round to 100 due to rounding.

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

B. Results

1. Differences in outcomes among control group enrollees: non-Hispanic Black youth had better outcomes than other youth, but non-Hispanic Black parents had relatively worse outcomes

For control group youth, we found a consistent pattern across programs wherein non-Hispanic Black youth tended to have more favorable transition outcomes on average compared with non-Hispanic White and Hispanic youth (Appendix Table J.2 and J.4.a–f). For some outcomes, this difference was not consistent across all six programs, but we observed such differences across the majority of programs for youth's employment, earnings, income, SSA program participation, and Medicaid and Medicare expenditures. On average, non-Hispanic Black youth in the control group were more likely to experience better transition outcomes, relative to their Hispanic or non-Hispanic White counterparts. This finding is confirmed in other studies of specific PROMISE programs (Hartman et al. 2021) but is somewhat at odds with findings from past research indicating that non-White young adults with disabilities have less favorable employment and education outcomes (Hasnain and Balcazar 2009, Lindsay et al. 2021). One possible explanation is that, compared with the general population, the non-Hispanic Black youth who volunteered for PROMISE were more highly motivated or differed in other unobservable characteristics associated with successful transitions to adulthood. We also found some evidence that, among control group youth, Hispanic youth tended to have better educational outcomes than youth in the other racial and ethnic subgroups.

In contrast to the findings for youth, among control group parents, parents of non-Hispanic Black youth did not experience better outcomes, on average, relative to their Hispanic or non-Hispanic White counterparts (Appendix Tables J.3 and J.4.a–f). For most outcomes, parents of non-Hispanic Black youth experienced worse outcomes than the other two subgroups. This pattern was not consistent across all six programs, but we observed such differences across at least two programs for parents' employment, earnings, income, and Medicaid and Medicare expenditures. Outcomes were mixed for the other two groups and inconsistent across programs; depending on the outcome and program, parents of Hispanic youth or parents of non-Hispanic White youth experienced better outcomes on average than the other subgroups.

Appendix Table J.2. Summary of differences in control group youth's average outcomes, by youth's race and ethnicity

Youth outcome	Differences by youth's race and ethnicity
Enrolled in an educational or training program	Hispanic youth had higher enrollment rates in education and training programs than youth in the other subgroups in the following programs: • CaPROMISE • MD PROMISE • NYS PROMISE
Has a GED, high school diploma, or certificate of completion	Hispanic youth were more likely to have a high school credential than youth in the other subgroups in the following program: • Arkansas PROMISE Non-Hispanic White youth were more likely to have a high school credential than youth in the other subgroups in the following program: • WI PROMISE
Employed in a paid job in the past year	Non-Hispanic Black youth had higher employment rates than youth in the other subgroups in the following programs: • ASPIRE • CaPROMISE • NYS PROMISE
Earnings in the past year ($)	Non-Hispanic Black youth had higher average earnings than youth in the other subgroups in the following programs: • ASPIRE • CaPROMISE • NYS PROMISE
Earnings during the five calendar years after RA ($)	Non-Hispanic Black youth had higher average earnings than youth in the other subgroups in the following programs: • Arkansas PROMISE • ASPIRE • CaPROMISE
Self-determination score	Hispanic youth had lower self-determination scores than youth in the other subgroups in the following programs: • NYS PROMISE • WI PROMISE
Expects that they will be financially independent at age 25	Non-Hispanic Black youth were more likely to have this expectation than youth in the other subgroups in the following programs: • ASPIRE • WI PROMISE Hispanic youth were more likely to have this expectation than youth in the other subgroups in MD PROMISE
Received SSA payments in Year 5 after RA	Non-Hispanic Black youth were least likely to receive SSA payments compared with youth in the other subgroups in all programs
Total SSA payments in Year 5 after RA ($)	Non-Hispanic Black youth had the lowest average SSA payments compared with youth in the other subgroups in all programs except MD PROMISE

Youth outcome	Differences by youth's race and ethnicity
Total SSA payments during Years 1–5 ($)	Non-Hispanic Black youth had the lowest average SSA payments than youth in the other subgroups in the following programs: • Arkansas PROMISE • ASPIRE • NYS PROMISE
Income in the past year ($)	Hispanic youth had higher average income than youth in the other subgroups in MD PROMISE
Covered by any health insurance	Non-Hispanic White youth were more likely to have health insurance than youth in the other subgroups in the following programs: • Arkansas PROMISE • CaPROMISE Hispanic youth were more likely to have health insurance than youth in the other subgroups in MD PROMISE
Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	Non-Hispanic Black youth had the lowest average Medicaid and Medicare expenditures compared with youth in the other subgroups in all programs.

Note: This table summarizes instances when the average outcomes for the three subgroups were significantly different from each other (*p*-value is less than .10/.05/.01) based on an adjusted Wald test.

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

Appendix Table J.3. Summary of differences in parents' average outcomes among parents of control group youth, by youth's race and ethnicity

Parents' outcome	Summary of difference by youth's race and ethnicity
Either parent worked for pay in the past year	Parents of Hispanic youth had the highest employment rates compared with parents of youth in the other subgroups in the following programs: • Arkansas PROMISE • CaPROMISE Parents of non-Hispanic White youth had the highest employment rates compared with parents of youth in the other subgroups in WI PROMISE.
Earnings in the past year ($),	Parents of Hispanic youth had the highest mean earnings compared with parents of youth in the other subgroups in Arkansas PROMISE. Parents of non-Hispanic White youth had the highest earnings compared with parents of youth in the other subgroups in the following programs: • ASPIRE • CaPROMISE • WI PROMISE.
Earnings during the five years after RA ($)	Parents of Hispanic youth had the highest mean earnings compared with parents of youth in the other subgroups in the following programs: • Arkansas PROMISE • CaPROMISE • MD PROMISE Parents of non-Hispanic White youth had the highest mean earnings compared with parents of youth in the other subgroups in the following programs: • ASPIRE • WI PROMISE
Income in the past year ($)	Parents of Hispanic youth had the highest mean income compared with parents of youth in the other subgroups in Arkansas PROMISE. Parents of non-Hispanic White youth had the highest mean income compared with parents of youth in the other subgroups in the following programs: • ASPIRE • CaPROMISE • NYS PROMISE • WI PROMISE
Income during the five calendar years after RA ($)	Parents of Hispanic youth had the highest mean income compared with parents of youth in the other subgroups in: • CaPROMISE • MD PROMISE Parents of non-Hispanic White youth had the highest mean income compared with parents of youth in the other subgroups in the following programs: • Arkansas PROMISE • ASPIRE • WI PROMISE

Parents' outcome	Summary of difference by youth's race and ethnicity
Either parent received SSA payments in Year 5 after RA; total SSA payments received in Year 5 after RA ($); total SSA payments received during the five years after RA ($)	Parents of Hispanic youth were least likely to receive and had the lowest amounts of SSA payments compared with parents of youth in the other subgroups in the following programs: • Arkansas PROMISE • CaPROMISE • NYS PROMISE
Either parent is covered by health insurance	Parents of non-Hispanic Black youth were most likely to have health insurance compared with parents of youth in the other subgroups in ASPIRE, while parents of non-Hispanic White youth were most likely to do so in the other programs.
Average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	Parents of Hispanic youth had the lowest mean expenditures compared with parents of youth in the other subgroups in the following programs: • CaPROMISE • MD PROMISE Parents of non-Hispanic White youth had the lowest mean expenditures compared with parents of youth in the other subgroups in ASPIRE.

Note: This table summarizes instances when the average outcomes for the three subgroups were significantly different from each other (*p*-value is less than .10/.05/.01) based on an adjusted Wald test.

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

Appendix Table J.4.a. Arkansas PROMISE: Average outcomes among youth in the control group, by youth's race and ethnicity

Outcome	Control group mean			*p*-value for subgroup difference
	Non-Hispanic White	Non-Hispanic Black	Hispanic	
Youth enrolled in an educational or training program	21.7	30.9	25.4	0.11
Youth has a GED, high school diploma, or certificate of completion	72.2	82.1	88.0	0.02††
Youth employed in a paid job in the past year	42.6	52.4	46.0	0.13
Youth earnings in the past year ($)	4,338	5,675	7,555	0.19
Youth earnings during the five calendar years after RA ($)	7,888	15,930	12,733	0.00†††
Youth self-determination score (scale: 0 to 100)	76.5	80.0	77.6	0.14
Youth expects to be financially independent at age 25	54.8	65.2	73.5	0.11
Youth received SSA payments in Year 5 after RA	69.1	53.9	61.9	0.00†††
Youth total SSA payments in Year 5 after RA ($)	5,485	3,762	5,135	0.00†††
Youth total SSA payments during Years 1–5 after RA ($)	34,079	30,560	33,805	0.01†††
Youth covered by any health insurance	89.7	80.5	81.6	0.03††
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	673	369	467	0.00†††
Youth income in the past year ($)	9,776	9,433	12,590	0.28
Youth total income during the five calendar years after RA ($)	43,351	46,995	48,059	0.03††
Either parent worked for pay in the past year	58.2	63.6	74.7	0.09†
Parents' earnings in the past year ($)	19,256	16,136	25,421	0.06†
Parents' earnings during the five calendar years after RA ($)	105,716	87,609	112,984	0.09†
Either parent received SSA payments in Year 5 after RA	48.4	32.4	27.1	0.00†††
Parents' total SSA payments received in Year 5 after RA ($)	5,831	3,495	2,782	0.00†††

Outcome	Control group mean			*p*-value for subgroup difference
	Non-Hispanic White	Non-Hispanic Black	Hispanic	
Parents' total SSA payments during the five years after RA ($)	26,082	16,791	14,911	0.00†††
Parents' income in the past year ($)	25,140	19,805	29,485	0.01†††
Parents' income during the five calendar years after RA ($)	134,748	106,063	128,879	0.01†††
Either parent is covered by health insurance	93.0	92.8	72.8	0.01†††
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)[a]	425	326	342	0.20

Source: PROMISE five-year surveys; CMS, RSA, and SSA administrative records; PROMISE 18-month youth survey.

Note: This table shows the observed means for the control group of Arkansas PROMISE. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

†/††/††† Average outcomes for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table J.4.b. ASPIRE: Average outcomes among youth in the control group, by youth's race and ethnicity

Outcome	Control group mean			*p*-value for subgroup difference
	Non-Hispanic White	Non-Hispanic Black	Hispanic	
Youth enrolled in an educational or training program	38.2	37.2	40.1	0.85
Youth has a GED, high school diploma, or certificate of completion	73.3	81.6	75.1	0.25
Youth employed in a paid job in the past year	39.0	59.1	40.6	0.00†††
Youth earnings in the past year ($)	3,846	6,616	5,619	0.01††
Youth earnings during the five calendar years after RA ($)	10,074	18,093	14,553	0.00†††
Youth self-determination score (scale: 0 to 100)	79.7	82.4	79.0	0.23
Youth expects to be financially independent at age 25	49.2	71.3	58.1	0.01†††
Youth received SSA payments in Year 5 after RA	76.7	46.0	62.7	0.00†††
Youth total SSA payments in Year 5 after RA ($)	6,217	3,567	5,014	0.00†††
Youth total SSA payments during Years 1–5 after RA ($)	32,832	28,142	30,796	0.01††
Youth covered by any health insurance	91.7	85.6	88.4	0.20
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,927	1,348	1,872	0.00†††
Youth income in the past year ($)	10,380	10,707	10,871	0.73
Youth total income during the five calendar years after RA ($)	44,838	46,531	45,951	0.65
Either parent worked for pay in the past year	75.4	69.6	68.2	0.13
Parents' earnings in the past year ($)	34,747	24,940	24,614	0.00†††
Parents' earnings during the five calendar years after RA ($)	152,394	102,437	123,181	0.00†††
Either parent received SSA payments in Year 5 after RA	29.1	29.4	25.6	0.56

Outcome	Control group mean			*p*-value for subgroup difference
	Non-Hispanic White	Non-Hispanic Black	Hispanic	
Parents' total SSA payments received in Year 5 after RA ($)	3,316	2,733	2,848	0.47
Parents' total SSA payments during the five years after RA ($)	14,897	15,872	12,758	0.39
Parents' income in the past year ($)	37,957	28,213	28,390	0.00†††
Parents' income during the five calendar years after RA ($)	168,640	119,569	137,221	0.00†††
Either parent is covered by health insurance	88.7	91.4	84.8	0.17
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)[a]	613	871	644	0.04††

Source: PROMISE five-year surveys; CMS, RSA, and SSA administrative records; ASPIRE intake form.

Note: This table shows the observed means for the control group of ASPIRE. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

†/††/††† Average outcomes for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table J.4.c. CaPROMISE: Average outcomes among youth in the control group, by youth's race and ethnicity

Outcome	Control group mean			*p*-value for subgroup difference
	Non-Hispanic White	Non-Hispanic Black	Hispanic	
Youth enrolled in an educational or training program	53.3	48.1	64.0	0.01†††
Youth has a GED, high school diploma, or certificate of completion	86.1	82.6	80.9	0.66
Youth employed in a paid job in the past year	34.1	48.8	29.8	0.00†††
Youth earnings in the past year ($)	1,912	4,503	3,652	0.02††
Youth earnings during the five calendar years after RA ($)	4,240	14,103	8,554	0.00†††
Youth self-determination score (scale: 0 to 100)	80.6	79.5	77.0	0.24
Youth expects to be financially independent at age 25	54.8	64.5	54.5	0.26
Youth received SSA payments in Year 5 after RA	80.4	53.8	68.9	0.00†††
Youth total SSA payments in Year 5 after RA ($)	7,884	5,060	6,543	0.00†††
Youth total SSA payments during Years 1–5 after RA ($)	41,087	36,435	37,755	0.25
Youth covered by any health insurance	100.0	86.5	92.0	0.00†††
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	2,363	1,414	1,672	0.00†††
Youth income in the past year ($)	10,295	9,803	10,373	0.79
Youth total income during the five calendar years after RA ($)	47,850	51,547	48,720	0.31
Either parent worked for pay in the past year	75.4	61.5	77.4	0.01†††
Parents' earnings in the past year ($)	37,452	20,064	26,356	0.01†††
Parents' earnings during the five calendar years after RA ($)	113,234	99,517	130,765	0.00†††
Either parent received SSA payments in Year 5 after RA	22.7	35.5	17.8	0.00†††
Parents' total SSA payments received in Year 5 after RA ($)	3,645	4,402	2,018	0.00†††

Outcome	Control group mean			*p*-value for subgroup difference
	Non-Hispanic White	Non-Hispanic Black	Hispanic	
Parents' total SSA payments during the five years after RA ($)	20,549	21,082	9,466	0.00†††
Parents' income in the past year ($)	42,139	24,674	30,012	0.01††
Parents' income during the five calendar years after RA ($)	134,867	122,364	141,028	0.10†
Either parent is covered by health insurance	100.0	92.5	82.7	0.00†††
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)[a]	539	737	470	0.00†††

Source: PROMISE five-year surveys; CMS, RSA, and SSA administrative records; PROMISE 18-month youth survey.

Note: This table shows the observed means for the control group of CaPROMISE. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

†/††/††† Average outcomes for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table J.4.d. MD PROMISE: Average outcomes among youth in the control group, by youth's race and ethnicity

Outcome	Control group mean			*p*-value for subgroup difference
	Non-Hispanic White	Non-Hispanic Black	Hispanic	
Youth enrolled in an educational or training program	30.9	37.2	55.7	0.02††
Youth has a GED, high school diploma, or certificate of completion	72.1	74.1	66.0	0.50
Youth employed in a paid job in the past year	38.9	45.4	49.7	0.35
Youth earnings in the past year ($)	5,389	4,345	6,222	0.30
Youth earnings during the five calendar years after RA ($)	9,997	12,743	13,521	0.25
Youth self-determination score (scale: 0 to 100)	77.5	78.2	82.6	0.12
Youth expects to be financially independent at age 25	51.0	63.3	77.3	0.02††
Youth received SSA payments in Year 5 after RA	65.5	62.6	78.2	0.04††
Youth total SSA payments in Year 5 after RA ($)	5,502	5,131	5,847	0.35
Youth total SSA payments during Years 1–5 after RA ($)	32,430	32,999	33,915	0.79
Youth covered by any health insurance	91.9	89.4	100.0	0.00†††
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,236	1,039	1,289	0.03††
Youth income in the past year ($)	11,244	9,519	12,075	0.03††
Youth total income during the five calendar years after RA ($)	44,253	47,330	49,085	0.18
Either parent worked for pay in the past year	60.2	66.0	73.2	0.25
Parents' earnings in the past year ($)	22,437	21,207	22,887	0.85
Parents' earnings during the five calendar years after RA ($)	104,958	100,600	137,214	0.08†
Either parent received SSA payments in Year 5 after RA	27.6	27.1	19.6	0.43

Outcome	Control group mean			*p*-value for subgroup difference
	Non-Hispanic White	Non-Hispanic Black	Hispanic	
Parents' total SSA payments received in Year 5 after RA ($)	3,466	2,931	2,053	0.24
Parents' total SSA payments during the five years after RA ($)	14,633	13,661	11,026	0.69
Parents' income in the past year ($)	27,144	24,782	26,093	0.73
Parents' income during the five calendar years after RA ($)	121,477	115,727	149,181	0.08†
Either parent is covered by health insurance	96.8	95.2	81.0	0.02††
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)[a]	938	793	595	0.03††

Source: PROMISE five-year surveys; CMS, RSA, and SSA administrative records; PROMISE 18-month youth survey.

