New York City's First Conditional Cash Transfer Program: What Worked, What Didn't

Supplementary Data on Impacts and Costs

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BUILDING KNOWLEDGE
TO IMPROVE SOCIAL POLICY

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Introduction

This document serves as a supplement to MDRC's final report on Opportunity NYC–Family Rewards, a conditional cash transfer (CCT) program that was offered to a sample of very-low-income families in New York City from 2007 to 2010. The program was evaluated using a randomized controlled trial involving approximately 4,800 families, with 11,000 children (including elementary, middle, and high school students), who applied for it. The final report, published separately,[1] presents the final results from MDRC's comprehensive evaluation of the program, which described and analyzed the implementation of the program, families' experiences in and views of the program, and the program's effects on their poverty and life outcomes for up to six years after study entry. It includes longer-term findings from existing data sources (such as school progress for children in grades 4, 7, and 9, which were the three target grades for the study), findings for preschool-age children, and new outcomes (such as postsecondary enrollment).

This supplement presents longer-term and more detailed findings based on administrative records on benefits receipt, education, health coverage, and parents' employment. It also presents findings from an analysis of the program's costs. This supplement does not present the full set of evaluation findings or a detailed interpretation of the findings. For that information, readers are referred to the final report and to previous MDRC publications on Family Rewards. In particular, readers should consult MDRC's early (2010) and interim (2013) reports on Family Rewards for detailed information on program operations, interim impact findings, and the data and methods used in the evaluation.[2]

The tables in this supplement appear at the end of each of their respective sections.

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[1]Riccio and Miller (2016).
[2]See Riccio et al. (2010) and Riccio et al. (2013).

I. Impacts on Receipt of TANF and SNAP Benefits

During the three years that Family Rewards operated, the average participating family earned over $8,700 in rewards, or roughly $3,000 in each year. As the program designers intended, families were able to and did earn rewards across a broad range of areas, and during the program period their average monthly income increased by 22 percent. This increased income led to statistically significant reductions in poverty and material hardship. The program also reduced the proportion of families who were living in severe poverty. However, these reductions began to diminish after Year 3, when the program ended.

Most of the data on family income and well-being were obtained through two surveys administered to families at 18 months and 42 months after study entry. However, as part of the study's examination of income and income sources, administrative records data were used to estimate the program's effects on receipt of benefits from two key safety net programs: Temporary Assistance for Needy Families (TANF)/Safety Net Assistance (SNA),[1] and the Supplemental Nutrition Assistance Program (SNAP), which was formerly known as the Food Stamp Program. MDRC's interim report documented no effects on receipt of these benefits through three years after study entry.[2] This section presents findings on those measures covering six years of follow-up (that is, 2007-2008 through 2013-2014).

Table S1.1 (page 4) presents the results. Data for the control group show that, in the absence of Family Rewards, the receipt of TANF or SNA benefits declined steadily over the six-year period, from 41 percent to 29 percent. In contrast, the receipt of SNAP benefits remained fairly steady at over 60 percent.

The impact of Family Rewards is estimated as the difference between the program and control groups' outcomes related to the rate and amount of TANF and SNAP benefits they received. The p-values in the tables that appear in this supplement show the probability that this difference arose by statistical chance, as opposed to being a result of Family Rewards. For this evaluation, only differences that have a 10 percent probability or less of arising by chance are considered "statistically significant" and therefore are viewed as true program effects.

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[1]Safety Net Assistance is a New York State welfare program for various low-income populations. For income-eligible families with dependent children, it allows those who have exhausted their five-year eligibility for cash assistance under TANF to continue receiving cash assistance on similar terms and conditions that applied under TANF, but paid out of nonfederal funds.

[2]Riccio et al. (2013).

As Table S1.1 shows, Family Rewards had no effects in the short or longer term on benefits receipt. This finding likely reflects the program's lack of any substantial effects on parents' earnings, as discussed in Section IV of this supplement, "Impacts on Parents' Employment and Earnings." (The Family Rewards incentive payments did not count as income in the computation of TANF/SNA or SNAP benefits.)

Table S1.1

Impacts on Temporary Assistance for Needy Families (TANF), Safety Net Assistance (SNA), and Food Stamp Receipt and Payments, Study Follow-Up Years 1 to 6

Outcome	Program Group	Control Group	Difference (Impact)		P-Value
Ever received TANF/SNA (%)					
Years 1-6	52.5	54.7	-2.2	**	0.047
Year 1	40.1	41.3	-1.3		0.182
Year 2	36.6	37.0	-0.3		0.756
Year 3	35.1	35.4	-0.3		0.790
Year 4	33.1	32.6	0.6		0.608
Year 5	30.1	29.3	0.7		0.536
Year 6	28.1	28.9	-0.8		0.477
Amount of TANF/SNA received ($)					
Years 1-6	11,356	11,005	350		0.432
Year 1	2,321	2,253	69		0.417
Year 2	2,065	2,022	43		0.625
Year 3	1,944	1,911	33		0.710
Year 4	1,788	1,716	72		0.419
Year 5	1,668	1,584	84		0.350
Year 6	1,569	1,520	49		0.596
Ever received food stamps (%)					
Years 1-6	80.7	81.1	-0.4		0.711
Year 1	67.2	67.8	-0.6		0.592
Year 2	68.2	69.3	-1.1		0.321
Year 3	69.5	70.9	-1.5		0.204
Year 4	70.8	70.3	0.5		0.695
Year 5	65.5	65.2	0.3		0.798
Year 6	63.1	62.3	0.7		0.568
Amount of food stamps received ($)					
Years 1-6	18,759	18,820	-61		0.873
Year 1	2,486	2,498	-11		0.847
Year 2	3,329	3,379	-50		0.508
Year 3	3,565	3,603	-38		0.634
Year 4	3,417	3,416	1		0.990
Year 5	3,118	3,093	24		0.760
Year 6	2,844	2,831	13		0.867
Sample size (total = 4,749)	2,377	2,372			