Note: This table shows the observed means for the control group of MD PROMISE. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

†/††/††† Average outcomes for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table J.4.e. NYS PROMISE: Average outcomes among youth in the control group, by youth's race and ethnicity

Outcome	Control group mean			*p*-value for subgroup difference
	Non-Hispanic White	Non-Hispanic Black	Hispanic	
Youth enrolled in an educational or training program	40.8	57.5	62.2	0.01††
Youth has a GED, high school diploma, or certificate of completion	58.6	55.7	52.7	0.64
Youth employed in a paid job in the past year	25.7	36.6	26.8	0.03††
Youth earnings in the past year ($)	2,684	3,183	2,034	0.07†
Youth earnings during the five calendar years after RA ($)	5,860	8,146	7,176	0.36
Youth self-determination score (scale: 0 to 100)	79.1	79.1	75.8	0.08†
Youth expects to be financially independent at age 25	50.9	69.3	63.2	0.12
Youth received SSA payments in Year 5 after RA	78.1	65.1	71.3	0.04††
Youth total SSA payments in Year 5 after RA ($)	6,240	5,075	5,837	0.02††
Youth total SSA payments during Years 1–5 after RA ($)	34,648	33,651	35,833	0.10†
Youth covered by any health insurance	98.3	93.8	95.0	0.12
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,625	1,249	1,461	0.00†††
Youth income in the past year ($)	8,986	8,352	8,021	0.50
Youth total income during the five calendar years after RA ($)	42,499	43,175	44,861	0.30
Either parent worked for pay in the past year	56.2	57.0	54.7	0.87
Parents' earnings in the past year ($)	17,149	16,783	14,150	0.26
Parents' earnings during the five calendar years after RA ($)	84,458	90,018	86,899	0.89
Either parent received SSA payments in Year 5 after RA	44.4	34.4	29.9	0.09†

Outcome	Control group mean			*p*-value for subgroup difference
	Non-Hispanic White	Non-Hispanic Black	Hispanic	
Parents' total SSA payments received in Year 5 after RA ($)	4,795	3,552	3,004	0.09†
Parents' total SSA payments during the five years after RA ($)	23,347	16,696	14,298	0.06†
Parents' income in the past year ($)	21,978	20,768	16,890	0.04††
Parents' income during the five calendar years after RA ($)	110,453	108,516	102,438	0.70
Either parent is covered by health insurance	98.3	95.1	87.1	0.00†††
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)[a]	893	831	885	0.72

Source: PROMISE five-year surveys; CMS, RSA, and SSA administrative records; PROMISE 18-month youth survey.

Note: This table shows the observed means for the control group of NYS PROMISE. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

†/††/††† Average outcomes for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table J.4.f. WI PROMISE: Average outcomes among youth in the control group, by youth's race and ethnicity

Outcome	Control group mean			*p*-value for subgroup difference
	Non-Hispanic White	Non-Hispanic Black	Hispanic	
Youth enrolled in an educational or training program	32.7	33.4	41.6	0.36
Youth has a GED, high school diploma, or certificate of completion	78.3	61.2	53.6	0.00†††
Youth employed in a paid job in the past year	49.2	49.3	45.9	0.86
Youth earnings in the past year ($)	4,321	5,249	4,315	0.46
Youth earnings during the five calendar years after RA ($)	11,839	13,678	13,436	0.53
Youth self-determination score (scale: 0 to 100)	77.2	81.7	74.1	0.00†††
Youth expects to be financially independent at age 25	51.6	68.2	52.6	0.00†††
Youth received SSA payments in Year 5 after RA	77.8	62.1	68.8	0.00†††
Youth total SSA payments in Year 5 after RA ($)	6,264	4,955	5,332	0.00†††
Youth total SSA payments during Years 1–5 after RA ($)	34,698	34,061	33,980	0.83
Youth covered by any health insurance	89.4	86.8	81.1	0.22
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,060	622	796	0.00†††
Youth income in the past year ($)	10,539	10,307	9,783	0.73
Youth total income during the five calendar years after RA ($)	48,472	48,760	48,618	0.98
Either parent worked for pay in the past year	77.0	60.1	65.4	0.00†††
Parents' earnings in the past year ($)	28,230	16,040	22,643	0.00†††
Parents' earnings during the five calendar years after RA ($)	129,035	80,935	89,766	0.00†††
Either parent received SSA payments in Year 5 after RA	33.8	36.7	40.7	0.52
Parents' total SSA payments received in Year 5 after RA ($)	3,572	3,827	4,241	0.65

Outcome	Control group mean			*p*-value for subgroup difference
	Non-Hispanic White	Non-Hispanic Black	Hispanic	
Parents' total SSA payments during the five years after RA ($)	16,872	18,413	21,247	0.46
Parents' income in the past year ($)	31,990	19,726	25,858	0.00†††
Parents' income during the five calendar years after RA ($)	147,607	100,950	113,362	0.00†††
Either parent is covered by health insurance	94.0	88.9	78.2	0.00†††
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)[a]	755	782	646	0.35

Source: PROMISE five-year surveys; CMS, RSA, and SSA administrative records; PROMISE 18-month youth survey.

Note: This table shows the observed means for the control group of WI PROMISE. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

†/††/††† Average outcomes for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

2. Differences in program impacts by race and ethnicity: program services minimized race and ethnic differences and may have helped reduced disparities

Relative to the findings for control group means, we found a less consistent pattern of differences by race and ethnicity in the impacts of the six programs on key youth and parent outcomes, though there are some important differences (Appendix Tables J.5, J.6, and J.7.a–f). For many of the outcomes examined, none of the programs had significantly different impacts across the three subgroups defined by youth's race and ethnicity; for a handful of outcomes, at most two programs did. The impacts of Arkansas PROMISE and CaPROMISE did not vary by youth's race and ethnicity for any outcome. In contrast, MD PROMISE had differential impacts by youth's race and ethnicity on more youth and parent outcomes than any other program.

The findings suggest that the programs did not exacerbate disparities across subgroups and may have reduced them in some instances. Overall, we found a consistent pattern of differences by youth's race and ethnicity in the mean outcomes of control group youth, and a more limited number of differences by race and ethnicity in the impacts of the PROMISE programs. In most cases where we found differences in impacts by youth's race and ethnicity, the subgroup differences in impacts ran counter to the subgroup differences in mean outcomes for the control group. In cases where we found differences in impacts by youth's race and ethnicity, positive impacts were typically observed for racial and ethnic subgroups that had lower control group mean values for the outcome relative to the other two subgroups, while negative impacts were typically observed for racial and ethnic subgroups that had higher control group mean values for the outcome relative to the other two subgroups. The one exception is that NYS PROMISE increased youth earnings during the five years after RA among non-Hispanic Black youth, the subgroup with the highest average earnings among control group youth, while it had no impact on the earnings of the two other subgroups. Besides this exception, any differences in programs' impacts by youth's race and ethnicity favored groups that experienced worse outcomes among the control group.

One potential explanation for the findings is that the programs intentionally offered services to all youth in ways that minimized differences in outcomes and impacts based on race and ethnicity and might even have mitigated some race-related structural barriers faced by youth during the transition to adulthood. When differences in impacts were observed, they most often had the effect of reducing inequalities in outcomes across racial and ethnic subgroups; where differences in impacts occurred, positive impacts tended to be observed within subgroups with lower control group mean values for an outcome and vice versa. The limited differences by race and ethnicity in the programs' impacts could be considered a strength of the PROMISE programs. Alternatively, the lack of subgroup impact differences might be driven by small sample sizes (Appendix Tables J.8.a–f) or the characteristics of youth who volunteered for PROMISE (see Appendix K).

Appendix Table J.5. Summary of differences in programs' impacts on youth outcomes, by youth's race and ethnicity

Youth outcome	Summary of subgroup impacts
Enrolled in an educational or training program	MD PROMISE increased enrollment rates of non-Hispanic White youth and had no impact on enrollment rates of the two other subgroups; based on differences in control group means, this might have reduced disparities across subgroups.
Has a GED, high school diploma, or certificate of completion	No significant differences in impacts across subgroups
Employed in a paid job in the past year	No significant differences in impacts across subgroups
Earnings in the past year ($)	ASPIRE increased the earnings of non-Hispanic White youth and had no impacts on the earnings of the two other subgroups; based on differences in control group means, this might have reduced disparities across subgroups. MD PROMISE decreased the earnings of Hispanic youth, increased the earnings of non-Hispanic Black youth, and had no impact on the earnings of non-Hispanic White youth; based on differences in control group means, this might have reduced disparities across subgroups.
Earnings during the five calendar years after RA ($)	MD PROMISE decreased earnings of Hispanic youth, increased earnings of non-Hispanic Black youth, and had no impact on earnings of non-Hispanic White youth; based on differences in control group means, this might have reduced disparities across subgroups. NYS PROMISE increased earnings for non-Hispanic Black youth and had no impact on the earnings of the two other subgroups; based on differences in control group means, this might have increased disparities across subgroups.
Self-determination score (scale: 0 to 100)	No significant differences in programs' impacts on this outcome by youth's race and ethnicity.
Expects to be financially independent at age 25	No significant differences in programs' impacts on this outcome by youth's race and ethnicity.
Covered by any health insurance	No significant differences in programs' impacts on this outcome by youth's race and ethnicity.
Average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	No significant differences in programs' impacts on this outcome by youth's race and ethnicity.
Received SSA payments in Year 5 after RA	No significant differences in programs' impacts on this outcome by youth's race and ethnicity.
Total SSA payments in Year 5 after RA ($)	No significant differences in programs' impacts on this outcome by youth's race and ethnicity.
Total SSA payments during Years 1–5 after RA ($)	No significant differences in programs' impacts on this outcome by youth's race and ethnicity.
Income in the past year ($)	MD PROMISE decreased income for Hispanic youth, increased income for non-Hispanic Black youth, and had no impact on the income of non-Hispanic White youth; based on differences in control group means, this might have reduced disparities across subgroups.
Total income during the five calendar years after RA ($)	MD PROMISE decreased income for Hispanic youth, increased income for non-Hispanic Black youth, and had no impact on the income of non-Hispanic White youth; based on differences in control group means, this might have reduced disparities across subgroups.

Note: This table summarizes instances when a program's impacts for the three subgroups were significantly different from each other (*p*-value is less than .10/.05/.01) based on an adjusted Wald test.

Appendix Table J.6. Summary of differences in programs' impacts on parent outcomes, by youth's race and ethnicity

Youth outcome	Summary of subgroup impacts
Either parent worked for pay in the past year	MD PROMISE increased employment rates of parents of non-Hispanic White youth, decreased employment rates of parents of Hispanic youth and had no impact for parents of non-Hispanic Black youth; based on differences in control group means, it is unclear whether this reduced disparities across subgroups.
Earnings in the past year ($)	MD PROMISE increased earnings for parents of non-Hispanic Black youth and had no impacts on earnings for the two other subgroups; based on differences in control group means, it is unclear whether this reduced disparities across subgroups.
Earnings during the five calendar years after RA ($)	ASPIRE reduced earnings for parents of non-Hispanic White youth and had no impacts on earnings for the two other subgroups; based on differences in control group means, this might have reduced disparities across subgroups. MD PROMISE increased earnings for parents of non-Hispanic White youth and had no impacts on earnings for the two other subgroups; based on differences in control group means, this might have reduced disparities across subgroups.
Either parent received SSA payments in Year 5 after RA	No significant differences in programs' impacts on this outcome by youth's race and ethnicity.
SSA payments received in Year 5 after RA ($)	No significant differences in programs' impacts on this outcome by youth's race and ethnicity.
SSA payments during the five years after RA ($)	No significant differences in programs' impacts on this outcome by youth's race and ethnicity.
Income in the past year ($)	No significant differences in programs' impacts on this outcome by youth's race and ethnicity.
Income during the five calendar years after RA ($)	ASPIRE increased income for parents of Hispanic youth and had no impacts on income for the two other subgroups; based on differences in control group means, this might have reduced disparities across subgroups.
Either parent is covered by health insurance	ASPIRE increased the share of parents of Hispanic youth that had health insurance and had no impacts on this outcome for the two other subgroups; based on differences in control group means, this might have reduced disparities across subgroups.
Average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	WI PROMISE increased expenditures for parents of Hispanic youth and had no impacts on earnings for the two other subgroups; based on differences in control group means, this might have reduced disparities across subgroups.

Note: This table summarizes instances when a program's impacts for the three subgroups were significantly different from each other (*p*-value is less than .10/.05/.01) based on an adjusted Wald test.

Appendix Table J.7.a. Arkansas PROMISE: Impact estimates on primary outcomes, by youth's race and ethnicity (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Non-Hispanic White			Non-Hispanic Black			Hispanic			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth enrolled in an educational or training program	21.7	1.0	0.85	30.9	-1.9	0.57	25.4	5.4	0.51	0.67
Youth has a GED, high school diploma, or certificate of completion	72.2	5.0	0.34	82.1	-1.5	0.60	88.0	-12.7*	0.10	0.16
Youth employed in a paid job in the past year	42.6	1.2	0.85	52.4	5.3	0.15	46.0	9.6	0.30	0.72
Youth earnings in the past year ($)	4,338	-648	0.46	5,675	192	0.79	7,555	-2,416	0.30	0.48
Youth earnings during the five calendar years after RA ($)	7,888	1,613	0.32	15,930	44	0.97	12,733	1,853	0.53	0.69
Youth self-determination score (scale: 0 to 100)	76.5	2.1	0.38	80.0	-0.4	0.76	77.6	-0.3	0.91	0.64
Youth expects to be financially independent at age 25	54.8	2.3	0.76	65.2	4.8	0.26	73.5	-11.9	0.28	0.37
Youth received SSA payments in Year 5 after RA	69.1	-4.1	0.38	53.9	-0.2	0.96	61.9	7.4	0.34	0.43
Youth total SSA payments in Year 5 after RA ($)	5,485	-460	0.29	3,762	0	1.00	5,135	347	0.63	0.54
Youth total SSA payments during Years 1–5 after RA ($)	34,079	-921	0.46	30,560	-470	0.58	33,805	1,519	0.48	0.61
Youth covered by any health insurance	89.7	-13.0***	0.00	80.5	-4.5	0.16	81.6	-10.1	0.23	0.27
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	673	-83	0.20	369	20	0.48	467	82	0.24	0.22
Youth income in the past year ($)	9,776	-1,323	0.11	9,433	145	0.83	12,590	-1,916	0.38	0.31
Youth total income during the five calendar years after RA ($)	43,351	250	0.88	46,995	-681	0.60	48,059	2,752	0.35	0.55
Either parent worked for pay in the past year	58.2	10.5*	0.06	63.6	1.3	0.67	74.7	-8.1	0.30	0.13

Outcome	Non-Hispanic White			Non-Hispanic Black			Hispanic			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Parents' earnings in the past year ($)	19,256	3,249	0.27	16,136	1,808	0.19	25,421	-3,733	0.46	0.48
Parents' earnings during the five calendar years after RA ($)	105,716	-12,431*	0.09	87,609	1,595	0.65	112,984	1,686	0.88	0.22
Either parent received SSA payments in Year 5 after RA	48.4	-2.5	0.53	32.4	1.1	0.53	27.1	0.7	0.89	0.71
Parents' total SSA payments received in Year 5 after RA ($)	5,831	-669	0.26	3,495	69	0.78	2,782	400	0.56	0.42
Parents' total SSA payments during the five years after RA ($)	26,082	-684	0.75	16,791	837	0.39	14,911	-258	0.92	0.77
Parents' income in the past year ($)	25,140	2,773	0.33	19,805	2,149	0.11	29,485	-5,353	0.30	0.34
Parents' income during the five calendar years after RA ($)	134,748	-13,268*	0.06	106,063	2,530	0.46	128,879	2,663	0.81	0.12
Either parent is covered by health insurance	93.0	-6.2	0.10	92.8	-1.9	0.35	72.8	5.1	0.53	0.38
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	425	91*	0.06	326	14	0.60	342	26	0.75	0.37

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records; PROMISE 18-month youth survey.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of Arkansas PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table J.7.b. ASPIRE: Impact estimates on primary outcomes, by youth's race and ethnicity (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Non-Hispanic White			Non-Hispanic Black			Hispanic			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth enrolled in an educational or training program	38.2	0.9	0.83	37.2	4.2	0.58	40.1	-1.6	0.68	0.77
Youth has a GED, high school diploma, or certificate of completion	73.3	-1.3	0.72	81.6	-12.4*	0.06	75.1	-6.2*	0.09	0.30
Youth employed in a paid job in the past year	39.0	3.4	0.38	59.1	3.8	0.61	40.6	-3.0	0.44	0.44
Youth earnings in the past year ($)	3,846	1,233*	0.08	6,616	1,920	0.20	5,619	-938	0.23	0.07†
Youth earnings during the five calendar years after RA ($)	10,074	1,205	0.36	18,093	431	0.88	14,553	-2,084	0.18	0.26
Youth self-determination score (scale: 0 to 100)	79.7	-0.5	0.70	82.4	-0.1	0.95	79.0	-2.5	0.10	0.53
Youth expects to be financially independent at age 25	49.2	-1.4	0.78	71.3	0.3	0.97	58.1	0.1	0.98	0.97
Youth received SSA payments in Year 5 after RA	76.7	-2.7	0.38	46.0	6.1	0.35	62.7	1.1	0.75	0.41
Youth total SSA payments in Year 5 after RA ($)	6,217	-63	0.83	3,567	-83	0.87	5,014	241	0.43	0.73
Youth total SSA payments during Years 1–5 after RA ($)	32,832	-503	0.58	28,142	2,610	0.14	30,796	383	0.71	0.29
Youth covered by any health insurance	91.7	-2.1	0.40	85.6	-2.1	0.71	88.4	0.6	0.82	0.74
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,927	-70	0.39	1,348	-2	0.99	1,872	55	0.44	0.50
Youth income in the past year ($)	10,380	1,081*	0.08	10,707	1,255	0.38	10,871	-731	0.31	0.13
Youth total income during the five calendar years after RA ($)	44,838	774	0.55	46,531	2,416	0.38	45,951	-1,263	0.39	0.39
Either parent worked for pay in the past year	75.4	-1.3	0.70	69.6	-9.4	0.18	68.2	0.8	0.83	0.43

Outcome	Non-Hispanic White			Non-Hispanic Black			Hispanic			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Parents' earnings in the past year ($)	34,747	-2,659	0.28	24,940	-2,193	0.60	24,614	2,133	0.37	0.33
Parents' earnings during the five calendar years after RA ($)	152,394	-10,714*	0.07	102,437	-5,027	0.56	123,181	8,649	0.12	0.05†
Either parent received SSA payments in Year 5 after RA	29.1	-2.2	0.33	29.4	-1.5	0.66	25.6	-2.4	0.26	0.97
Parents' total SSA payments received in Year 5 after RA ($)	3,316	95	0.81	2,733	216	0.62	2,848	-75	0.82	0.85
Parents' total SSA payments during the five years after RA ($)	14,897	873	0.54	15,872	-1,109	0.52	12,758	504	0.66	0.63
Parents' income in the past year ($)	37,957	-2,413	0.32	28,213	-3,496	0.40	28,390	3,278	0.19	0.18
Parents' income during the five calendar years after RA ($)	168,640	-9,454	0.11	119,569	-6,349	0.47	137,221	9,119*	0.10	0.05†
Either parent is covered by health insurance	88.7	3.2	0.20	91.4	-3.1	0.51	84.8	1.1	0.72	0.48
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	613	30	0.46	871	-102	0.20	644	27	0.48	0.29

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records; ASPIRE intake form.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of ASPIRE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table J.7.c. CaPROMISE: Impact estimates on primary outcomes, by youth's race and ethnicity (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Non-Hispanic White			Non-Hispanic Black			Hispanic			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth enrolled in an educational or training program	53.3	12.9	0.23	48.1	0.4	0.95	64.0	0.1	0.98	0.50
Youth has a GED, high school diploma, or certificate of completion	86.1	-2.8	0.72	82.6	-1.1	0.84	80.9	-0.3	0.91	0.95
Youth employed in a paid job in the past year	34.1	-4.6	0.69	48.8	5.2	0.43	29.8	3.2	0.29	0.75
Youth earnings in the past year ($)	1,912	-509	0.72	4,503	1,285	0.36	3,652	415	0.48	0.66
Youth earnings during the five calendar years after RA ($)	4,240	455	0.87	14,103	-1,235	0.61	8,554	1,431	0.18	0.58
Youth self-determination score (scale: 0 to 100)	80.6	-0.9	0.81	79.5	-0.6	0.78	77.0	-1.8	0.18	0.88
Youth expects to be financially independent at age 25	54.8	-3.2	0.81	64.5	-0.2	0.98	54.5	5.0	0.24	0.73
Youth received SSA payments in Year 5 after RA	80.4	-2.6	0.75	53.8	9.4*	0.10	68.9	1.6	0.56	0.37
Youth total SSA payments in Year 5 after RA ($)	7,884	-808	0.39	5,060	970	0.11	6,543	351	0.23	0.27
Youth total SSA payments during Years 1–5 after RA ($)	41,087	-1,148	0.70	36,435	2,620	0.13	37,755	842	0.34	0.48
Youth covered by any health insurance	100.0	-0.4	0.89	86.5	4.0	0.34	92.0	2.1	0.23	0.63
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	2,363	-322	0.10	1,414	116	0.17	1,672	46	0.37	0.12
Youth income in the past year ($)	10,295	-1,118	0.42	9,803	2,119	0.10	10,373	814	0.13	0.23
Youth total income during the five calendar years after RA ($)	47,850	-894	0.79	51,547	2,288	0.32	48,720	2,049*	0.07	0.69
Either parent worked for pay in the past year	75.4	-4.8	0.58	61.5	1.2	0.83	77.4	0.4	0.86	0.83

Outcome	Non-Hispanic White			Non-Hispanic Black			Hispanic			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Parents' earnings in the past year ($)	37,452	-6,620	0.39	20,064	3,093	0.34	26,356	-645	0.68	0.40
Parents' earnings during the five calendar years after RA ($)	113,234	33,395**	0.03	99,517	-2,830	0.76	130,765	6,527	0.21	0.13
Either parent received SSA payments in Year 5 after RA	22.7	-2.1	0.65	35.5	-0.1	0.97	17.8	0.5	0.76	0.87
Parents' total SSA payments received in Year 5 after RA ($)	3,645	-868	0.28	4,402	-243	0.65	2,018	-35	0.88	0.58
Parents' total SSA payments during the five years after RA ($)	20,549	-4,841	0.21	21,082	-1,196	0.54	9,466	-579	0.48	0.54
Parents' income in the past year ($)	42,139	-8,761	0.27	24,674	2,092	0.51	30,012	-720	0.69	0.42
Parents' income during the five calendar years after RA ($)	134,867	28,637*	0.08	122,364	-4,220	0.64	141,028	6,296	0.23	0.19
Either parent is covered by health insurance	100.0	-7.8*	0.06	92.5	-4.6	0.26	82.7	1.4	0.56	0.12
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	539	-52	0.49	737	52	0.38	470	19	0.47	0.53

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records; PROMISE 18-month youth survey.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of CaPROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table J.7.d. MD PROMISE: Impact estimates on primary outcomes, by youth's race and ethnicity (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Non-Hispanic White			Non-Hispanic Black			Hispanic			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth enrolled in an educational or training program	30.9	10.6*	0.08	37.2	-4.9	0.14	55.7	-8.0	0.39	0.06†
Youth has a GED, high school diploma, or certificate of completion	72.1	-1.8	0.76	74.1	-7.1**	0.02	66.0	-10.3	0.25	0.65
Youth employed in a paid job in the past year	38.9	2.4	0.70	45.4	5.7	0.11	49.7	-14.7	0.12	0.13
Youth earnings in the past year ($)	5,389	-199	0.88	4,345	1,703**	0.01	6,222	-3,410**	0.04	0.01††
Youth earnings during the five calendar years after RA ($)	9,997	-69	0.97	12,743	2,779**	0.05	13,521	-5,398*	0.10	0.05†
Youth self-determination score (scale: 0 to 100)	77.5	-1.3	0.65	78.2	1.3	0.25	82.6	-3.7	0.19	0.19
Youth expects to be financially independent at age 25	51.0	6.1	0.49	63.3	6.6	0.11	77.3	-16.1	0.14	0.14
Youth received SSA payments in Year 5 after RA	65.5	10.0*	0.06	62.6	5.0	0.10	78.2	-1.5	0.84	0.43
Youth total SSA payments in Year 5 after RA ($)	5,502	775	0.14	5,131	-128	0.65	5,847	99	0.89	0.30
Youth total SSA payments during Years 1–5 after RA ($)	32,430	2,058	0.17	32,999	890	0.28	33,915	13	0.99	0.67
Youth covered by any health insurance	91.9	1.1	0.75	89.4	0.3	0.88	100.0	-4.3	0.19	0.42
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,236	11	0.88	1,039	-58	0.14	1,289	53	0.64	0.52
Youth income in the past year ($)	11,244	352	0.78	9,519	1,730***	0.01	12,075	-2,920**	0.05	0.01††
Youth total income during the five calendar years after RA ($)	44,253	2,555	0.26	47,330	3,554**	0.01	49,085	-5,300*	0.08	0.02††
Either parent worked for pay in the past year	60.2	12.4**	0.04	66.0	2.3	0.47	73.2	-15.5*	0.06	0.02††

Outcome	Non-Hispanic White			Non-Hispanic Black			Hispanic			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Parents' earnings in the past year ($)	22,437	5,164	0.18	21,207	3,326*	0.06	22,887	-5,913	0.14	0.08†
Parents' earnings during the five calendar years after RA ($)	104,958	14,384*	0.08	100,600	-4,508	0.29	137,214	-7,997	0.42	0.09†
Either parent received SSA payments in Year 5 after RA	27.6	-4.8	0.25	27.1	-0.8	0.70	19.6	7.6	0.15	0.17
Parents' total SSA payments received in Year 5 after RA ($)	3,466	-753	0.22	2,931	-69	0.81	2,053	1,010	0.12	0.13
Parents' total SSA payments during the five years after RA ($)	14,633	-1,578	0.46	13,661	-584	0.52	11,026	267	0.91	0.83
Parents' income in the past year ($)	27,144	3,339	0.38	24,782	2,664	0.13	26,093	-5,709	0.16	0.15
Parents' income during the five calendar years after RA ($)	121,477	12,466	0.12	115,727	-5,174	0.21	149,181	-7,384	0.45	0.12
Either parent is covered by health insurance	96.8	0.1	0.95	95.2	-0.4	0.78	81.0	4.3	0.55	0.80
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	938	-43	0.66	793	6	0.88	595	-21	0.77	0.87

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records; PROMISE 18-month youth survey.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of MD PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table J.7.e. NYS PROMISE: Impact estimates on primary outcomes, by youth's race and ethnicity (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Non-Hispanic White			Non-Hispanic Black			Hispanic			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth enrolled in an educational or training program	40.8	0.9	0.91	57.5	-7.6*	0.05	62.2	-2.3	0.55	0.48
Youth has a GED, high school diploma, or certificate of completion	58.6	-0.5	0.95	55.7	0.0	1.00	52.7	0.7	0.87	0.99
Youth employed in a paid job in the past year	25.7	16.6**	0.04	36.6	8.9**	0.03	26.8	7.1*	0.07	0.57
Youth earnings in the past year ($)	2,684	1,194	0.47	3,183	873	0.16	2,034	694	0.17	0.94
Youth earnings during the five calendar years after RA ($)	5,860	2,232	0.35	8,146	2,752**	0.01	7,176	-814	0.44	0.06†
Youth self-determination score (scale: 0 to 100)	79.1	-2.1	0.50	79.1	-1.0	0.46	75.8	0.5	0.75	0.67
Youth expects to be financially independent at age 25	50.9	14.7	0.22	69.3	-0.3	0.95	63.2	6.1	0.28	0.41
Youth received SSA payments in Year 5 after RA	78.1	2.7	0.69	65.1	-4.4	0.21	71.3	2.3	0.49	0.34
Youth total SSA payments in Year 5 after RA ($)	6,240	296	0.64	5,075	-428	0.17	5,837	50	0.87	0.42
Youth total SSA payments during Years 1–5 after RA ($)	34,648	2,870	0.16	33,651	-1,258	0.16	35,833	-34	0.97	0.15
Youth covered by any health insurance	98.3	0.2	0.92	93.8	-0.5	0.80	95.0	1.0	0.58	0.86
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,625	-64	0.63	1,249	-66	0.17	1,461	-66	0.27	1.00
Youth income in the past year ($)	8,986	1,120	0.48	8,352	442	0.46	8,021	660	0.20	0.91
Youth total income during the five calendar years after RA ($)	42,499	4,768*	0.07	43,175	1,276	0.31	44,861	-788	0.49	0.11
Either parent worked for pay in the past year	56.2	-1.6	0.84	57.0	1.4	0.71	54.7	2.5	0.52	0.89

Outcome	Non-Hispanic White			Non-Hispanic Black			Hispanic			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Parents' earnings in the past year ($)	17,149	2,689	0.48	16,783	400	0.81	14,150	-662	0.67	0.68
Parents' earnings during the five calendar years after RA ($)	84,458	-1,359	0.90	90,018	1,994	0.70	86,899	770	0.88	0.96
Either parent received SSA payments in Year 5 after RA	44.4	-3.8	0.45	34.4	-1.9	0.43	29.9	-1.9	0.41	0.94
Parents' total SSA payments received in Year 5 after RA ($)	4,795	-110	0.89	3,552	-311	0.31	3,004	-16	0.96	0.80
Parents' total SSA payments during the five years after RA ($)	23,347	-225	0.94	16,696	-617	0.58	14,298	-166	0.89	0.96
Parents' income in the past year ($)	21,978	2,732	0.47	20,768	-68	0.97	16,890	-538	0.73	0.72
Parents' income during the five calendar years after RA ($)	110,453	-1,517	0.88	108,516	1,170	0.81	102,438	947	0.84	0.97
Either parent is covered by health insurance	98.3	1.8	0.39	95.1	-1.1	0.54	87.1	5.0**	0.02	0.09†
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	893	22	0.79	831	7	0.88	885	10	0.83	0.99

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records; PROMISE 18-month youth survey.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of NYS PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table J.7.f. WI PROMISE: Impact estimates on primary outcomes, by youth's race and ethnicity (values measured at the time of the survey and shown in percentages, unless otherwise noted)

Outcome	Non-Hispanic White			Non-Hispanic Black			Hispanic			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Youth enrolled in an educational or training program	32.7	-0.1	0.99	33.4	1.6	0.70	41.6	-4.1	0.58	0.79
Youth has a GED, high school diploma, or certificate of completion	78.3	-0.5	0.90	61.2	7.6*	0.07	53.6	7.4	0.31	0.33
Youth employed in a paid job in the past year	49.2	13.5***	0.01	49.3	8.3*	0.05	45.9	2.4	0.75	0.43
Youth earnings in the past year ($)	4,321	2,009**	0.03	5,249	616	0.45	4,315	-392	0.76	0.26
Youth earnings during the five calendar years after RA ($)	11,839	898	0.62	13,678	2,016	0.17	13,436	-911	0.75	0.64
Youth self-determination score (scale: 0 to 100)	77.2	0.6	0.73	81.7	-3.4**	0.02	74.1	1.5	0.59	0.11
Youth expects to be financially independent at age 25	51.6	0.0	0.99	68.2	-1.2	0.80	52.6	6.1	0.51	0.78
Youth received SSA payments in Year 5 after RA	77.8	-1.6	0.68	62.1	4.1	0.28	68.8	2.7	0.67	0.56
Youth total SSA payments in Year 5 after RA ($)	6,264	-1	1.00	4,955	293	0.38	5,332	511	0.36	0.69
Youth total SSA payments during Years 1–5 after RA ($)	34,698	-514	0.64	34,061	1,266	0.20	33,980	2,032	0.21	0.32
Youth covered by any health insurance	89.4	1.6	0.59	86.8	-2.0	0.50	81.1	5.3	0.32	0.44
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	1,060	16	0.82	622	66	0.21	796	106	0.30	0.75
Youth income in the past year ($)	10,539	2,165***	0.01	10,307	810	0.30	9,783	331	0.78	0.34
Youth total income during the five calendar years after RA ($)	48,472	727	0.68	48,760	3,375**	0.02	48,618	1,250	0.65	0.48
Either parent worked for pay in the past year	77.0	3.5	0.35	60.1	6.6*	0.08	65.4	4.9	0.40	0.84

Outcome	Non-Hispanic White			Non-Hispanic Black			Hispanic			*p*-value for subgroup difference
	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	Control mean	Impact	*p*-value	
Parents' earnings in the past year ($)	28,230	3,920	0.18	16,040	3,883**	0.04	22,643	-3,347	0.34	0.17
Parents' earnings during the five calendar years after RA ($)	129,035	7,700	0.24	80,935	6,593	0.14	89,766	-5,726	0.56	0.48
Either parent received SSA payments in Year 5 after RA	33.8	-3.9	0.21	36.7	-0.7	0.77	40.7	3.0	0.50	0.41
Parents' total SSA payments received in Year 5 after RA ($)	3,572	-311	0.45	3,827	-175	0.58	4,241	598	0.31	0.41
Parents' total SSA payments during the five years after RA ($)	16,872	-1,386	0.37	18,413	-314	0.78	21,247	-1,215	0.60	0.84
Parents' income in the past year ($)	31,990	3,300	0.25	19,726	3,614**	0.05	25,858	-3,676	0.32	0.19
Parents' income during the five calendar years after RA ($)	147,607	6,044	0.35	100,950	6,464	0.15	113,362	-6,985	0.47	0.43
Either parent is covered by health insurance	94.0	1.1	0.62	88.9	2.5	0.33	78.2	-1.7	0.75	0.75
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	755	-58	0.31	782	26	0.57	646	170*	0.06	0.09†

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records; PROMISE 18-month youth survey.

Note: This table shows the observed means for the control group and the regression-adjusted impact estimates of WI PROMISE. The adjusted mean for the treatment group can be calculated by adding the impact estimate to the observed mean for the control group. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

*/**/*** Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Impact estimates for subgroups are significantly different from each other (*p*-value is less than .10/.05/.01) using an adjusted Wald test.

GED = General Educational Development; N = sample size; RA = random assignment; RSA = Rehabilitation Services Administration; SSA = Social Security Administration.

Appendix Table J.8.a. Arkansas PROMISE: Sample sizes for primary outcomes, by youth's race and ethnicity

Outcome	Non-Hispanic White		Non-Hispanic Black		Hispanic	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Youth enrolled in an educational or training program	132	128	362	347	49	49
Youth has a GED, high school diploma, or certificate of completion	139	136	373	358	51	51
Youth employed in a paid job in the past year	140	136	373	360	52	51
Youth earnings in the past year ($)	140	136	373	360	52	51
Youth earnings during the five calendar years after RA ($)	162	165	441	414	57	63
Youth self-determination score (scale: 0 to 100)	91	82	256	220	32	32
Youth expects to be financially independent at age 25	97	84	261	226	35	33
Youth received SSA payments in Year 5 after RA	162	165	441	414	57	63
Youth total SSA payments in Year 5 after RA ($)	162	165	441	414	57	63
Youth total SSA payments during Years 1–5 after RA ($)	162	165	441	414	57	63
Youth covered by any health insurance	136	133	355	340	52	50
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	162	165	441	414	57	63
Youth income in the past year ($)	140	136	373	360	52	51
Youth total income during the five calendar years after RA ($)	162	165	441	414	57	63
Either parent worked for pay in the past year	129	130	368	356	51	49
Parents' earnings in the past year ($)	129	130	368	357	51	49
Parents' earnings during the five calendar years after RA ($)	158	161	439	413	51	59
Either parent received SSA payments in Year 5 after RA	158	161	439	413	51	59
Parents' total SSA payments received in Year 5 after RA ($)	158	161	439	413	51	59

Outcome	Non-Hispanic White		Non-Hispanic Black		Hispanic	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Parents' total SSA payments during the five years after RA ($)	158	161	439	413	51	59
Parents' income in the past year ($)	127	127	366	356	46	45
Parents' income during the five calendar years after RA ($)	158	161	439	413	51	59
Either parent is covered by health insurance	129	129	365	354	50	49
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	158	161	439	413	51	59

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the sample size by subgroup for each regression-adjusted impact estimates of Arkansas PROMISE reported in Appendix Table J.7.a. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; RA = random assignment; SSA = Social Security Administration.