Table S1.1 (continued)

SOURCE: MDRC calculations using administrative records data from the New York City Human Resources Administration.

NOTES: Sample sizes may vary because of missing values.

A two-tailed t-test was applied to differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who were not receiving TANF/SNA benefits or food stamps.

II.   Impacts on Children's Education

MDRC's interim report on Family Rewards found some encouraging effects of the program on high school students' school outcomes, but these effects were concentrated on a specific subgroup of students — ninth-graders who were performing relatively better academically than their peers when they entered the study.[1] For example, the program increased their attendance rate, credit accumulation, and the number of Regents exams they passed. For the better-prepared subgroup of ninth-graders who were already reading-proficient when they entered the study (although not for the math-proficient subgroup), those early gains in performance led to sizable increases in grade promotion and on-time graduation rates. In contrast, the program had no effect for lower-performing ninth-graders or for elementary and middle school students. The final report updates those impacts and shows that the overall pattern continues through Year 6 of the follow-up period.

The final report also presents findings on two outcomes that had not previously been examined — postsecondary enrollment after six years for students in the sample who were in grades 7 and 9 at baseline, and effects on test scores for younger siblings in the sample, many who were not yet in school when their families enrolled in the study. The findings show no overall effect on postsecondary enrollment, although Family Rewards does seem to have led to a shift toward full-time enrollment in four-year colleges for both the math- and reading-proficient ninth-graders. Effects for very young children (ages 2 through 7 at baseline) are intriguing, showing positive effects on test scores when these children were in the third through fifth grades. As noted in the final report, the mechanism driving these positive effects is not clear, but the substantial increase in family income that these students experienced during young childhood may have contributed. The effects may have also been driven in part by changes that might have occurred in parents' attitudes toward or support for their young children's education.

Impacts on School Outcomes for Students in the Target Grades

The program recruited families with children who were entering the fourth, seventh, or ninth grade when the study began, although siblings in other grades were also enrolled. The impact analysis gave primary attention to these three grade cohorts, and the results are presented separately by cohort.

Tables S2.1 through S2.3 (pages 11 to 16) present effects on school progress using data provided by the New York City Department of Education. These data include attendance, test scores, grade progression, and, for high school students, credits earned, Regents exams passed,

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[1]Riccio et al. (2013).

and graduation rates. In order to graduate, a student must have earned at least 44 credits and passed at least five Regents exams in specified subject areas.[2]

Tables S2.1 and S2.2 present effects for students who were beginning fourth or seventh grade, respectively, when they entered the study. The tables show that the program had little effect on school progress for students in either cohort. Table S2.2 presents impacts on standardized exams for entering seventh-graders, which the students would take through eighth grade, and on high school outcomes, such as credits earned and Regents exams passed, since most of these students would be in high school by the third year of follow-up.

Table S2.3 presents effects for entering ninth-graders (that is, students who were entering ninth grade when their families enrolled in the study). As MDRC's interim report documented, Family Rewards led to modest increases in attendance and credits earned for this group overall while the rewards were in effect.[3] However, these impacts did not lead to effects on grade retention or graduation. Only 52.3 percent of students in the control group graduated within six years of starting ninth grade, compared with 53.9 percent of students in the program group, a small difference that is not statistically significant.

Impacts for Subgroups Defined by Academic Proficiency

As part of the analysis of effects on school outcomes, the evaluation prespecified three dimensions across which the program's effects might vary — students' prior performance, parents' education level, and students' school environment. The results showed little variation in effects across these subgroups for the elementary and middle school students. For entering ninth-graders, the effects of the program also did not differ significantly by parents' education level or by school environment. School environment was defined using test scores of earlier cohorts in the school a student entered when he or she entered the study. Specifically, students' schools were ranked according to their average pass rates for the English and math Regents exams in the 2005-2006 and 2006-2007 school years. The schools were then divided into thirds (low, medium, and high) based on this ranking.[4]

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[2]In the past, students who did not pass all five Regents exams with a minimum score could receive a "local" diploma instead of a Regents diploma. However, the local diploma option was phased out for most students beginning with the class of 2012. Thus, entering ninth-graders in the Family Rewards study could receive either a local diploma or a Regents diploma.

[3]Riccio et al. (2013).