Appendix Table J.8.b. ASPIRE: Sample sizes for primary outcomes, by youth's race and ethnicity

Outcome	Non-Hispanic White		Non-Hispanic Black		Hispanic	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Youth enrolled in an educational or training program	293	301	80	84	294	288
Youth has a GED, high school diploma, or certificate of completion	301	307	81	84	300	295
Youth employed in a paid job in the past year	304	308	81	84	302	296
Youth earnings in the past year ($)	304	308	81	84	302	296
Youth earnings during the five calendar years after RA ($)	366	374	113	113	359	365
Youth self-determination score (scale: 0 to 100)	204	210	57	53	189	182
Youth expects to be financially independent at age 25	211	213	55	52	195	186
Youth received SSA payments in Year 5 after RA	366	374	113	113	359	365
Youth total SSA payments in Year 5 after RA ($)	366	374	113	113	359	365
Youth total SSA payments during Years 1–5 after RA ($)	366	374	113	113	359	365
Youth covered by any health insurance	298	304	79	83	289	287
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	366	374	113	113	359	365
Youth income in the past year ($)	304	308	81	84	302	296
Youth total income during the five calendar years after RA ($)	366	374	113	113	359	365
Either parent worked for pay in the past year	294	299	78	82	296	286
Parents' earnings in the past year ($)	294	299	78	82	296	286
Parents' earnings during the five calendar years after RA ($)	352	358	106	102	306	312
Either parent received SSA payments in Year 5 after RA	352	358	106	102	306	312

Outcome	Non-Hispanic White		Non-Hispanic Black		Hispanic	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Parents' total SSA payments received in Year 5 after RA ($)	352	358	106	102	306	312
Parents' total SSA payments during the five years after RA ($)	352	358	106	102	306	312
Parents' income in the past year ($)	285	290	71	74	250	248
Parents' income during the five calendar years after RA ($)	352	358	106	102	306	312
Either parent is covered by health insurance	292	295	78	82	296	286
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	352	358	106	102	306	312

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the sample size by subgroup for each regression-adjusted impact estimates of ASPIRE reported in Appendix Table J.7.b. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; RA = random assignment; SSA = Social Security Administration.

Appendix Table J.8.c. CaPROMISE: Sample sizes for primary outcomes, by youth's race and ethnicity

Outcome	Non-Hispanic White		Non-Hispanic Black		Hispanic	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Youth enrolled in an educational or training program	51	35	111	112	467	442
Youth has a GED, high school diploma, or certificate of completion	52	34	112	114	471	451
Youth employed in a paid job in the past year	52	35	112	115	475	454
Youth earnings in the past year ($)	52	35	112	115	475	454
Youth earnings during the five calendar years after RA ($)	62	46	143	145	540	534
Youth self-determination score (scale: 0 to 100)	38	22	79	79	286	263
Youth expects to be financially independent at age 25	38	22	78	81	285	268
Youth received SSA payments in Year 5 after RA	62	46	143	145	540	534
Youth total SSA payments in Year 5 after RA ($)	62	46	143	145	540	534
Youth total SSA payments during Years 1–5 after RA ($)	62	46	143	145	540	534
Youth covered by any health insurance	48	34	111	111	458	452
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	62	46	143	145	540	534
Youth income in the past year ($)	52	35	112	115	475	454
Youth total income during the five calendar years after RA ($)	62	46	143	145	540	534
Either parent worked for pay in the past year	52	33	116	118	477	458
Parents' earnings in the past year ($)	52	33	116	118	478	459
Parents' earnings during the five calendar years after RA ($)	59	44	141	141	417	422
Either parent received SSA payments in Year 5 after RA	59	44	141	141	417	422
Parents' total SSA payments received in Year 5 after RA ($)	59	44	141	141	417	422

Outcome	Non-Hispanic White		Non-Hispanic Black		Hispanic	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Parents' total SSA payments during the five years after RA ($)	59	44	141	141	417	422
Parents' income in the past year ($)	50	31	115	115	365	365
Parents' income during the five calendar years after RA ($)	59	44	141	141	417	422
Either parent is covered by health insurance	51	33	115	118	470	460
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	59	44	141	141	417	422

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the sample size by subgroup for each regression-adjusted impact estimates of CaPROMISE reported in Appendix Table J.7.c. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse and sample design.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; RA = random assignment; SSA = Social Security Administration.

Appendix Table J.8.d. MD PROMISE: Sample sizes for primary outcomes, by youth's race and ethnicity

Outcome	Non-Hispanic White		Non-Hispanic Black		Hispanic	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Youth enrolled in an educational or training program	112	108	373	401	56	46
Youth has a GED, high school diploma, or certificate of completion	115	114	381	408	57	48
Youth employed in a paid job in the past year	116	114	382	409	58	49
Youth earnings in the past year ($)	116	114	382	409	58	49
Youth earnings during the five calendar years after RA ($)	142	139	452	463	74	55
Youth self-determination score (scale: 0 to 100)	71	59	259	275	34	33
Youth expects to be financially independent at age 25	68	64	262	273	36	35
Youth received SSA payments in Year 5 after RA	142	139	452	463	74	55
Youth total SSA payments in Year 5 after RA ($)	142	139	452	463	74	55
Youth total SSA payments during Years 1–5 after RA ($)	142	139	452	463	74	55
Youth covered by any health insurance	115	112	367	388	55	49
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	142	139	452	463	74	55
Youth income in the past year ($)	116	114	382	409	58	49
Youth total income during the five calendar years after RA ($)	142	139	452	463	74	55
Either parent worked for pay in the past year	108	106	389	403	58	52
Parents' earnings in the past year ($)	108	107	389	403	58	52
Parents' earnings during the five calendar years after RA ($)	132	127	429	439	68	51
Either parent received SSA payments in Year 5 after RA	132	127	429	439	68	51

Outcome	Non-Hispanic White		Non-Hispanic Black		Hispanic	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Parents' total SSA payments received in Year 5 after RA ($)	132	127	429	439	68	51
Parents' total SSA payments during the five years after RA ($)	132	127	429	439	68	51
Parents' income in the past year ($)	100	97	372	380	55	48
Parents' income during the five calendar years after RA ($)	132	127	429	439	68	51
Either parent is covered by health insurance	107	106	387	403	58	51
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	132	127	429	439	68	51

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the sample size by subgroup for each regression-adjusted impact estimates of MD PROMISE reported in Appendix Table J.7.d. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; RA = random assignment; SSA = Social Security Administration.

Appendix Table J.8.e. NYS PROMISE: Sample sizes for primary outcomes, by youth's race and ethnicity

Outcome	Non-Hispanic White		Non-Hispanic Black		Hispanic	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Youth enrolled in an educational or training program	56	56	288	301	307	254
Youth has a GED, high school diploma, or certificate of completion	58	57	289	302	310	258
Youth employed in a paid job in the past year	59	57	294	306	318	263
Youth earnings in the past year ($)	59	57	294	306	318	263
Youth earnings during the five calendar years after RA ($)	64	64	328	355	359	307
Youth self-determination score (scale: 0 to 100)	34	31	196	208	170	140
Youth expects to be financially independent at age 25	38	31	194	210	172	143
Youth received SSA payments in Year 5 after RA	64	64	328	355	359	307
Youth total SSA payments in Year 5 after RA ($)	64	64	328	355	359	307
Youth total SSA payments during Years 1–5 after RA ($)	64	64	328	355	359	307
Youth covered by any health insurance	58	57	287	294	308	260
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	64	64	328	355	359	307
Youth income in the past year ($)	59	57	294	306	318	263
Youth total income during the five calendar years after RA ($)	64	64	328	355	359	307
Either parent worked for pay in the past year	59	56	287	299	314	258
Parents' earnings in the past year ($)	59	56	287	299	314	258
Parents' earnings during the five calendar years after RA ($)	64	63	320	343	337	261
Either parent received SSA payments in Year 5 after RA	64	63	320	343	337	261

Outcome	Non-Hispanic White		Non-Hispanic Black		Hispanic	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Parents' total SSA payments received in Year 5 after RA ($)	64	63	320	343	337	261
Parents' total SSA payments during the five years after RA ($)	64	63	320	343	337	261
Parents' income in the past year ($)	59	55	279	289	295	215
Parents' income during the five calendar years after RA ($)	64	63	320	343	337	261
Either parent is covered by health insurance	59	56	287	298	309	258
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	64	63	320	343	337	261

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the sample size by subgroup for each regression-adjusted impact estimates of NYS PROMISE reported in Appendix Table J.7.e. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; RA = random assignment; SSA = Social Security Administration.

Appendix Table J.8.f. WI PROMISE: Sample sizes for primary outcomes, by youth's race and ethnicity

Outcome	Non-Hispanic White		Non-Hispanic Black		Hispanic	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Youth enrolled in an educational or training program	212	198	259	263	96	79
Youth has a GED, high school diploma, or certificate of completion	221	207	263	268	99	82
Youth employed in a paid job in the past year	222	208	267	273	99	82
Youth earnings in the past year ($)	222	208	267	273	99	82
Youth earnings during the five calendar years after RA ($)	245	225	301	306	114	96
Youth self-determination score (scale: 0 to 100)	152	143	182	186	68	51
Youth expects to be financially independent at age 25	154	147	185	191	69	55
Youth received SSA payments in Year 5 after RA	245	225	301	306	114	96
Youth total SSA payments in Year 5 after RA ($)	245	225	301	306	114	96
Youth total SSA payments during Years 1–5 after RA ($)	245	225	301	306	114	96
Youth covered by any health insurance	215	208	247	262	96	80
Youth average monthly Medicaid and Medicare expenditures in Years 1–5 after RA ($)	245	225	301	306	114	96
Youth income in the past year ($)	222	208	267	273	99	82
Youth total income during the five calendar years after RA ($)	245	225	301	306	114	96
Either parent worked for pay in the past year	219	200	261	272	97	79
Parents' earnings in the past year ($)	219	200	262	273	97	79
Parents' earnings during the five calendar years after RA ($)	243	225	295	300	94	81
Either parent received SSA payments in Year 5 after RA	243	225	295	300	94	81

Outcome	Non-Hispanic White		Non-Hispanic Black		Hispanic	
	Treatment group N	Control group N	Treatment group N	Control group N	Control group N	Treatment group N
Parents' total SSA payments received in Year 5 after RA ($)	243	225	295	300	94	81
Parents' total SSA payments during the five years after RA ($)	243	225	295	300	94	81
Parents' income in the past year ($)	217	200	256	268	80	68
Parents' income during the five calendar years after RA ($)	243	225	295	300	94	81
Either parent is covered by health insurance	219	199	262	270	96	77
Parents' average monthly Medicaid and Medicare expenditures in Years 1-5 after RA ($)	243	225	295	300	94	81

Source: PROMISE five-year surveys, CMS administrative records, and SSA administrative records.

Note: This table shows the sample size by subgroup for each regression-adjusted impact estimates of WI PROMISE reported in Appendix Table J.7.f. For outcomes derived from survey data, we weighted the statistics to adjust for survey nonresponse.

CMS = Centers for Medicare & Medicaid Services; GED = General Educational Development; N = sample size; RA = random assignment; SSA = Social Security Administration.

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Appendix K. Outcomes of Methods to Improve Survey Response

This appendix presents the results of three descriptive studies we conducted to identify factors associated with responding to the PROMISE five-year surveys and assess the effectiveness of methods used to maximize survey response. Findings from these studies might inform future surveys of similar populations.

We conducted three analyses:

1. Using regression modeling, we identified **correlates of survey response** among PROMISE sample members and assessed the effectiveness of selected survey methods.
2. We examined the pattern of survey responses surrounding the **dates we sent text messages** and the **cutoff dates for incentive bonuses** to assess the effectiveness of text messages and bonuses in eliciting survey responses.
3. We examined whether the **characteristics and outcomes of respondents who completed an abbreviated self-administered questionnaire (SAQ) differed from those who completed the full survey**. We sent the SAQ to hard-to-reach respondents in an effort to collect key survey data from as many sample members as possible. The analysis provides evidence on the value of the SAQ and the potential magnitude and direction of survey nonresponse bias for outcome measures captured in the full survey.

To conduct these analyses, we used data from the PROMISE 18-month and five-year surveys, SSA, and the PROMISE RA system (see Appendix A for descriptions of these data). We also used data from the PROMISE survey management system (SMS) that Mathematica developed and maintained to administer the PROMISE surveys. The SMS data include information about sample members' PROMISE program, RA date, treatment status, survey cohort, outreach communication dates, permission to send text message reminders, survey completion statuses, survey completion dates, and the mode of survey completion. All analyses were descriptive, unweighted, and based on the samples of and parents eligible to complete the five-year survey that we pooled across the six PROMISE programs (11,345 youth and 11,084 parents).

In the sections that follow, we first provide some background on how we implemented the five-year survey. We then describe the methods and findings of the three survey implementation studies.

A. Background on the five-year survey implementation

Mathematica fielded youth and parent five-year surveys from May 2019 through August 2021. To simplify the survey management process, we aggregated the youth into 25 cohorts that corresponded to their month of enrollment. In each month from May 2019 through March 2021, we released a cohort to be surveyed.[25] We completed almost all interviews within 24 weeks (five and a half months) from the cohort release date; we completed a small number of interviews slightly later to give more youth and parents a chance to respond. Appendix Table A.1 shows the survey fielding start and end dates for each cohort and the PROMISE programs represented in each cohort.

[25] We launched two cohorts in May 2019, corresponding to youth who enrolled in PROMISE in April and May 2014, because few youth enrolled in these months. We also launched two cohorts in March 2021, corresponding to youth who enrolled in March and April 2016, to complete data collection more quickly.

We administered the surveys in English and Spanish using three modes: on the telephone by an interviewer, in person by an interviewer, and on paper via self-administration. The interviewer-administered interviews used the same parent and youth instruments and were deployed via computer-assisted interviewing technology. The paper SAQs used abbreviated versions of the instruments. Matulewicz et al. (2018) provides more detail about the survey design and implementation.

The following subsections describe the five methods we used to maximize survey response that we assessed in the survey implementation analyses.

1. In-person locating and interviews

In-person locating and interviewing were intended to help the survey team obtain complete survey responses from sample members who were difficult to reach by telephone or had a disability that prevented them from responding by telephone. When conducting in-person locating, staff gave respondents a cell phone with which to call Mathematica's phone center and complete an interview on the telephone. When conducting in-person interviewing, staff read the interview questions off a tablet and respondents completed the interview in person. We halted in-person locating and interviewing in March 2020 because of the COVID-19 pandemic and resumed them in June 2021. We completed in-person locating and interviewing for Cohorts 1–8 before the suspension, so these cohorts had full access to these efforts for their entire duration.[26] Cohorts 10–22 never had access to in-person locating and interviewing.[27] Cohorts 9, 23, 24, and 25 were eligible for in-person interviewing and locating during periods when the suspension was and was not in place and thus, had partial access to these efforts.

2. SAQs

The youth and parent SAQs contained a subset of critical items from the full-length instruments and were designed to take 10 minutes to complete. We mailed the SAQs to nonrespondents for whom we had a viable address. We initially mailed the SAQs to nonrespondents in Week 21 of each cohort's 24-week field period. Starting with Cohort 11 for youth and Cohort 16 for parents, we mailed SAQs to nonrespondents a second time in Week 24. We provided postage-paid return envelopes for sample members to return the completed SAQs. Youth and parents received the same $30 incentive for completing an SAQ as they did for a full-length interview. We expected the SAQs to enable us to complete more interviews by increasing responses among sample members who did not have the time to complete a full-length interview, preferred to complete a paper or self-administered interview, or lived in rural or frontier areas where in-person interviewing was cost prohibitive (during the periods when in-person interviewing was taking place).

3. Differential incentives

We offered three incentive amounts to sample members who completed the five-year surveys:

1. $50 each for youth and parents who previously had not completed the 18-month survey and called in to complete a five-year interview within 12 days of their cohort's release date

[26] Cohort 8 experienced a slightly shorter period of in-person locating and interviewing than Cohorts 1–7 because the suspension began two weeks before the planned end of in-person efforts for that cohort.

[27] Cohort 10 experienced one week of in-person locating and interviewing before the suspension began.

2. $40 each for youth and parents who previously had completed the 18-month survey and called in to complete a five-year interview within 12 days of their cohort's release date
3. $30 each for youth and parents who completed the survey after the first 12 days of their cohort's release date

We offered the bonuses with the expectation that the higher incentive would encourage more sample members to complete interviews sooner, with a larger bonus for those who had been harder to reach for the 18-month survey. All outreach to sample members occurring before the bonus period expired informed them of its limited-time availability.

4. Text messages

We sent text messages to sample members for whom we had a cell phone number and who had opted to receive them. In total, about 99 percent of the youth sample and 92 percent of the parent sample met the criteria to receive text messages. We sent text messages to nonresponding youth and parents at four points over the 24-week period in which each cohort was active (during Weeks 2, 5, 14, and 19). Youth and parents received the same text messages, with the wording varying slightly at each point (Appendix Table K.1). The text messages invited sample members to call a toll-free telephone number to complete an interview and receive an incentive. Because of privacy concerns, the text messages were not personalized with names and did not refer to PROMISE. We sent the text messages in English or Spanish, depending on the language we had on record for the youth and parents.

Appendix Table K.1. Text message reminders

Week of text message	Text message
Week 2 – bonus incentive period	*Enrollees eligible for $10 bonus:* "Earn $40 if you complete a Social Security Administration survey by [DATE] ($30 after [DATE]). Call 844-306-5011 to begin. Text charges can be reimbursed." *Enrollees eligible for $20 bonus:* "Earn $50 for completing a Social Security Administration survey by [DATE] ($30 after [DATE]). Call 844-306-5011 to begin. Text charges can be reimbursed."
Weeks 5 and 14	"Earn $30 for completing a Social Security Administration survey. Your input matters! Call 844-306-5011 to begin. Text charges can be reimbursed."
Week 19	"Earn $30 for completing a Social Security Administration survey. Survey ends soon. Call 844-306-5011 to begin. Text charges can be reimbursed."

5. Calls from regional area codes

For Cohorts 1–19, we called sample members from a telephone number with the Princeton, New Jersey area code of Mathematica's call center. For Cohorts 20–25, we obtained telephone numbers with area codes associated with the PROMISE states and called sample members from the area code associated with the state where they lived when they enrolled in PROMISE.[28] We decided to use regional rather than local area codes to contain costs for this untested approach. We hypothesized that sample members would be more likely to answer calls from a familiar area code, thus contributing to more responses.

[28] We obtained two area codes for California: one for Northern California and one for Southern California.

B. Correlates of survey response

This study explored the factors associated with responding to the five-year surveys. Specifically, we examined the correlation between completing the five-year surveys and selected survey methods, respondent characteristics, age-18 redetermination status, and 18-month outcome measures related to service use and employment. Including all candidate predictors of survey response in a regression model allowed us to adjust estimated associations between individual factors and survey response for potentially confounding factors. For example, we were especially interested in the relationships between survey methods and response, but several of the survey methods varied by survey cohort. The regression models allowed us to account for differences in the demographic composition of the cohorts in the estimates.

1. Data and methods

We used data from the PROMISE SMS and RA system, SSA, and the 18-month surveys to estimate the correlation between survey response and a set of covariates. Separately for youth and parents, we developed ordinary linear regression models that estimated a binary measure of five-year survey completion. The models included a core set of covariates and selected other covariates to assess their relationships with survey response. Coefficients from all linear models estimated the change in the probability of completing the five-year survey in percentage points associated with a one-unit change in each covariate.

We grouped the covariates into categories and included each group additively in separate models. The categories of variables were as follows:

- **Core covariates.** We included indicators for treatment status and PROMISE program in all models.
- **Survey methods.** We included variables reflecting survey methods in the models to assess their correlation with the likelihood of response after adjusting for the core covariates and other variables. These covariates included the following:
  - *An indicator for receiving telephone calls from a regional area code.* We compared whether sample members who received telephone calls from a telephone number with a Princeton, New Jersey area code (Cohorts 1–19; 7,628 youth and 7,451 parents) were less likely to complete interviews than those who received calls from telephone numbers with area codes associated with their home states (Cohorts 20–25; 3,717 youth and 3,633 parents).
  - *A categorical variable that grouped the sample into cohorts that experienced pre-COVID and post-COVID survey modalities.* We compared whether sample members who had the opportunity to receive in-person locating and interviewing before the onset of the COVID-19 pandemic (Cohorts 1–8; 1,536 youth and 1,502 parents) were more likely to complete interviews than those who did not have the opportunity to receive in-person locating and interviewing after the onset of the pandemic (Cohorts 10–22; 7,568 youth and 7,397 parents). Cohorts 9 and 23–25 (2,241 youth and 2,185 parents) experienced both modalities.
- **Demographic characteristics.** We included a small set of demographic characteristics measured at enrollment via SSA administrative data[29] to identify whether sample members with those characteristics were more or less likely to complete interviews. We also included them in models to estimate the associations between other factors and survey completion after controlling for these

[29] We measured race and ethnicity via the 18-month surveys rather than at baseline.

characteristics. The covariates included variables reflecting sex, age, preferred written language, race, ethnicity, and primary impairment.

- **Outcome measures.** We included a limited set of outcome measures that we hypothesized to be correlated with survey response. We included the SSI age-18 redetermination status to determine whether a positive redetermination decision was positively correlated with survey response. We also used several survey outcomes measured at 18 months after RA that we hypothesized to be correlated with survey response: indicators for completion of the 18-month surveys, whether the youth used transition services in the 18 months after RA, whether the youth was employed in a paid job in the 18 months after RA, and whether the parent was employed in a paid job in the 18 months after RA. These survey outcomes are missing for enrollees who did not complete the 18-month survey; we imputed these measures using the mean of the observed values. We expected a positive correlation between completion of the 18-month and five-year surveys because the same factors that made youth and parents willing to complete one survey would likely make them willing to complete another. We also expected a positive correlation with the receipt of transition services because youth and parents who took the initiative to seek out services might be more interested in the survey topics and more likely to take action to complete the surveys. The direction of the correlation between the employment measures and survey completion was harder to predict. On the one hand, youth and parents with employment experience might resemble those who received transition services and tend to complete the surveys at higher rates due to unobservable characteristics such as interest or initiative. On the other hand, if youth and parents employed at 18 months after RA were also employed at five years after RA, their employment might have crowded out time for survey participation.

2. Results

Appendix Tables K.2 and K.3 present the estimated coefficients from four models predicting the likelihood of completing the five-year youth and parent surveys, respectively. Model 1 included only the core covariates; subsequent models included covariates from the other three groups additively. Model 4 included all four groups of covariates.

The strongest predictor of five-year survey completion was 18-month survey completion. In Model 4, youth and parents who completed the 18-month surveys were more than 20 percentage points more likely to complete the five-year surveys than their counterparts who did not complete the 18-month surveys. Youth and parents in Arkansas PROMISE and youth in CaPROMISE were less likely than their counterparts in other programs to complete the five-year surveys. Demographic characteristics had relatively small associations with survey response. Youth who were age 16 at RA were less likely to respond than youth who were ages 14 or 15. Parent responses showed the same pattern by youth age. Male youth were less likely to respond than female youth. Other factors positively associated with youth and parent survey response included treatment group membership and youth paid employment in the 18 months after RA. Losing SSI benefits because of an age-18 redetermination, however, was associated with a decline in survey responses among youth and parents. Model 4 showed a small positive relationship between receiving calls from a telephone number with a regional area code and survey response for youth and parents, but the other models showed no relationship. We found no association between membership in the post-COVID survey cohorts and completing the five-year surveys except in Model 3 for parents, where there was a slightly negative association.

3. Implications of the findings

The results indicate a link between survey completion and experiences with SSA and PROMISE among both youth and parents. As noted above, losing benefits at the youth's age-18 redetermination was associated with a decline in survey response among youth and parents. The termination decision or the lack of ongoing attachment to SSA programs after benefit termination might have reduced youth's and parents' motivation to complete interviews for a study sponsored by SSA and reduced the quality of the information we had to contact them for the survey. Being a member of the treatment group, on the other hand, had a modest positive association with survey completion for both youth and parents. This finding is not surprising, given that treatment group families had a stronger connection with PROMISE than control group families, which might have increased their willingness to respond to a PROMISE survey.

The small positive correlation between receipt of calls from a telephone number with a regional area code and the likelihood of responding to the five-year surveys suggests that the use of such area codes is a promising method to increase survey response, especially given that it is relatively inexpensive to implement. Survey sample members increasingly screen telephone calls (Brick and Williams 2013), and familiar area codes may help circumvent this screening. Because we used regional rather than local area codes, the small positive coefficients in our results may represent a lower bound for estimates of the association of targeted area codes with survey response. To develop a rough estimate of the cost-effectiveness of adopting regional area codes, we compared the cost of obtaining the area codes to the savings from making fewer telephone calls per completed interview. Mathematica paid $20,781 for the regional area codes. This cost included a one-time start-up fee and a monthly recurring fee. The area code provider set these fees based on the number of area codes so they did not vary based on the number of calls made. Based on a comparison of the number of telephone calls between survey cohorts 17-19 (who received calls from the area code of the SOC) and cohorts 20-22 (who received calls from regional area codes), we estimate that the cohorts who received calls from regional area codes required approximately one fewer phone call per completed interview. A rough estimate of the cost of each telephone call excluding the fee for the regional area code is $4.95, based on charges for telephone interviewing between June 2020 and June 2021. While we cannot definitively attribute the observed reduction in telephone calls required for completed interviews to the regional area codes, our findings suggest that they might reduce interviewing costs. Because the fee for the regional area codes was fixed, the cost or savings associated with them depends on the number of completed surveys. In the case of the PROMISE five-year survey, the regional area codes would be cost-neutral after 4,199 completed interviews.

The lack of a consistent association for youth and parents between membership in the post-COVID survey cohorts and completing the five-year surveys suggests that the absence of in-person locating and interviewing did not affect the likelihood of responding to the surveys. In-person locating and interviewing are expensive, so it would be beneficial if surveys could abandon these efforts without sacrificing response rates. Abandoning in-person interviewing could also help surveys reduce mode effects, the phenomenon in which different survey modes produce different responses. Nonetheless, two significant caveats apply to the findings. First, even if in-person locating and interviewing do not affect response, they might change the composition of responders. We did not directly assess whether the characteristics of PROMISE five-year survey respondents changed before and after the suspension of in-person locating and interviewing; however, we did adjust for program indicators and a set of basic demographic characteristics in our regression models. We found that the coefficient on the post-COVID

survey cohort indicator did not change much across the four models, suggesting that the relationship between the likelihood of responding to the survey and suspending in-person locating and interviewing was not mediated by individual characteristics; therefore, big changes in the demographic composition of survey respondents was unlikely. Second, the results may not be generalizable to a non-pandemic period. Aspects of the COVID-19 pandemic unrelated to the suspension of in-person locating and interviewing may have influenced survey response. For example, many states issued stay-at-home orders in response to the pandemic (Moreland et al. 2020), meaning that people were more likely to be at home and available to complete interviews. People were also less likely to move or be evicted during the pandemic (U.S. Census Bureau 2021), which made them easier to locate for the surveys. Economic disruptions caused by the pandemic may also have increased the appeal of the survey incentive. Absent these factors, we might have found a negative relationship between suspending in-person locating and interviewing and survey response.

Appendix Table K.2. Results from regression models predicting completion of the five-year youth survey

Covariate	(Model 1) Coefficient (SE)	(Model 2) Coefficient (SE)	(Model 3) Coefficient (SE)	(Model 4) Coefficient (SE)
Core covariates				
Treatment group member	0.02*	0.02*	0.01	0.01
	(0.01)	(0.01)	(0.01)	(0.01)
PROMISE program				
ASPIRE (omitted)				
Arkansas PROMISE	-0.03*	-0.03*	-0.03*	-0.02
	(0.01)	(0.01)	(0.01)	(0.01)
CaPROMISE	-0.03*	-0.02	-0.04**	-0.04**
	(0.01)	(0.01)	(0.01)	(0.01)
MD PROMISE	-0.03*	-0.02	-0.02	-0.02
	(0.01)	(0.01)	(0.01)	(0.01)
NYS PROMISE	0.01	0.01	-0.01	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)
WI PROMISE	0.01	0.01	0.01	0.02
	(0.01)	(0.01)	(0.01)	(0.01)
Survey methods[a]				
Calls came from regional area code		0.01	0.01	0.02*
		(0.01)	(0.01)	(0.01)
Eligibility for survey modality				
Pre-COVID-19 only (omitted)				
Post-COVID-19 only		-0.01	-0.01	-0.01
		(0.01)	(0.01)	(0.01)
Pre- and post-COVID-19		-0.00	-0.00	0.00
		(0.01)	(0.01)	(0.01)

Covariate	(Model 1) Coefficient (SE)	(Model 2) Coefficient (SE)	(Model 3) Coefficient (SE)	(Model 4) Coefficient (SE)
Youth characteristics				
Youth is female			0.02**	0.02*
			(0.01)	(0.01)
Youth age at RA				
14 (omitted)				
15			-0.01	-0.01
			(0.01)	(0.01)
16			-0.03***	-0.04***
			(0.01)	(0.01)
Youth prefers English for written language			-0.02	-0.02
			(0.01)	(0.01)
Youth race and ethnicity				
Non-Hispanic White (omitted)				
Non-Hispanic Black			-0.01	0.00
			(0.01)	(0.01)
Hispanic			-0.01	-0.00
			(0.01)	(0.01)
Non-Hispanic American Indian			-0.04	-0.03
			(0.03)	(0.03)
Non-Hispanic other or mixed race			0.01	0.01
			(0.01)	(0.01)
Missing			-0.24***	-0.02
			(0.01)	(0.02)
Youth primary impairment				
Intellectual or developmental disability (omitted)				
Speech, hearing, or visual impairment			0.03	0.02
			(0.02)	(0.02)
Physical disability			0.02	0.02
			(0.01)	(0.01)

Covariate	(Model 1) Coefficient (SE)	(Model 2) Coefficient (SE)	(Model 3) Coefficient (SE)	(Model 4) Coefficient (SE)
Other mental impairment			-0.03***	-0.01
			(0.01)	(0.01)
Other or unknown disability			-0.01	-0.00
			(0.02)	(0.02)
Outcome measures				
SSI age-18 redetermination outcome				
Final decision: benefits ceased				-0.08***
				(0.01)
Youth completed 18-month survey				0.23***
				(0.03)
Youth used key transition services in 18 months after RA[b]				0.01
				(0.01)
Youth had paid employment in 18 months after RA				0.02*
				(0.01)
Parent had paid employment in 18 months after RA				0.00
				(0.01)
Constant	0.83***	0.83***	0.93***	0.71***
	(0.01)	(0.01)	(0.02)	(0.03)
Number of youth	11,345	11,345	11,345	11,345

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

Note: This table presents the results of four regression models, using an expanding set of covariates to estimate the probability of completing the five-year youth survey. Model 1 included core covariates; Model 2 included core covariates and survey methods; Model 3 included core covariates, survey methods, and youth characteristics; and Model 4 included core covariates, survey methods, youth characteristics, and outcome measures. The sample included all youth eligible to complete the PROMISE five-year youth survey and for whom age-18 redetermination status was observable in SSA data. Estimates were based on unweighted ordinary least squares models with a binary outcome that equals 1 if an enrollee completed the five-year survey. We imputed outcomes measured in the 18-month survey for enrollees who were eligible for the five-year survey but did not complete the 18-month survey, using the mean of the observed values of the measures. Coefficients estimate the change in the probability of completing the five-year survey in percentage points associated with a one-unit change in each predictor variable. Standard errors are robust to heteroskedasticity.

*/**/*** Coefficient is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] Telephone calls to Cohorts 1–19 came from a telephone number with a generic area code; telephone calls to Cohorts 20–25 came from a telephone number with the respondents' own area codes. Cohorts 1–8 experienced the pre-COVID-19 survey modality, which included telephone, in-person, and mailed surveys. Cohorts

10–22 experienced the post-COVID-19 survey modality, which included telephone and mailed surveys only. Cohorts 9 and 23–25 were eligible to complete the survey over a time frame that spanned both pre- and post-COVID survey modalities.

[b] Key transition services were case management, employment-promoting services, benefits counseling, and financial education. We identified these services as key transition services because PROMISE programs were required to offer them.

ASPIRE = Achieving Success by Promoting Readiness for Education and Employment; CaPROMISE = California PROMISE; MD = Maryland; NYS = New York State; RA = random assignment; SE = standard error; SSA = Social Security Administration; SSI = Supplemental Security Income; WI = Wisconsin.

Appendix Table K.3. Results from regression models predicting completion of the five-year parent survey

Covariate	(Model 1) Coefficient (SE)	(Model 2) Coefficient (SE)	(Model 3) Coefficient (SE)	(Model 4) Coefficient (SE)
Core covariates				
Treatment group member	0.02**	0.02**	0.02*	0.01
	(0.01)	(0.01)	(0.01)	(0.01)
PROMISE program				
ASPIRE (omitted)				
Arkansas PROMISE	-0.03*	-0.03*	-0.04**	-0.03**
	(0.01)	(0.01)	(0.01)	(0.01)
CaPROMISE	-0.01	-0.01	-0.03*	-0.03*
	(0.01)	(0.01)	(0.01)	(0.01)
MD PROMISE	-0.02	-0.02	-0.02	-0.03*
	(0.01)	(0.01)	(0.01)	(0.01)
NYS PROMISE	0.02	0.02	-0.00	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)
WI PROMISE	0.01	0.01	0.01	0.01
	(0.01)	(0.01)	(0.01)	(0.01)
Survey methods[a]				
Calls came from regional area code		0.01	0.01	0.02*
		(0.01)	(0.01)	(0.01)
Eligibility for survey modality				
Pre-COVID-19 only (omitted)				
Post-COVID-19 only		-0.02	-0.02*	-0.02
		(0.01)	(0.01)	(0.01)
Pre- and post-COVID-19		0.01	-0.00	0.00
		(0.01)	(0.01)	(0.01)

Covariate	(Model 1) Coefficient (SE)	(Model 2) Coefficient (SE)	(Model 3) Coefficient (SE)	(Model 4) Coefficient (SE)
Youth characteristics				
Youth is female			0.00 (0.01)	0.00 (0.01)
Youth age at RA				
14 (omitted)				
15			-0.01 (0.01)	-0.01 (0.01)
16			-0.03*** (0.01)	-0.04*** (0.01)
Youth prefers English for written language			-0.03* (0.01)	-0.02 (0.01)
Youth race and ethnicity				
Non-Hispanic White (omitted)				
Non-Hispanic Black			0.01 (0.01)	0.02* (0.01)
Hispanic			-0.01 (0.01)	-0.00 (0.01)
Non-Hispanic American Indian			-0.03 (0.03)	-0.02 (0.03)
Non-Hispanic other or mixed race			0.01 (0.01)	0.02 (0.01)
Missing			-0.25*** (0.01)	-0.10*** (0.02)
Youth primary impairment				
Intellectual or developmental disability (omitted)				
Speech, hearing, or visual impairment			0.01 (0.03)	-0.00 (0.03)
Physical disability			0.02* (0.01)	0.02* (0.01)

Covariate	(Model 1) Coefficient (SE)	(Model 2) Coefficient (SE)	(Model 3) Coefficient (SE)	(Model 4) Coefficient (SE)
Other mental impairment			-0.02**	-0.01
			(0.01)	(0.01)
Other or unknown disability			-0.00	-0.00
			(0.02)	(0.02)
Outcome measures				
SSI age-18 redetermination outcome				
Final decision: benefits ceased				-0.07***
				(0.01)
Parent completed 18-month survey				0.20***
				(0.02)
Youth used key transition services in 18 months after RA[b]				0.01
				(0.01)
Youth had paid employment in 18 months after RA				0.02**
				(0.01)
Parent had paid employment in 18 months after RA				0.00
				(0.01)
Constant	0.83***	0.83***	0.94***	0.75***
	(0.01)	(0.01)	(0.02)	(0.03)
Number of youth	11,084	11,084	11,084	11,084

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

Note: This table presents the results of four regression models using an expanding set of covariates to estimate the probability of completing the five-year parent survey. Model 1 included core covariates; Model 2 included core covariates and survey methods; Model 3 included core covariates, survey methods, and youth characteristics; and Model 4 included core covariates, survey methods, youth characteristics, and outcome measures. The sample included all youth eligible to complete the PROMISE five-year youth survey and for whom age-18 redetermination status was observable in SSA data. Estimates were based on unweighted ordinary least squares models with a binary outcome that equals 1 if an enrollee completed the five-year survey. We imputed outcomes measured in the 18-month survey for enrollees who were eligible for the five-year survey but did not complete the 18-month survey, using the mean of the observed values of the measures. Coefficients estimate the change in the probability of completing the five-year survey in percentage points associated with a one-unit change in each predictor variable. Standard errors are robust to heteroskedasticity.