[4]As noted in the final report, Wolf (2014) examined how the program's impacts varied by school environment, using a more comprehensive definition of school environment that included attendance rates, per pupil expenditures, and students' perceptions of school safety as well as test scores. For a subset of ninth-graders, she found that effects on academic achievement in Year 3 were positive at lower-quality schools and negative at higher-quality schools, for an inverse relationship. This finding was not evident in the analysis con-

However, effects varied significantly for entering ninth-graders by their prior academic performance. As documented in the final report, Family Rewards led to notable gains for proficient students in attendance and credits earned during the three years that the incentives were offered. For students who scored at the proficient level or higher on their ELA test (given in eighth grade), the program also led to a sizable effect on graduation rates.

Tables S2.4 and S2.5 (pages 17 to 22) present effects for entering ninth-graders by proficiency status, updating graduation rates and Regents exams taken through Year 6. When considering how to define academic preparedness, it was not obvious which test to use — ELA or math — so proficiency status is presented for both tests. The proficiency groups are not mutually exclusive. The ELA-proficient group, for example, includes all students who were reading-proficient, including some who were proficient in math but some who were not math-proficient. Effects follow a similar pattern for both proficient groups, with large increases in attendance and positive, smaller increases in credits earned during the program period. For the ELA-proficient group, however, the program led to a large increase in the number of students who passed the minimum number of Regents exams required to graduate and an increase in graduation rates, at both four and six years after study entry.

Tables S2.6 and S2.7 (pages 23 to 27) present effects by proficiency status for entering fourth- and seventh-graders. The tables show that Family Rewards had no effect on these younger students, as a whole or by proficiency status. In looking at students in the control groups, proficiency status in these younger grades is strongly correlated with later performance. For example, 56.6 percent of math-proficient seventh-graders graduated within four years of entering high school, compared with only 29.4 percent of their nonproficient counterparts.

Impacts on Postsecondary Enrollment

This section presents effects on postsecondary enrollment in the fifth and sixth years after study entry. Postsecondary enrollment data are available from the National Student Clearinghouse, which provides enrollment and degree receipt information, covering 95 percent of postsecondary enrollment in the United States. Tables 2.8 through 2.11 (pages 28 to 31) present data on the percentage of students who enrolled in a postsecondary institution at some point during the six-year follow-up period and whether this enrollment was full time or part time and at a four-year or a two-year institution. The percentages by institution type and enrollment status do not necessarily sum to the overall enrollment rates, since students might enroll full time at some point and then part time later. In addition, full-time and part-time status may not sum to the percentage

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ducted for this supplement for the full sample of ninth-graders or for other measures of achievement, such as four-year and six-year graduation rates.

who were enrolled, given that this information is missing for various students, such as those who enrolled but subsequently withdrew from school.

Table S2.8 presents effects for entering seventh-graders. Entering seventh-graders who had progressed in school each year would have graduated in the sixth year of the follow-up period and may have enrolled in college later that year. Thus, these data capture college entry right after graduation from high school. The table shows that only 23 percent of the control group had enrolled in college within six years. However, Table S2.2 documented that only about 43 percent of this group had graduated from high school by Year 6, assuming they had graduated within four years of entering ninth grade. Data for the control group show that most of the students who attended college within six years attended four-year colleges, and full-time enrollment was more common than part-time enrollment. Family Rewards had no effect on college enrollment for the group of students who were entering seventh grade at the time of random assignment.

Tables S2.9 through S2.11 present effects for all ninth-graders and for ninth-graders by proficiency status. For entering ninth-graders, the data cover two years post-graduation among those who graduated within four years of starting ninth grade. Among all ninth-graders, 42.5 percent of the control group attended college at some point during the six-year follow-up period, and the program had no effect on this outcome, as shown in Table S2.9. A more interesting analysis is for the proficient subgroups of ninth-graders, since the program increased graduation rates for the ELA-proficient subgroup. These results are shown in Tables S2.10 and S2.11. The tables document that some impacts for the proficient and nonproficient subgroups are statistically significantly different, as indicated by the daggers in the rightmost columns of both tables. For the proficient subgroups, the program seems to have led to substitution away from two-year colleges and toward four-year colleges, and from part-time to full-time enrollment. For example, the program increased four-year, full-time enrollment by 9.7 percentage points for the ELA-proficient group, and this impact is statistically significantly different from the impact for the nonproficient group.[5] A similar pattern is found by math proficiency.

Overall, the data indicate that Family Rewards did not increase the rate of postsecondary enrollment, but did have an effect on the types of institutions students attended. This effect occurred, not surprisingly, for the proficient ninth-graders, especially those who were ELA-proficient. That said, negative enrollment effects were observed for their nonproficient counterparts, particularly those who were not ELA-proficient. For this group, the program reduced the

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[5]Students' enrollment hours and institution type do not necessarily occur at the same time. For example, students might have enrolled part time at a four-year college one semester and full time another semester. Since these outcomes capture the highest level of enrollment, such students would be coded as enrolling full time at a four-year college, even though that was not their status throughout enrollment.

rate of college enrollment by a statistically significant 5.0 percentage points. It is not clear what might be driving this effect, but it may be worth further investigation.

Impacts on School Progress for Younger Siblings

Although the education rewards were targeted to school-age children, a large number of families in the study had preschool-age children. These children were eligible for the health rewards but not for the education rewards, unless they reached elementary school during the three-year program period. This section presents effects on school outcomes for younger siblings in the sample who were in grades 3 through 5 during the fifth and sixth years of follow-up. These grades are used because standardized tests are not administered to students until the third grade. These children were roughly ages 2 to 7 when their families entered the study and most of them were not yet in elementary school.

Table S2.12 (page 32) presents the results. The top panel presents test scores and other school outcomes for students who were in grades 3 or 4 in Year 5 of the follow-up period, depending on their age. These students were largely in kindergarten or were one year younger than kindergarten age when their families entered the study. The bottom panel presents data for students who were in grades 3, 4, or 5 in Year 6 of the follow-up period. This group includes children who were in kindergarten or were one or two years younger than kindergarten age when their families entered the study.

The findings show that the program led to positive effects on test scores in both years, for math in Year 5 and for both math and English in Year 6. For Year 6, for example, shown in the second panel and using the larger sample, Family Rewards increased proficiency rates on the math test by 5.5 percentage points and on the ELA test by 5.3 percentage points.

Table S2.1

Impacts on Enrollment, Attendance, and Test Scores
for Students in Grade 4 at the Time of Random Assignment

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Enrollment status (%)				
Enrolled in grade 5, Year 2	93.8	94.7	-0.9	0.416
Enrolled in grade 6, Year 3	90.4	92.0	-1.6	0.241
Enrolled in grade 7, Year 4	84.6	85.5	-0.9	0.587
Enrolled in grade 8, Year 5	79.7	80.3	-0.6	0.771
Enrolled in grade 9, Year 6	74.9	75.5	-0.7	0.755
Enrolled in any grade in Year 6	84.3	85.0	-0.7	0.694
Attendance rate 95% or higher (%)				
Year 1	43.2	43.2	0.0	0.987
Year 2	44.5	41.6	2.9	0.221
Year 3	41.3	40.2	1.1	0.648
Year 4	40.0	39.3	0.7	0.765
Year 5	41.3	37.4	3.9 *	0.096
Year 6	31.1	31.2	-0.1	0.967
Average attendance rate (%)				
Year 1	91.5	91.0	0.5	0.417
Year 2	87.9	88.3	-0.4	0.684
Year 3	84.6	86.3	-1.6	0.187
Year 4	82.4	82.7	-0.3	0.807
Year 5	79.9	80.3	-0.4	0.794
Year 6	71.0	69.3	1.7	0.345
Scored at proficient level or higher on ELA[a] (%)				
Year 1	50.7	51.1	-0.4	0.861
Year 2	67.6	68.1	-0.5	0.816
Year 3	27.9	29.1	-1.3	0.541
Year 4	24.8	25.2	-0.4	0.846
Year 5	25.6	26.1	-0.5	0.818
Scored at proficient level or higher on math[a] (%)				
Year 1	73.4	71.2	2.1	0.234
Year 2	80.3	78.6	1.7	0.351
Year 3	40.5	41.7	-1.3	0.561
Year 4	44.5	43.1	1.3	0.555
Year 5	41.8	42.0	-0.2	0.946
Sample size (total = 1,726)	862	864		

(continued)

Table S2.1 (continued)

NOTES: Sample sizes may vary because of missing values.

 A two-tailed t-test was applied to the differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

Years 1, 2, 3, 4, 5, and 6 cover the 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, and 2012-2013 school years, respectively.

ELA = English language arts.

ELA and math exams are not given to students in grade 9.

[a]In New York State, students who score at a level of 3 or higher on a 4-point scale are deemed "proficient."

Table S2.2

**Impacts on Enrollment, Attendance, Test Scores, Credits, and Regents
Exams for Students in Grade 7 at the Time of Random Assignment**

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Enrollment and graduation (%)				
Enrolled in grade 8, Year 2	95.0	96.4	-1.3	0.179
Enrolled in grade 9, Year 3	87.6	89.9	-2.3	0.145
Enrolled in grade 10, Year 4	70.3	74.1	-3.9 *	0.076
Enrolled in grade 11, Year 5	56.4	57.3	-0.9	0.710
Enrolled in grade 12, Year 6	56.4	56.3	0.1	0.975
Enrolled in any grade in Year 6	79.7	80.5	-0.9	0.669
Graduated within 6 years of entering 7th grade	44.9	43.4	1.6	0.500
Dropped out within 6 years of entering 7th grade	10.4	9.9	0.5	0.731
Attendance rate 95% or higher (%)				
Year 1	43.5	43.0	0.5	0.846
Year 2	36.6	35.0	1.6	0.477
Year 3	36.8	34.3	2.5	0.287
Year 4	26.7	24.9	1.8	0.402
Year 5	27.8	25.0	2.8	0.187
Year 6	17.5	16.8	0.8	0.678
Average attendance rate (%)				
Year 1	91.1	90.8	0.3	0.533
Year 2	86.4	87.6	-1.2	0.185
Year 3	79.3	80.4	-1.0	0.462
Year 4	73.0	74.5	-1.5	0.343
Year 5	68.4	69.6	-1.2	0.482
Year 6	59.8	60.5	-0.7	0.720
Scored at proficient level or higher on ELA[a] (%)				
Year 1	50.6	50.6	0.0	0.995
Year 2	46.5	46.0	0.5	0.809
Scored at proficient level or higher on math[a] (%)				
Year 1	60.4	59.6	0.8	0.675
Year 2	61.9	63.5	-1.6	0.429
Attempted 11+ credits (%)				
Year 3	78.0	79.0	-0.9	0.621
Year 4	77.3	77.2	0.1	0.963
Year 5	69.2	69.0	0.2	0.943
Year 6	53.0	52.3	0.7	0.782