*/**/*** Coefficient is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

[a] Telephone calls to Cohorts 1–19 came from a telephone number with a generic area code; telephone calls to Cohorts 20–25 came from a telephone number with the respondents' own area codes. Cohorts 1–8 experienced the pre-COVID-19 survey modality, which included telephone, in-person, and mailed surveys. Cohorts

10–22 experienced the post-COVID-19 survey modality, which included telephone and mailed surveys only. Cohorts 9 and 23–25 were eligible to complete the survey over a time frame that spanned both pre- and post-COVID survey modalities.

[b] Key transition services were case management, employment-promoting services, benefits counseling, and financial education. We identified these services as key transition services because PROMISE programs were required to offer them.

ASPIRE = Achieving Success by Promoting Readiness for Education and Employment; CaPROMISE = California PROMISE; MD = Maryland; NYS = New York State; RA = random assignment; SE = standard error; SSA = Social Security Administration; SSI = Supplemental Security Income; WI = Wisconsin.

C. Responses to text messages and incentive bonuses

This study examined when sample members completed the five-year surveys relative to the dates of text messages and to the bonus incentive cutoff date to look for evidence on the effectiveness of these methods in promoting survey response.

1. Data and methods

We used PROMISE SMS data to (1) compare the percentage of youth who completed an interview and the number of completed interviews during the 12 days of the incentive bonus period and the 12 days immediately after that period and (2) examine the number of completed interviews following each text message and. We examined responses separately for youth who completed the 18-month survey and were eligible for an $10 bonus (for a total incentive of $40) and youth who did not complete the 18-month survey and were eligible for a $20 bonus (for a total incentive of $50). We restricted our analysis of responses before and after the bonus incentive cutoff to youth because we used different outreach approaches for youth and parents around the time of the cutoff. We began calling parents immediately after the bonus period ended, whereas we refrained from calling youth because our strategy was to complete the parent interview first and then enlist the parent's help to reach the youth. It would not be possible to disentangle any observed change in parent responses after the close of the bonus period from the initiation of calls. Because youth did not receive calls during or after the bonus period, their experience provides a more accurate indication of the bonus period's effectiveness.

2. Results

a. Responses to bonus incentives

We found limited evidence that the early call-in incentive bonus led to more survey responses. Of the 2,981 youth who completed the five-year survey during the 12 days of the bonus period and the 12 days immediately after that period, 52 percent completed during the bonus period (Appendix Table K.4). The rates of early completion were the same for youth eligible for the $40 and $50 incentives. The two incentive groups showed different patterns of responses over time (Appendix Figure K.1). Responses among youth eligible for the $40 incentive fell by 56 percent on the day after the bonus period ended, the largest one-day drop during the 24-day analysis period. Responses among youth eligible for the $50 incentive declined by only 13 percent on the day after the bonus period ended, which is similar to the day-to-day variation observed at other times during the 24-day analysis period.

b. Responses to text messages

The findings indicate that text messages might have prompted survey responses over a short (one- or two-day) time horizon. Appendix Figures K.2 and K.3 show the number of youth (K.2) and parent (K.3) responses over four two-week periods, each beginning on the day we sent a text message. We sent text messages on different days of the week for different survey cohorts, therefore Day 1 could be any day of the week. There are clear spikes in survey completions on the day of the first and second text messages and progressively less pronounced spikes for the days of the third and fourth text messages. There are also small spikes in responses seven or eight days after sending each text message. These smaller spikes generally coincide with different outreach methods, such as telephone calls.

3. Implications of the findings

a. Responses to bonus incentives

Slightly more youth completed interviews during the 12 days of the bonus period than during the 12 succeeding days. Taken on its own, this finding does not necessarily indicate that youth who completed interviews early did so because of the bonus. They might have completed early regardless of the bonus, perhaps because they are more motivated or more organized than other youth. Nonetheless, the pattern of completes among the $40 incentive group offers some evidence of the bonus's role. The number of completes fell sharply the day after the bonus expired. The availability of the bonus was the only characteristic that differentiated the last day of the bonus period and the next day, suggesting that the withdrawal of the bonus motivated the decreased survey participation. If the bonus successfully shifted the timing of interviews earlier among the $40 incentive group, it likely reduced survey costs because we did not incur locating expenses for youth who called in during the bonus period.

The $50 incentive group did not experience a sharp drop in interview completions the day after the bonus expired, so there is less evidence that the bonus influenced this group. As noted above, youth eligible for the $40 incentive had completed the 18-month survey, whereas youth eligible for the $50 incentive had not done so. Youth eligible for the $40 incentive might have been more willing to complete interviews and thus were more motivated by the bonus. Bonuses might need to be larger to induce reluctant sample members to complete interviews and may not work for some sample members regardless of the size.

b. Responses to text messages

The pattern of spikes corresponding with the dates of text messages suggests that the text messages were associated with the timing of completing an interview. By motivating people to respond earlier, text message could help reduce costs by reducing the effort required for locating. The pattern also suggests that the association of text messages with survey completion faded as time elapses after each text message and as the field period progressed. For the first three text messages, the number of responses spiked on the day we sent the message and then fell sharply. The size of the spike declined over subsequent text messages and disappeared by the fourth one. These diminishing returns over time and with multiple reminders are consistent with patterns observed for other survey outreach methods, including mail (Fekete et al. 2015) and email (Sauermann and Roach 2013).

The findings do not prove there is a causal relationship between text messages and interview completion. Several factors complicate the effort to assess causality. First, some mailings and telephone calls occurred close to the dates of the text messages, thus preventing us from isolating the role of the text messages from that of other communications. Second, we sent the first text message between Days 8 and 11 after each cohort's release, shortly before the end of the bonus incentive period on Day 12. It is likely that the large spike around the date of the first text message was partly attributable to the imminent expiration of the incentive bonus. Finally, text messages might have prompted earlier responses from sample members who would have eventually completed an interview without receiving a text message, so it is not possible to determine whether the text messages increased the likelihood of responding.

Appendix Table K.4. Youth five-year survey responses during and after the incentive bonus period (percentages, unless otherwise noted)

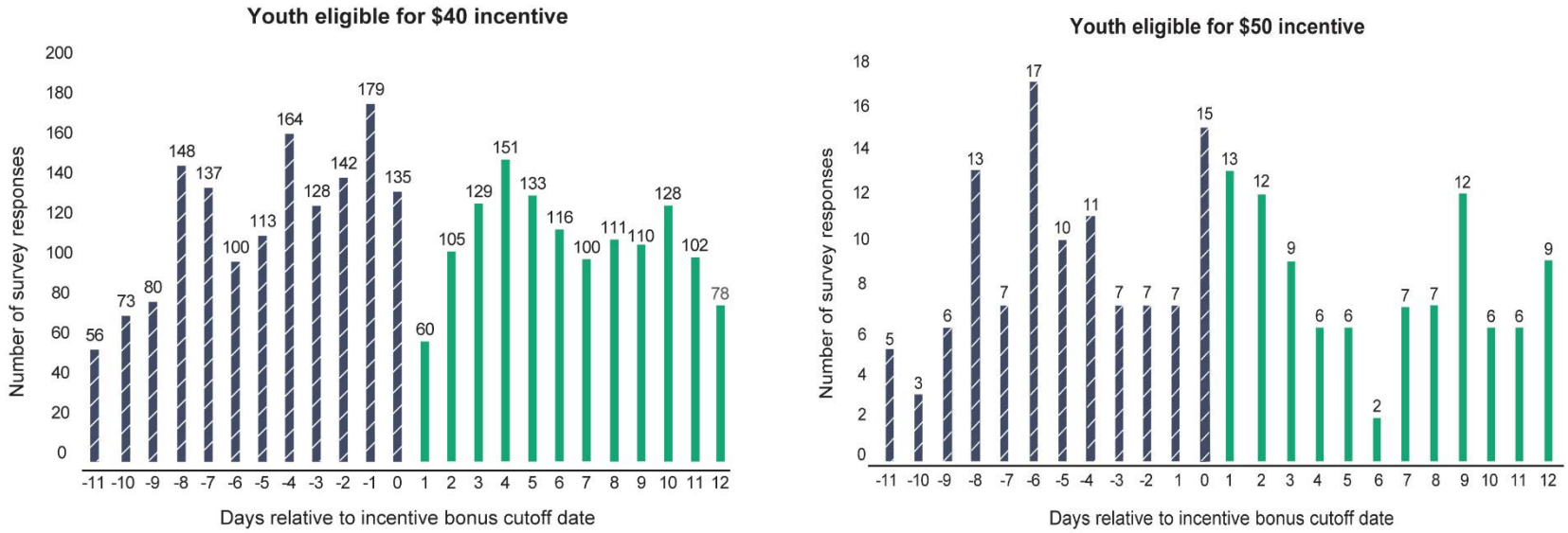
Youth	Completed survey during 12-day bonus period (A)	Completed survey within 12 days after bonus period (B)	Difference (A – B)	*p*-value	Sample size
Youth eligible for the $40 incentive	52.4	47.6	4.8**	0.01	2,778
Youth eligible for the $50 incentive	53.2	46.8	6.4	0.36	203
All youth	52.4	47.6	4.9**	0.01	2,981

Source: PROMISE survey management system.

Note: This table presents the fraction of youth who completed the five-year survey during and after the bonus incentive period as a percentage of all youth who completed the survey within the first 24 days. All survey respondents received a $30 incentive for completing thing five-year survey. The bonus incentive was available to survey-eligible youth who responded in the first 12 days. Youth who completed the 18-month survey were offered a $10 bonus and youth who did not complete the 18-month survey were offered a $20 bonus.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

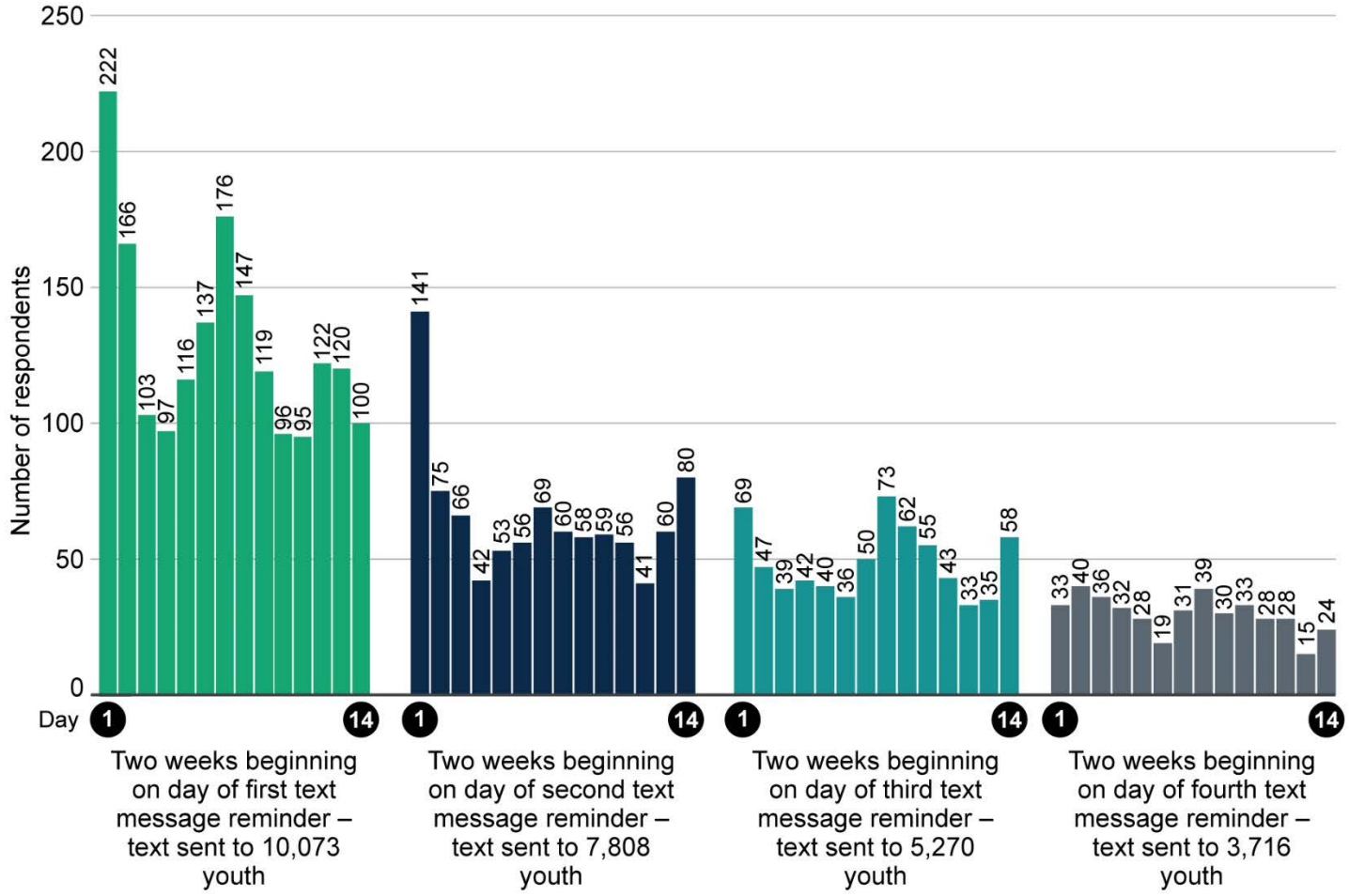
Appendix Figure K.1. Number of youth survey responses during and after the incentive bonus period



Source: PROMISE survey management system.

Note: This figure plots the number of five-year youth survey completions per day for the 12-day bonus incentive period and 12 days after. The bonus cutoff date is day 0.

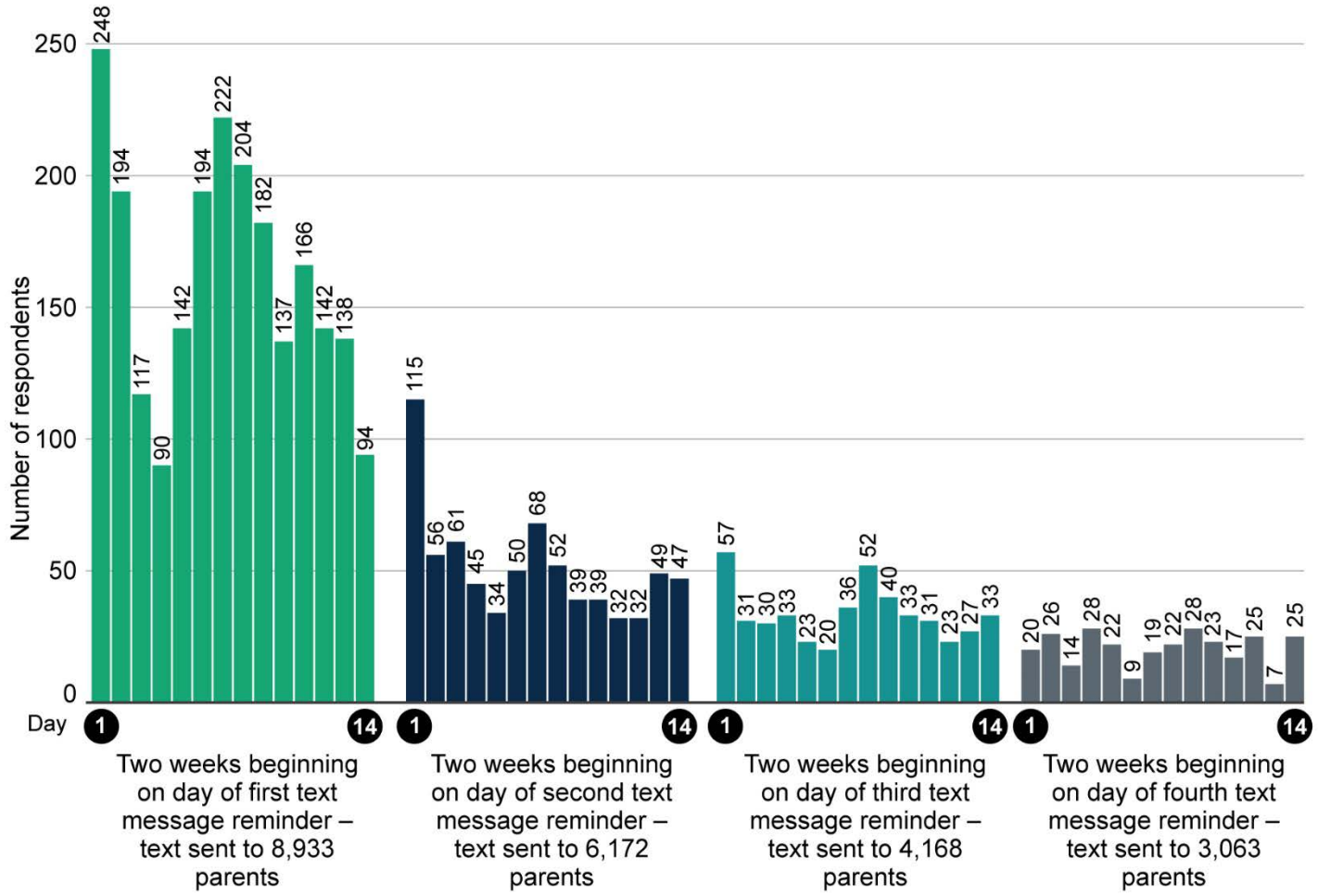
Appendix Figure K.2. Number of youth survey responses per day within two weeks of sending text message reminders



Source: PROMISE survey management system.