(continued)

Table S2.2 (continued)

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Earned 11+ credits				
Year 3 (%)	50.9	50.7	0.2	0.931
Year 4 (%)	46.5	48.5	-2.0	0.403
Year 5 (%)	45.6	43.2	2.4	0.324
Year 6 (%)	34.5	34.5	0.0	0.995
Earned at least 44 credits, Years 3 to 6 (%)	45.6	44.5	1.2	0.629
Average number of credits earned, Years 3 to 6	32.3	32.3	0.0	0.997
Regents exams, Years 3 to 6				
Number taken	6.9	6.9	0.0	0.898
Number passed	3.3	3.3	0.1	0.604
Passed at least 5 exams (%)	42.4	42.5	0.0	0.974
Sample size (total = 1,670)	823	847		

SOURCE: MDRC calculations using data from New York City Department of Education administrative records.

NOTES: Sample sizes may vary because of missing values.

A two-tailed t-test was applied to the differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

Years 1, 2, 3, 4, 5, and 6 cover the 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, and 2012-2013 school years, respectively.

ELA = English language arts.

The Regents measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

[a]In New York State, students who score at a level of 3 or higher on a 4-point scale are deemed "proficient."

Table S2.3

Impacts on Enrollment, Graduation, Attendance, Credits, and Regents Exams for Students in Grade 9 at the Time of Random Assignment

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Enrollment and graduation (%)				
Enrolled in grade 10, Year 2	73.1	70.6	2.6	0.193
Enrolled in grade 11, Year 3	54.8	53.0	1.7	0.411
Enrolled in grade 12, Year 4	53.1	51.2	1.9	0.360
Enrolled in any grade in Year 4	80.1	79.2	0.9	0.610
Graduated within 4 years of entering 9th grade	49.2	48.2	1.1	0.621
Graduated within 6 years of entering 9th grade	53.9	52.3	1.6	0.420
Dropped out within 6 years of entering 9th grade	18.1	19.3	-1.1	0.505
Attendance rate 95% or higher (%)				
Year 1	34.0	31.5	2.5	0.211
Year 2	28.8	23.7	5.1 ***	0.007
Year 3	25.1	21.9	3.1 *	0.089
Year 4	17.4	15.3	2.1	0.197
Average attendance rate (%)				
Year 1	81.8	81.4	0.4	0.683
Year 2	75.3	74.3	1.0	0.439
Year 3	69.4	67.7	1.7	0.254
Year 4	60.7	59.7	1.1	0.508
Attempted 11+ credits (%)				
Year 1	87.8	83.9	3.9 ***	0.006
Year 2	80.5	77.9	2.6	0.126
Year 3	71.0	68.0	3.0	0.126
Year 4	45.6	47.4	-1.9	0.403
Earned 11+ credits				
Year 1 (%)	49.7	50.0	-0.3	0.896
Year 2 (%)	45.2	45.4	-0.2	0.928
Year 3 (%)	42.8	39.2	3.7 *	0.080
Year 4 (%)	31.6	31.5	0.1	0.961
Earned at least 44 credits, Years 1 to 4 (%)	41.5	40.5	0.9	0.652
Average number of credits earned, Years 1 to 4	32.7	31.9	0.8	0.300
Regents exams, Years 1 to 6				
Number taken	6.2	6.0	0.2	0.263
Number passed	3.1	3.0	0.1	0.271
Passed at least 5 exams (%)	38.1	38.2	-0.1	0.942
Sample size (total = 1,978)	988	990		

(continued)

Table S2.3 (continued)

NOTES: Sample sizes may vary because of missing values.

  A two-tailed t-test was applied to the differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

  Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

  Rounding may cause slight discrepancies in calculating sums and differences.

  Years 1, 2, 3, 4, 5, and 6 cover the 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, and 2012-2013 school years, respectively.

  The Regents measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

Table S2.4

**Impacts on Enrollment, Graduation, Attendance, Credits, and Regents Exams for Students in Grade 9
at the Time of Random Assignment, by Performance on Math Test in the Prior Year (Grade 8)**

Subgroup and Outcome	Proficient on 8th Grade Math Test[a]			Not Proficient on 8th Grade Math Test[a]			
	Program Group	Control Group	Difference (Impact)	Program Group	Control Group	Difference (Impact)	Sig.
Enrollment and graduation (%)							
Enrolled in grade 12, Year 4	77.6	71.8	5.8	47.5	47.0	0.5	
Enrolled in any grade in Year 4	91.1	89.3	1.8	81.9	80.5	1.4	
Graduated within 4 years of entering 9th grade	74.8	71.3	3.5	41.7	42.2	-0.5	
Graduated within 6 years of entering 9th grade	78.9	75.8	3.1	50.8	49.2	1.6	
Dropped out within 6 years of entering 9th grade	9.2	10.0	-0.8	26.3	25.1	1.2	
Attendance rate 95% or higher (%)							
Year 1	53.8	46.9	7.0 *	29.0	26.9	2.1	
Year 2	50.8	36.7	14.1 ***	21.8	19.4	2.4	††
Year 3	42.6	34.4	8.2 **	19.2	18.1	1.0	
Year 4	28.8	23.2	5.6	14.1	13.2	0.8	
Average attendance rate (%)							
Year 1	91.4	88.1	3.3 **	82.2	81.5	0.6	
Year 2	87.9	82.9	5.1 ***	74.0	74.0	0.0	††
Year 3	82.8	78.2	4.6 **	67.8	66.7	1.1	
Year 4	75.6	72.6	3.0	59.2	58.9	0.3	
Attempted 11+ credits (%)							
Year 1	95.7	91.5	4.2 **	90.5	84.9	5.6 ***	
Year 2	92.3	89.5	2.9	80.8	78.8	2.1	
Year 3	86.9	81.1	5.9 *	71.2	69.0	2.2	
Year 4	51.3	59.7	-8.3 **	48.3	47.2	1.1	†

(continued)

Table S2.4 (continued)

Subgroup and Outcome	Proficient on 8th Grade Math Test[a]			Not Proficient on 8th Grade Math Test[a]			
	Program Group	Control Group	Difference (Impact)	Program Group	Control Group	Difference (Impact)	Sig.
Earned 11+ credits							
Year 1 (%)	77.4	68.9	8.5 **	43.5	47.1	-3.6	†††
Year 2 (%)	71.5	62.8	8.7 **	37.6	41.5	-3.9	†††
Year 3 (%)	64.2	57.5	6.7 *	37.3	35.0	2.3	
Year 4 (%)	42.2	44.6	-2.4	30.6	29.4	1.2	
Earned at least 44 credits, Years 1 to 4 (%)	64.4	60.4	4.1	36.9	36.8	0.1	
Average number of credits earned, Years 1 to 4	43.5	41.3	2.3 *	30.8	30.6	0.2	
Regents exams, Years 1 to 6							
Number taken	7.4	7.2	0.2	6.2	6.0	0.2	
Number passed	5.2	5.0	0.1	2.4	2.3	0.1	
Passed at least 5 exams (%)	70.2	71.2	-1.0	27.4	26.4	1.0	
Rewards earned, Years 1 to 3[b] ($)							
Total amount earned	4,490	--	--	2,369	--	--	
Amount earned from attendance	815	--	--	460	--	--	
Amount earned from Regents exams	2,237	--	--	1,072	--	--	
Amount earned from earning 11+ credits	1,297	--	--	745	--	--	
Sample size (total = 1,726)	298	285		565	578		

(continued)

Table S2.4 (continued)

NOTES: Sample sizes may vary because of missing values.

A two-tailed t-test was applied to the differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Differences across subgroup impacts were tested for statistical significance. Statistical significance levels (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

Years 1, 2, 3, 4, 5, and 6 cover the 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, and 2012-2013 school years, respectively.

The Regents measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

A double dash (--) indicates "not applicable."

[a]In New York State, students who score at a level of 3 or higher on a 4-point scale are deemed "proficient."

[b]Reward amounts are calculated among all program group members in each subgroup, including rhose who did not earn any education rewards. The total amount includes other rewards for education activities not listed.

Table S2.5

**Impacts on Enrollment, Graduation, Attendance, Credits, and Regents Exams
for Students in Grade 9 at the Time of Random Assignment, by Performance
on English Language Arts (ELA) Test in the Prior Year (Grade 8)**

Subgroup and Outcome	Proficient on 8th Grade ELA Test[a]			Not Proficient on 8th Grade ELA Test[a]			
	Program Group	Control Group	Difference (Impact)	Program Group	Control Group	Difference (Impact)	Sig.
Enrollment and graduation (%)							
Enrolled in grade 12, Year 4	78.4	68.2	10.1 ***	48.3	50.3	-2.0	††
Enrolled in any grade in Year 4	90.9	89.0	1.9	82.7	81.3	1.4	
Graduated within 4 years of entering 9th grade	74.8	66.9	8.0 **	43.2	45.9	-2.8	††
Graduated within 6 years of entering 9th grade	81.7	72.2	9.5 ***	50.8	52.5	-1.6	††
Dropped out within 6 years of entering 9th grade	8.9	10.5	-1.6	26.0	23.7	2.4	
Attendance rate 95% or higher (%)							
Year 1	54.9	42.3	12.6 ***	29.6	29.6	0.1	††
Year 2	47.0	33.9	13.1 ***	24.3	21.5	2.8	††
Year 3	40.3	30.8	9.5 **	21.4	20.4	1.0	†
Year 4	28.1	23.0	5.2	14.8	14.3	0.5	
Average attendance rate (%)							
Year 1	92.0	86.9	5.1 ***	82.1	82.3	-0.2	†††
Year 2	87.5	81.4	6.1 ***	74.9	75.1	-0.3	††
Year 3	83.9	77.1	6.8 ***	68.1	67.7	0.4	††
Year 4	76.7	71.6	5.1 *	59.8	60.4	-0.6	
Attempted 11+ credits (%)							
Year 1	95.8	91.6	4.2 **	90.7	85.5	5.1 ***	
Year 2	93.0	86.3	6.6 **	80.9	80.4	0.4	†
Year 3	87.7	80.3	7.4 **	71.8	70.1	1.7	
Year 4	53.3	58.8	-5.5	48.3	48.8	-0.5	