Note: This figure plots the number of five-year youth survey completions per day over four 14-day periods. Each period began on the day of a text message reminder. We sent text messages to sample members at four points over the 24-week period in which each survey cohort was active (Weeks 2, 5,14, and 19). We sent the messages on different days of the week for different survey cohorts; therefore, Day 1 could be any day of the week.

Appendix Figure K.3. Number of parent survey responses per day within two weeks of sending text message reminders



Source: PROMISE survey management system.

Note: This figure plots the number of five-year parent survey completions per day over four 14-day periods. Each period began on the day of a text message reminder. We sent text messages to sample members at four points over the 24-week period in which each survey cohort was active (Weeks 2, 5, 14, and 19). We sent the messages on different days of the week for different survey cohorts; therefore, Day 1 could be any day of the week.

D. Responses to SAQs

This study assessed whether the SAQ was a useful tool for eliciting responses to key survey questions from hard-to-reach populations. The study also provided some evidence on the extent of nonresponse bias that might have existed in impact estimates based on measures not included in the SAQ. Large differences in outcomes between SAQ and full survey respondents might suggest that impacts on other survey-based outcomes not measured in the SAQ should be interpreted carefully because of the potential for bias.

1. Data sources and methods

We used data from the PROMISE SMS and RA system, SSA, and the 18-month surveys to compare the characteristics of SAQ and full survey respondents by treatment and control group membership (Appendix Tables K.5 and K.6). We used data from the five-year surveys to compare unadjusted rates of outcomes measured in the SAQ for respondents who completed the SAQs and those who completed the full surveys by treatment and control group membership (Appendix Table K.7).

2. Results

Overall, SAQ respondents look similar to full survey respondents, with the most substantial difference between the two groups being completion of the 18-month surveys: youth and parent SAQ respondents were about 15 percentage points less likely than full survey respondents to have completed their respective 18-month surveys. Youth SAQ respondents resembled full survey respondents on most baseline measures except for race and ethnicity, number of parents, and parent SSA payment status at RA (Appendix Table K.5). Youth SAQ respondents were almost 14 percentage points less likely than full survey respondents to be non-Hispanic Black. They were also more likely to have at least one parent, but their parents were less likely to receive SSA payments. We observed similar patterns of modest differences between parent SAQ and full survey respondents (Appendix Table K.6).

The SAQs measured a subset of key outcomes of the PROMISE demonstration; we observed several large differences in the outcomes of SAQ respondents compared with those of full survey respondents (Appendix Table K.7). Youth SAQ respondents were much more likely than full survey respondents to be enrolled in an educational or training program (by 53 percentage points in both the treatment group and the control group) and less likely to have had a paid job in the year before the survey (13 percentage points less likely in the treatment group and 20 percentage points less likely in the control group). They also had lower earnings and were less likely to have health insurance. Parent SAQ respondents reported higher rates of paid employment and higher earnings than full survey respondents, though the difference in parents' earnings in the treatment group was not statistically significant.

3. Implications of the findings

The SAQs might have served their intended purpose of increasing survey response without biasing the impact estimates. As discussed in Section B, completion of the 18-month survey was one of the strongest predictors for completion of the five-year survey. This finding suggests that the availability of the SAQ might have increased five-year survey responses among hard-to-reach sample members unlikely to respond to the full survey. We did observe substantial differences in several outcome rates between SAQ and full survey respondents; however, the same pattern of differences existed in both treatment and control groups, suggesting that nonresponse was not correlated with treatment group status and might not

have had a meaningful effect on impact estimates based on differences in treatment and control group means.

We hypothesized that youth and parents enrolled in ASPIRE would make up a disproportionately large share of SAQ respondents because ASPIRE had a greater percentage of enrollees who lived in frontier areas where in-person locating and interviewing were infeasible. This was not the case—in fact, while ASPIRE youth made up 17 percent of all youth who completed the five-year survey, they made up only 14.2 percent of SAQ respondents. However, the suspension of in-person locating and interviewing during the COVID-19 pandemic levelled the playing field between families that lived in frontier areas and those that did not. Had the five-year surveys not coincided with the pandemic, we might have observed a greater difference in response patterns between ASPIRE and the other programs.

Appendix Table K.5. Characteristics of youth five-year survey respondents who completed the SAQ and full survey (percentages, unless otherwise noted)

Characteristic	All (A)	SAQ (B)	Full survey (C)	Difference (B – C)[a]	*p*-value
Parent completed five-year survey	96.9	87.6	97.3	-9.7***	0.00
Youth completed 18-month survey	86.2	70.9	86.9	-16.0***	0.00
PROMISE Program					
Program					0.10
ASPIRE	17.0	14.2	17.1	-2.9	
Arkansas PROMISE	15.4	19.1	15.2	4.0	
CaPROMISE	17.1	16.1	17.2	-1.1	
MD PROMISE	15.8	16.5	15.8	0.7	
NYS PROMISE	17.7	15.1	17.8	-2.7	
WI PROMISE	17.0	18.9	16.9	2.0	
Demographic characteristics					
Youth is female	33.8	33.1	33.8	-0.7	0.75
Youth age at RA					0.97
14	36.3	35.9	36.3	-0.4	
15	29.2	29.1	29.2	-0.2	
16	34.4	35.0	34.4	0.6	
Average age at RA	15.4	15.5	15.4	0.0	0.46
Youth language preference					
English for written language	87.9	89.8	87.8	2.0	0.18
English for spoken language	87.7	89.8	87.6	2.3	0.13
Youth living arrangement					0.30
In parents' household	84.1	86.8	83.9	2.8	
Own household or alone	13.8	11.6	13.9	-2.4	
Another household and receiving support	2.1	1.7	2.1	-0.5	

Characteristic	All (A)	SAQ (B)	Full survey (C)	Difference (B – C)[a]	*p*-value
Youth race and ethnicity				†††	0.00
Non-Hispanic White	18.7	20.3	18.6	1.7	
Non-Hispanic Black	32.6	19.6	33.2	-13.6	
Hispanic	26.7	25.5	26.7	-1.2	
Non-Hispanic American Indian	1.9	2.4	1.9	0.5	
Non-Hispanic other or mixed race	7.2	6.4	7.3	-0.9	
Missing	13.0	25.8	12.4	13.4	
Enrolling parent age at RA	43.3	41.7	43.4	-1.7***	0.00
Parent race and ethnicity				†††	0.00
Non-Hispanic White	23.9	27.2	23.8	3.4	
Non-Hispanic Black	34.1	23.4	34.6	-11.2	
Hispanic	24.3	23.9	24.3	-0.4	
Non-Hispanic American Indian	1.8	2.4	1.7	0.6	
Non-Hispanic other or mixed race	5.6	2.8	5.8	-2.9	
Missing	10.2	20.3	9.8	10.6	
Disability					
Youth primary impairment					0.40
Intellectual or developmental disability	45.4	45.9	45.4	0.4	
Speech, hearing, or visual impairment	1.8	1.2	1.8	-0.6	
Physical disability	14.1	11.8	14.2	-2.4	
Other mental impairment	34.3	35.7	34.3	1.4	
Other or unknown disability	4.3	5.4	4.3	1.1	
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.3	92.4	94.3	-1.9	0.15
Received OASDI	10.9	10.4	10.9	-0.5	0.75
Years between youth's earliest SSI eligibility and RA	8.9	8.7	8.9	-0.2	0.46
Youth age at most recent SSI application	7.0	7.2	7.0	0.2	0.32

Characteristic	All (A)	SAQ (B)	Full survey (C)	Difference (B – C)[a]	*p*-value
Youth payments in the year before RA ($)					
SSI	7,280	7,147	7,286	-140	0.23
OASDI	313	312	313	-1	0.98
Total SSI and OASDI	7,593	7,459	7,599	-141	0.17
Household had multiple SSI-eligible children	19.2	19.2	19.2	0.0	0.99
Enrolling parent provided a valid SSN	76.6	77.8	76.5	1.3	0.54
Parents in the administrative data				††	0.01
None	6.8	3.3	7.0	-3.7	
One parent	59.4	60.8	59.3	1.4	
Two parents	33.8	35.9	33.7	2.2	
Parent SSA payment status at RA				†††	0.00
A parent received SSI only	9.3	7.1	9.4	-2.3	
A parent received OASDI only	8.8	9.9	8.8	1.2	
A parent received SSI and OASDI	5.4	3.3	5.5	-2.2	
No parent received any SSA payments	69.6	76.4	69.3	7.0	
No parent included in the SSA data analyses	6.8	3.3	7.0	-3.7	
Number of youth	9,377	423	8,954		

Source: PROMISE survey management system, SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: This table shows characteristics of two groups: youth who completed the SAQ and youth who completed the full PROMISE five-year youth survey. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

[a] The difference might not equal the difference between the numbers shown in columns B and C due to rounding.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SAQ = self-administered questionnaire; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table K.6. Characteristics of parent five-year survey respondents who completed the SAQ and full survey (percentages, unless otherwise noted)

Characteristic	All (A)	SAQ (B)	Full survey (C)	Difference (B – C)	*p*-value
Youth completed five-year survey	96.8	87.7	97.2	-9.4***	0.00
Parent completed 18-month survey	90.0	75.7	90.5	-14.8***	0.00
PROMISE Program					
Program					0.17
ASPIRE	16.8	16.0	16.8	-0.8	
Arkansas PROMISE	15.1	18.3	15.0	3.3	
CaPROMISE	17.4	16.0	17.5	-1.5	
MD PROMISE	15.8	17.4	15.7	1.7	
NYS PROMISE	17.9	13.7	18.0	-4.3	
WI PROMISE	17.0	18.6	16.9	1.7	
Demographic characteristics					
Youth is female	33.4	35.1	33.3	1.8	0.49
Youth age at RA					0.91
14	36.3	35.4	36.3	-0.9	
15	29.4	30.3	29.3	1.0	
16	34.3	34.3	34.3	-0.1	
Average age at RA	15.4	15.5	15.4	0.0	0.76
Youth language preference					
English for written language	87.6	89.4	87.5	1.9	0.26
English for spoken language	87.4	89.4	87.3	2.2	0.20
Youth living arrangement					0.21
In parents' household	84.4	87.7	84.3	3.5	
Own household or alone	13.6	10.9	13.7	-2.8	
Another household and receiving support	2.0	1.4	2.1	-0.6	

Characteristic	All (A)	SAQ (B)	Full survey (C)	Difference (B – C)	*p*-value
Youth race and ethnicity				†††	0.00
Non-Hispanic White	18.3	22.9	18.1	4.7	
Non-Hispanic Black	33.0	20.9	33.4	-12.6	
Hispanic	27.0	23.7	27.1	-3.4	
Non-Hispanic American Indian	1.9	2.6	1.9	0.7	
Non-Hispanic other or mixed race	7.2	5.4	7.3	-1.9	
Missing	12.6	24.6	12.1	12.4	
Enrolling parent age at RA	43.2	42.0	43.2	-1.2***	0.01
Parent race and ethnicity				†††	0.00
Non-Hispanic White	23.6	32.3	23.3	9.0	
Non-Hispanic Black	34.6	20.0	35.2	-15.2	
Hispanic	24.6	22.6	24.7	-2.2	
Non-Hispanic American Indian	1.7	2.0	1.7	0.3	
Non-Hispanic other or mixed race	5.5	2.6	5.6	-3.1	
Missing	9.9	20.6	9.4	11.1	
Disability					
Youth primary impairment					0.99
Intellectual or developmental disability	45.5	46.3	45.5	0.8	
Speech, hearing, or visual impairment	1.8	1.4	1.8	-0.4	
Physical disability	14.2	14.0	14.2	-0.2	
Other mental impairment	34.2	33.7	34.2	-0.5	
Other or unknown disability	4.3	4.6	4.3	0.2	
SSA program participation					
Youth SSA payment status at RA					
Received SSI	94.3	94.9	94.2	0.6	0.61
Received OASDI	10.6	11.7	10.5	1.2	0.50
Years between youth's earliest SSI eligibility and RA	8.9	8.8	8.9	-0.1	0.79
Youth age at most recent SSI application	7.0	7.2	7.0	0.1	0.58

Characteristic	All (A)	SAQ (B)	Full survey (C)	Difference (B – C)	*p*-value
Youth payments in the year before RA ($)					
SSI	7,287	7,234	7,289	-55	0.66
OASDI	303	331	302	29	0.65
Total SSI and OASDI	7,590	7,565	7,591	-26	0.82
Household had multiple SSI-eligible children	19.2	21.2	19.1	2.1	0.35
Enrolling parent provided a valid SSN	76.7	78.3	76.6	1.7	0.45
Parents in the administrative data				††	0.02
None	6.7	3.1	6.9	-3.7	
One parent	59.4	60.0	59.3	0.7	
Two parents	33.9	36.9	33.8	3.1	
Parent SSA payment status at RA				††	0.02
A parent received SSI only	9.2	7.7	9.2	-1.5	
A parent received OASDI only	8.6	10.3	8.5	1.8	
A parent received SSI and OASDI	5.4	4.0	5.5	-1.5	
No parent received any SSA payments	70.1	74.9	69.9	5.0	
No parent included in the SSA data analyses	6.7	3.1	6.9	-3.7	
Number of parents	9,202	350	8,852		

Source: PROMISE survey management system, SSA administrative records, PROMISE RA system, and 18-month surveys (race and ethnicity).

Note: This table shows characteristics of two groups: parents who completed the SAQ and parents who completed the full PROMISE five-year parent survey. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; RA = random assignment; SAQ = self-administered questionnaire; SSA = Social Security Administration; SSI = Supplemental Security Income; SSN = Social Security number.

Appendix Table K.7. Selected outcomes of five-year survey respondents who completed the SAQ and full survey, by treatment status (percentages, unless otherwise noted)

Outcome	Treatment group					Control group				
	SAQ (A)	Full survey (B)	Difference (A – B)	*p*-value	N	SAQ (C)	Full survey (D)	Difference (C – D)	*p*-value	N
Youth outcomes										
Enrolled in an educational or training program	94.6	41.5	53.1***	0.00	4,578	95.3	42.8	52.5***	0.00	4,486
Had a GED, high school diploma, or certificate of completion	71.9	69.2	2.8	0.39	4,683	75.2	71.1	4.2	0.18	4,620
Employed in a paid job in the past year	32.6	45.4	-12.8***	0.00	4,723	22.7	42.8	-20.1***	0.00	4,654
Earnings in past year ($)	3,660	4,759	-1,099*	0.08	4,723	1,998	4,472	-2,474***	0.00	4,654
Youth expected to be financially independent at age 25	58.1	63.0	-4.8	0.30	3,025	48.1	61.0	-12.9***	0.00	2,943
Covered by health insurance	85.3	88.6	-3.3	0.19	4,559	86.5	89.5	-2.9	0.23	4,525
Parent outcomes										
Either parent worked for pay in the past year	72.8	67.2	5.6*	0.09	4,641	69.4	66.6	2.9	0.44	4,543
Earnings in the past year ($)	23,566	22,808	758	0.74	4,644	24,056	22,319	1,737	0.50	4,547
Either parent covered by health insurance	92.5	90.3	2.2	0.27	4,609	91.9	89.8	2.1	0.34	4,522

Source: PROMISE survey management system and five-year surveys.

Note: This table shows mean outcomes of four groups: treatment group members who completed the SAQ, control group members who completed the SAQ, treatment group members who completed the full survey, and control group members who completed the full survey. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

GED = General Educational Development; SAQ = self-administered questionnaire.

Appendix L. Differences between PROMISE Control Group Enrollees and Non-Enrollees

In this appendix, we compare selected characteristics and outcomes of PROMISE control group youth to those of PROMISE-eligible youth who did not enroll in the demonstration, either because the programs did not attempt to recruit them or their parents chose not to enroll them (hereafter called "non-enrollees"). This comparison can help us better understand the representativeness of the PROMISE sample and the extent to which PROMISE volunteers differed from other eligible youth. These findings can thus inform the interpretation and generalizability of impacts.

In the sections that follow, we first describe the data and methods, then present the findings of the analyses. Overall, we found that PROMISE control group youth had higher employment rates, earnings, and SSA payments than non-enrollees. As a result, the PROMISE evaluation findings might not generalize to a broader population of youth receiving SSI.

A. Data and methods

1. Data and samples

We used SSA administrative data to examine youth's employment, earnings, and SSA payments. The analysis focused on youth's outcomes in the calendar year that they turned age 18 to allow for a uniform measurement period. Age 18 was the latest age possible, given the data that were available for all enrollees at the time of the analysis. Because the control group youth enrolled in the evaluation before the calendar year of their 18th birthday, it is possible they were prompted to think about their transition to adulthood, which might have affected their outcomes.

We examined the outcomes of the 6,282 youth randomly assigned to the control groups across the six programs and 69,898 non-enrollees in the same program service areas. The non-enrollee sample included youth receiving SSI who were eligible to enroll in PROMISE but their parents either chose not to enroll them or did not receive outreach from the program to enroll. We are unable to identify who received outreach and who did not.

The composition of the control group youth and non-enrollees was not identical (Appendix Tables L.1.a–L.1.g). For each program, enrollees differed from non-enrollees in some but not all of these characteristics; in most cases the differences were relatively small. One consistent difference was in youth's language preferences; for all programs except WI PROMISE, control group youth were more likely to cite English as their preferred written and spoken language than non-enrollees. We did not control for the differences in characteristics in this analysis because we were interested in whether the differences contributed to differences in outcomes.