(continued)

Table S2.5 (continued)

Subgroup and Outcome	Proficient on 8th Grade ELA Test[a]			Not Proficient on 8th Grade ELA Test[a]			
	Program Group	Control Group	Difference (Impact)	Program Group	Control Group	Difference (Impact)	Sig.
Earned 11+ credits							
Year 1 (%)	76.3	66.1	10.2 ***	45.0	49.6	-4.6	†††
Year 2 (%)	71.3	58.5	12.9 ***	38.0	44.5	-6.5 **	†††
Year 3 (%)	65.1	53.4	11.8 ***	37.8	37.9	-0.1	††
Year 4 (%)	42.8	43.8	-1.0	31.1	31.0	0.1	
Earned at least 44 credits, Years 1 to 4 (%)	66.1	56.6	9.6 **	36.9	39.8	-2.8	††
Average number of credits earned, Years 1 to 4	44.3	40.0	4.3 ***	30.9	31.8	-0.8	†††
Regents exams, Years 1 to 6							
Number taken	7.4	6.7	0.7 **	6.3	6.3	0.0	†
Number passed	5.1	4.7	0.4 **	2.6	2.6	0.0	†
Passed at least 5 exams (%)	74.0	65.4	8.6 **	27.1	31.4	-4.3 *	†††
Rewards earned, Years 1 to 3 ($)							
Total amount earned	4,536	--	--	2,447	--	--	
Amount earned from attendance	800	--	--	483	--	--	
Amount earned from Regents exams	2,276	--	--	1,109	--	--	
Amount earned from earning 11+ credits	1,308	--	--	764	--	--	
Sample size (total = 1,700)	271	256		576	597		

(continued)

Table S2.5 (continued)

SOURCE: MDRC calculations using data from New York City Department of Education administrative records.

NOTES: Sample sizes may vary because of missing values.

   A two-tailed t-test was applied to the differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

   Differences across subgroup impacts were tested for statistical significance. Statistical significance levels (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

   Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

   Rounding may cause slight discrepancies in calculating sums and differences.

   Years 1, 2, 3, 4, 5, and 6 cover the 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, and 2012-2013 school years, respectively.

   The Regents measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

   A double dash (--) indicates "not applicable."

   [a]In New York State, students who score at a level of 3 or higher on a 4-point scale are deemed "proficient."

Table S2.6

**Impacts on School Outcomes for Students in Grade 4 at the
Time of Random Assignment, by Performance in the Prior Year (Grade 3)**

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Sig.
Proficient on 3rd grade math test[a] (%)					
Enrolled in grade 9, Year 6	78.0	78.2	-0.2	0.929	
Attendance rate					
Years 1 to 3	92.3	91.9	0.4	0.526	
Year 4	83.2	83.2	-0.1	0.976	
Year 5	81.4	81.1	0.3	0.857	
Year 6	72.5	70.0	2.5	0.232	
Scored at proficient level or higher on					
ELA, Year 4	29.9	31.7	-1.8	0.455	
Math, Year 4	53.2	53.1	0.1	0.972	
ELA, Year 5	30.8	31.2	-0.4	0.858	
Math, Year 5	48.5	47.7	0.8	0.778	
Sample size (total = 1,290)	656	634			
Not proficient on 3rd grade math test[a] (%)					
Enrolled in grade 9, Year 6	65.2	68.8	-3.7	0.479	
Attendance rate					
Years 1 to 3	89.5	90.4	-0.9	0.370	
Year 4	81.9	81.4	0.6	0.846	
Year 5	77.0	78.2	-1.3	0.711	
Year 6	69.6	67.3	2.3	0.556	
Scored at proficient level or higher on					
ELA, Year 4	7.3	4.4	3.0	0.323	
Math, Year 4	13.1	9.2	3.9	0.288	
ELA, Year 5	7.3	7.7	-0.4	0.906	
Math, Year 5	18.7	20.5	-1.7	0.706	
Sample size (total = 377)	178	199			
Proficient on 3rd grade ELA test[a] (%)					
Enrolled in grade 9, Year 6	80.5	79.5	1.0	0.746	
Attendance rate					
Years 1 to 3	92.1	92.6	-0.5	0.505	
Year 4	81.4	82.4	-1.0	0.672	
Year 5	79.6	80.6	-1.0	0.667	
Year 6	72.5	69.4	3.1	0.273	
Scored at proficient level or higher on					
ELA, Year 4	41.9	46.3	-4.3	0.238	
Math, Year 4	59.0	63.9	-4.9	0.167	††
ELA, Year 5	42.1	44.9	-2.8	0.440	
Math, Year 5	54.8	57.7	-2.9	0.433	
Sample size (total = 760)	382	378			

(continued)

Table S2.6 (continued)

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Sig.
Not proficient on 3rd grade ELA test[a] (%)					
Enrolled in grade 9, Year 6	70.9	72.6	-1.8	0.569	
Attendance rate					
Years 1 to 3	91.2	90.5	0.7	0.371	
Year 4	84.8	82.9	1.9	0.296	
Year 5	81.3	80.4	0.9	0.647	
Year 6	71.1	69.8	1.3	0.600	
Scored at proficient level or higher on					
ELA, Year 4	10.6	8.5	2.0	0.337	
Math, Year 4	32.1	25.5	6.6 **	0.030	††
ELA, Year 5	12.0	10.7	1.4	0.561	
Math, Year 5	30.3	27.3	3.1	0.340	
Sample size (total = 878)	437	441			

SOURCE: MDRC calculations using data from New York City Department of Education administrative records.