The PROMISE enrollment period spanned two years and had an eligibility age range of 14 to 16 and youth in both groups had their 18th birthdays between 2015 and 2020. However, the distribution of birthdates differed significantly between control group youth and non-enrollees (Appendix Tables L.1.a–L.1.g). Larger shares of non-enrollee youth had their 18th birthdays in 2015, 2016, 2019, and 2020, whereas larger shares of PROMISE control group youth had their 18th birthdays in 2017 and 2018. Thus, the control group had a more condensed age distribution, likely reflecting the programs' enrollment experiences. Programs were slow to enroll youth in the early years of PROMISE, so the non-enrollee sample contained a larger share of older youth. Some programs also might have focused on older youth

because they were at risk of becoming ineligible for PROMISE sooner. Similarly, once programs achieved their enrollment targets, the remaining eligible youth, who were disproportionately younger, could not enroll. These differences mean that the two groups differed in the distributions of the calendar years of their 18th birthdays—the measurement period for the outcomes of interest. Notably, we measured a larger share of non-enrollees' outcomes in 2020, a year in which labor market and program participation outcomes could have been affected by the COVID-19 pandemic. Because we did not want differences in outcomes to be driven by differences in the years that outcomes were measured, we accounted for the measurement year in the analyses, as described further below.

Another difference between the two groups was that a larger percentage of non-enrollees (0.72 percent) died in or before the year they turned age 18, compared with control group youth (0.37 percent). We did not exclude deceased youth from the sample; the earnings and SSA payments of these youth had a value of zero in the analyses. Differential death rates between the two groups could have contributed to differences in outcomes. However, because the shares of deceased youth in each group are small, it is unlikely that the different death rates are drivers of differences in outcomes between control group youth and non-enrollees.

2. Methods

We examined the baseline characteristics and outcomes of PROMISE control group and non-enrollee youth in aggregate and separately by program. We assessed two measures of labor market outcomes: the share of youth who were employed (that is, had any earnings) in the calendar year of their 18th birthday as well as youth's average earnings (including those with zero earnings) in that year. We also considered three SSA payment measures: total SSA payments, SSI payments, and OASDI payments in the calendar year of the youth's 18th birthday. We adjusted each measure for inflation using the CPI-W and outliers (see Appendix B for our approach to winsorizing). We compared the average outcomes between the control group and non-enrollees after controlling for the calendar year of the 18th birthday using covariate adjustment. We used two-sided *t*-tests to assess whether the adjusted difference in outcomes between the two groups significantly differed from zero.

B. Results

In general, we found significant differences between the two groups across all outcome measures, as described below:

- **Employment.** On average across the six programs, a significantly larger share of control group youth (39 percent) were employed in the year of their 18th birthday compared with non-enrollee youth (35 percent). However, at the program level, the employment rate among enrollees was only significantly higher than non-enrollees for WI PROMISE and CaPROMISE. This is consistent with findings from additional analyses that compared the outcomes of PROMISE enrollees with outcomes of similarly aged youth who responded to the 2019 or 2020 American Community Survey (ACS). Compared with similarly aged ACS youth who received SSI, PROMISE youth were more likely to have been employed in the year before they were surveyed and reported higher earnings and weeks worked over that period, on average (Farid et al. 2022).
- **SSA payments.** In all programs except ASPIRE, control group youth had significantly higher SSI payments and total SSA payments than non-enrollees in the calendar year of their 18th birthday. For example, on average across the programs, control group youth's SSA payment amounts in the calendar year of their 18th birthday were 5 percent higher than those of non-enrollees.

The differences in outcomes between control group youth and non-enrollees indicate that, on average across the programs, youth who enrolled in the PROMISE demonstration were likely to have better-than-average employment outcomes even in the absence of PROMISE. This suggests that those who volunteered to enroll in PROMISE might have unobserved characteristics (such as motivation to work or work readiness) associated with better employment outcomes. This is consistent with findings from descriptive analyses indicating that PROMISE enrollees tended to be more work-oriented and less education-oriented, compared with similarly aged youth receiving SSI in the ACS (Farid et al. 2022). Thus, the results of the five-year impact evaluation are likely only generalizable to voluntary programs, which most transition programs are.

Appendix Table L.1.a. Arkansas PROMISE: Baseline characteristics of youth enrollees and non-enrollees (percentages, unless otherwise noted)

Characteristic or outcome	Control group (A)	Non-enrollees (B)	Difference (A – B)	*p*-value
Baseline characteristics				
Youth is female	34.0	32.8	1.2	0.48
Calendar year of 18th birthday (%)			†††	0.00
2015	3.3	6.4	-3.0	
2016	19.2	20.1	-0.9	
2017	26.2	20.3	5.9	
2018	28.7	23.1	5.6	
2019	19.8	22.9	-3.2	
2020	2.8	7.1	-4.4	
Youth language preference at SSI application				
Prefers English for written language	97.3	99.0	-1.6***	0.00
Prefers English for spoken language	97.3	98.9	-1.6***	0.00
Youth primary impairment				0.19
Intellectual or developmental disability	41.4	38.3	3.1	
Speech, hearing, or visual impairment	1.1	1.2	-0.1	
Physical disability	9.9	9.9	-0.1	
Other mental impairment	45.0	46.6	-1.7	
Other or unknown disability	2.7	4.0	-1.3	
Youth age at most recent SSI application	7.1	7.0	0.2	0.21
Household had multiple SSI-eligible children	28.6	25.8	2.7*	0.08
Outcomes				
Youth had earnings in calendar year of 18th birthday (%)	41.0	38.5	2.5	0.15
Youth earnings in calendar year of 18th birthday ($)	1,569	1,501	85	0.45
Youth SSA payments in calendar year of 18th birthday ($)	6,667	6,075	637***	0.00
Youth SSI payments in calendar year of 18th birthday ($)	6,118	5,538	634***	0.00
Youth OASDI payments in calendar year of 18th birthday ($)	549	537	3	0.96
Number of youth	901	7,870		

Source: SSA administrative records, PROMISE RA system.

Note: The sample includes all youth who were eligible to enroll in PROMISE except those who were randomly assigned to the treatment group. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories. When comparing outcomes between the control group and non-enrollees, we control for the calendar year in which the youth turned age 18.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table L.1.b. ASPIRE: Baseline characteristics of youth enrollees and non-enrollees (percentages, unless otherwise noted)

Characteristic or outcome	Control group (A)	Non-enrollees (B)	Difference (A – B)	*p*-value
Baseline characteristics				
Youth is female	31.8	33.0	-1.2	0.43
Calendar year of 18th birthday (%)			†††	0.00
2015	0.1	2.9	-2.8	
2016	13.0	21.5	-8.4	
2017	29.7	22.1	7.7	
2018	31.7	23.4	8.3	
2019	22.6	22.7	-0.1	
2020	2.9	7.5	-4.6	
Youth language preference at SSI application				
Prefers English for written language	91.7	89.0	2.7***	0.01
Prefers English for spoken language	91.3	88.7	2.6**	0.01
Youth primary impairment				0.45
Intellectual or developmental disability	43.3	42.7	0.6	
Speech, hearing, or visual impairment	2.8	2.7	0.1	
Physical disability	18.5	18.8	-0.4	
Other mental impairment	30.9	29.8	1.1	
Other or unknown disability	4.6	6.1	-1.4	
Youth age at most recent SSI application	7.3	6.7	0.6***	0.00
Household had multiple SSI-eligible children	17.2	17.1	0.1	0.91
Outcomes				
Youth had earnings in calendar year of 18th birthday (%)	32.4	31.1	1.2	0.43
Youth earnings in calendar year of 18th birthday ($)	1,319	1,376	-73	0.53
Youth SSA payments in calendar year of 18th birthday ($)	6,267	6,271	124	0.31
Youth SSI payments in calendar year of 18th birthday ($)	5,819	5,867	82	0.52
Youth OASDI payments in calendar year of 18th birthday ($)	448	404	43	0.41
Number of youth	975	12,690		

Source: SSA administrative records, PROMISE RA system.

Note: The sample includes all youth who were eligible to enroll in PROMISE except those who were randomly assigned to the treatment group. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories. When comparing outcomes between the control group and non-enrollees, we control for the calendar year in which the youth turned age 18.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table L.1.c. CaPROMISE: Baseline characteristics of youth enrollees and non-enrollees (percentages, unless otherwise noted)

Characteristic or outcome	Control group (A)	Non-enrollees (B)	Difference (A – B)	*p*-value
Baseline characteristics				
Youth is female	33.3	33.3	0.0	0.98
Calendar year of 18th birthday (%)			†††	0.00
2015	3.5	8.8	-5.3	
2016	19.2	20.1	-0.9	
2017	28.2	20.7	7.5	
2018	28.4	21.5	7.0	
2019	18.2	22.2	-4.0	
2020	2.5	6.8	-4.3	
Youth language preference at SSI application				
Prefers English for written language	65.1	72.6	-7.5***	0.00
Prefers English for spoken language	65.3	74.1	-8.8***	0.00
Youth primary impairment				0.14
Intellectual or developmental disability	47.8	45.7	2.2	
Speech, hearing, or visual impairment	2.6	3.2	-0.5	
Physical disability	19.5	19.0	0.5	
Other mental impairment	23.1	25.6	-2.5	
Other or unknown disability	6.9	6.5	0.4	
Youth age at most recent SSI application	6.8	6.4	0.4***	0.00
Household had multiple SSI-eligible children	14.6	15.8	-1.2	0.20
Outcomes				
Youth had earnings in calendar year of 18th birthday (%)	30.8	27.4	2.7**	0.02
Youth earnings in calendar year of 18th birthday ($)	806	809	-14	0.84
Youth SSA payments in calendar year of 18th birthday ($)	7,857	7,614	306***	0.00
Youth SSI payments in calendar year of 18th birthday ($)	7,537	7,313	285***	0.01
Youth OASDI payments in calendar year of 18th birthday ($)	320	301	21	0.55
Number of youth	1,549	18,347		

Source: SSA administrative records, PROMISE RA system.

Note: The sample includes all youth who were eligible to enroll in PROMISE except those who were randomly assigned to the treatment group. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories. When comparing outcomes between the control group and non-enrollees, we control for the calendar year in which the youth turned age 18.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table L.1.d. MD PROMISE: Baseline characteristics of youth enrollees and non-enrollees (percentages, unless otherwise noted)

Characteristic or outcome	Control group (A)	Non-enrollees (B)	Difference (A – B)	*p*-value
Baseline characteristics				
Youth is female	36.6	31.5	5.0***	0.00
Calendar year of 18th birthday (%)			†††	0.00
2015	16.1	11.8	4.3	
2016	20.1	20.4	-0.3	
2017	24.9	20.3	4.6	
2018	22.8	20.9	1.9	
2019	15.4	23.3	-7.9	
2020	0.6	3.3	-2.6	
Youth language preference at SSI application				
Prefers English for written language	96.9	97.8	-1.0*	0.07
Prefers English for spoken language	96.6	97.6	-1.0*	0.06
Youth primary impairment				0.40
Intellectual or developmental disability	36.6	35.6	1.0	
Speech, hearing, or visual impairment	1.4	1.6	-0.2	
Physical disability	11.3	11.9	-0.7	
Other mental impairment	47.6	46.5	1.2	
Other or unknown disability	3.1	4.4	-1.3	
Youth age at most recent SSI application	7.8	7.5	0.4***	0.01
Household had multiple SSI-eligible children	17.4	19.6	-2.2	0.11
Outcomes				
Youth had earnings in calendar year of 18th birthday (%)	34.8	36.3	-0.9	0.62
Youth earnings in calendar year of 18th birthday ($)	1,154	1,321	-95	0.35
Youth SSA payments in calendar year of 18th birthday ($)	7,004	6,637	276**	0.02
Youth SSI payments in calendar year of 18th birthday ($)	6,559	6,223	245*	0.05
Youth OASDI payments in calendar year of 18th birthday ($)	445	414	31	0.57
Number of youth	930	5,661		

Source: SSA administrative records, PROMISE RA system.

Note: The sample includes all youth who were eligible to enroll in PROMISE except those who were randomly assigned to the treatment group. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories. When comparing outcomes between the control group and non-enrollees, we control for the calendar year in which the youth turned age 18.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table L.1.e. NYS PROMISE: Baseline characteristics of youth enrollees and non-enrollees (percentages, unless otherwise noted)

Characteristic or outcome	Control group (A)	Non-enrollees (B)	Difference (A – B)	*p*-value
Baseline characteristics				
Youth is female	32.7	32.6	0.1	0.94
Calendar year of 18th birthday (%)			†††	0.00
2015	0.0	5.2	-5.2	
2016	9.9	21.5	-11.6	
2017	28.8	21.4	7.5	
2018	30.8	22.5	8.3	
2019	27.6	22.3	5.3	
2020	2.9	7.1	-4.2	
Youth language preference at SSI application				
Prefers English for written language	85.7	82.4	3.4***	0.01
Prefers English for spoken language	85.0	82.5	2.5**	0.04
Youth primary impairment			†††	0.00
Intellectual or developmental disability	57.8	48.2	9.6	
Speech, hearing, or visual impairment	1.6	1.6	0.0	
Physical disability	11.4	14.4	-3.0	
Other mental impairment	25.1	31.9	-6.8	
Other or unknown disability	4.1	3.9	0.2	
Youth age at most recent SSI application	6.3	6.2	0.1	0.55
Household had multiple SSI-eligible children	19.1	20.7	-1.6	0.22
Outcomes				
Youth had earnings in calendar year of 18th birthday (%)	34.0	32.0	0.8	0.62
Youth earnings in calendar year of 18th birthday ($)	1,011	1,028	-123	0.13
Youth SSA payments in calendar year of 18th birthday ($)	7,208	6,671	778***	0.00
Youth SSI payments in calendar year of 18th birthday ($)	6,747	6,324	654***	0.00
Youth OASDI payments in calendar year of 18th birthday ($)	461	347	124***	0.01
Number of youth	981	18,198		

Source: SSA administrative records, PROMISE RA system.

Note: The sample includes all youth who were eligible to enroll in PROMISE except those who were randomly assigned to the treatment group. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories. When comparing outcomes between the control group and non-enrollees, we control for the calendar year in which the youth turned age 18.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table L.1.f. WI PROMISE: Baseline characteristics of youth enrollees and non-enrollees (percentages, unless otherwise noted)

Characteristic or outcome	Control group (A)	Non-enrollees (B)	Difference (A – B)	*p*-value
Baseline characteristics				
Youth is female	33.3	31.6	1.7	0.29
Calendar year of 18th birthday (%)			†††	0.00
2015	3.9	14.1	-10.2	
2016	20.3	18.9	1.4	
2017	24.3	19.3	5.0	
2018	24.8	19.5	5.3	
2019	22.3	21.0	1.3	
2020	4.3	7.2	-2.9	
Youth language preference at SSI application				
Prefers English for written language	95.9	96.1	-0.3	0.70
Prefers English for spoken language	95.7	96.1	-0.5	0.48
Youth primary impairment				0.32
Intellectual or developmental disability	38.1	36.6	1.4	
Speech, hearing, or visual impairment	1.1	1.5	-0.4	
Physical disability	11.9	13.0	-1.0	
Other mental impairment	45.3	44.2	1.1	
Other or unknown disability	3.6	4.7	-1.1	
Youth age at most recent SSI application	7.4	7.0	0.4***	0.01
Household had multiple SSI-eligible children	23.1	21.7	1.4	0.32
Outcomes				
Youth had earnings in calendar year of 18th birthday (%)	53.4	47.9	4.8***	0.01
Youth earnings in calendar year of 18th birthday ($)	1,818	1,761	-1	1.00
Youth SSA payments in calendar year of 18th birthday ($)	6,914	6,626	435***	0.00
Youth SSI payments in calendar year of 18th birthday ($)	6,445	6,177	421***	0.00
Youth OASDI payments in calendar year of 18th birthday ($)	469	449	13	0.81
Number of youth	946	7,132		

Source: SSA administrative records, PROMISE RA system.

Note: The sample includes all youth who were eligible to enroll in PROMISE except those who were randomly assigned to the treatment group. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories. When comparing outcomes between the control group and non-enrollees, we control for the calendar year in which the youth turned age 18.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; SSA = Social Security Administration; SSI = Supplemental Security Income.

Appendix Table L.1.g. All PROMISE programs: Baseline characteristics of youth enrollees and non-enrollees (percentages, unless otherwise noted)

Characteristic or outcome	Control group (A)	Non-enrollees (B)	Difference (A – B)	*p*-value
Baseline characteristics				
Youth is female	34.0	32.5	1.5***	0.01
Calendar year of 18th birthday (%)			†††	0.00
2015	6.0	8.1	-2.1	
2016	18.0	20.4	-2.4	
2017	26.5	20.7	5.8	
2018	26.9	21.8	5.1	
2019	20.0	22.4	-2.4	
2020	2.5	6.5	-4.0	
Youth language preference at SSI application				
Prefers English for written language	90.7	89.2	1.4***	0.00
Prefers English for spoken language	90.5	89.5	1.0***	0.01
Youth primary impairment			†††	0.00
Intellectual or developmental disability	42.1	41.3	0.8	
Speech, hearing, or visual impairment	1.6	2.0	-0.3	
Physical disability	13.2	14.6	-1.4	
Other mental impairment	39.1	37.2	1.9	
Other or unknown disability	3.9	4.9	-1.0	
Youth age at most recent SSI application	7.3	6.8	0.5***	0.00
Household had multiple SSI-eligible children	20.4	20.1	0.3	0.57
Outcomes				
Youth had earnings in calendar year of 18th birthday (%)	38.9	35.4	3.4***	0.00
Youth earnings in calendar year of 18th birthday ($)	1,328	1,293	45	0.24
Youth SSA payments in calendar year of 18th birthday ($)	6,967	6,652	355***	0.00
Youth SSI payments in calendar year of 18th birthday ($)	6,513	6,244	310***	0.00
Youth OASDI payments in calendar year of 18th birthday ($)	453	407	44**	0.02
Number of youth	6,282	69,898		

Source: SSA administrative records, PROMISE RA system.

Note: The sample includes all youth who were eligible to enroll in PROMISE except those who were randomly assigned to the treatment group. The *p*-value for a continuous or binary variable is based on a two-tailed *t*-test. The *p*-value for a multinomial categorical variable, which we present in the row for the variable label, is based on a chi-square test across all categories. When comparing outcomes between the control group and non-enrollees, we control for the calendar year in which the youth turned age 18.

*/**/*** Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

†/††/††† Difference is significantly different from zero (*p*-value is less than .10/.05/.01) using a chi-square test.

OASDI = Old-Age, Survivors, and Disability Insurance; SSA = Social Security Administration; SSI = Supplemental Security Income.

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