NOTES: Sample sizes may vary because of missing values.

A two-tailed t-test was applied to the differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Differences across subgroup impacts were tested for statistical significance. Statistical significance levels (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

Years 1, 2, 3, 4, 5 and 6 cover the 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, and 2012-2013 school years, respectively.

ELA = English language arts.

ELA and math exams are not given to students in grade 9.

[a]In New York State, students who score at a level of 3 or higher on a 4-point scale are deemed "proficient."

Table S2.7

**Impacts on School Outcomes for Students in Grade 7 at the
Time of Random Assignment, by Performance in the Prior Year (Grade 6)**

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Sig.
Proficient on 6th grade math test[a]					
Enrolled in grade 12, Year 6 (%)	66.2	66.8	-0.6	0.862	
Graduated within 6 years of entering 7th grade (%)	55.6	56.6	-1.0	0.775	
Dropped out within 6 years of entering 7th grade (%)	6.6	4.2	2.4	0.122	
Attendance rate (%)					
Years 1 to 3	91.6	91.5	0.2	0.794	
Year 4	76.9	78.6	-1.7	0.415	
Year 5	73.4	74.9	-1.5	0.513	
Year 6	63.4	66.3	-2.9	0.261	
Earned at least 11 credits (%)					
Year 4	54.7	59.1	-4.4	0.190	
Year 5	53.3	54.2	-1.0	0.774	†
Year 6	38.4	41.9	-3.5	0.300	
Regents exams, Years 3 to 6					
Number taken	7.1	7.5	-0.4	0.198	†
Number passed	4.4	4.5	-0.2	0.407	
Passed at least 5 exams (%)	57.9	61.6	-3.8	0.268	
Sample size (total = 854)	432	422			
Not proficient on 6th grade math test[a]					
Enrolled in grade 12, Year 6 (%)	45.8	44.4	1.5	0.685	
Graduated within 6 years of entering 7th grade (%)	34.4	29.4	5.0	0.138	
Dropped out within 6 years of entering 7th grade (%)	14.5	15.4	-0.9	0.737	
Attendance rate (%)					
Years 1 to 3	86.3	86.4	-0.1	0.928	
Year 4	68.8	70.3	-1.4	0.532	
Year 5	63.6	63.8	-0.2	0.943	
Year 6	56.2	54.0	2.2	0.425	
Earned at least 11 credits (%)					
Year 4	38.8	37.7	1.1	0.767	
Year 5	38.8	31.6	7.3 **	0.036	†
Year 6	30.9	27.6	3.3	0.313	
Regents exams, Years 3 to 6					
Number taken	6.9	6.4	0.5	0.237	†
Number passed	2.2	2.0	0.3	0.123	
Passed at least 5 exams (%)	25.4	22.8	2.6	0.381	
Sample size (total = 761)	370	391			

(continued)

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value
<u>Proficient on 6th grade ELA test[a]</u>				
Enrolled in grade 12, Year 6 (%)	65.0	64.4	0.6	0.876
Graduated within 6 years of entering 7th grade (%)	53.5	53.5	0.1	0.991
Dropped out within 6 years of entering 7th grade (%)	7.5	6.8	0.8	0.716
Attendance rate (%)				
Years 1 to 3	91.9	91.1	0.8	0.272
Year 4	76.0	76.8	-0.8	0.762
Year 5	72.9	73.1	-0.2	0.955
Year 6	62.3	61.7	0.6	0.840
Earned at least 11 credits (%)				
Year 4	54.0	54.6	-0.6	0.877
Year 5	52.5	49.5	3.0	0.455
Year 6	35.0	37.4	-2.4	0.536
Regents exams, Years 3 to 6				
Number taken	6.8	6.7	0.1	0.789
Number passed	4.5	4.5	0.0	0.933
Passed at least 5 exams (%)	58.2	59.9	-1.7	0.672
Sample size (total = 600)	301	299		
<u>Not proficient on 6th grade ELA test[a]</u>				
Enrolled in grade 12, Year 6 (%)	52.0	51.9	0.2	0.962
Graduated within 6 years of entering 7th grade (%)	41.2	38.0	3.3	0.280
Dropped out within 6 years of entering 7th grade (%)	11.8	11.8	0.0	0.997
Attendance rate (%)				
Years 1 to 3	87.6	87.7	-0.1	0.903
Year 4	71.5	73.0	-1.5	0.455
Year 5	66.6	67.8	-1.3	0.569
Year 6	59.0	60.1	-1.1	0.647
Earned at least 11 credits (%)				
Year 4	43.0	45.6	-2.5	0.415
Year 5	43.0	39.8	3.1	0.308
Year 6	34.8	33.9	0.9	0.778
Regents exams, Years 3 to 6				
Number taken	7.1	7.1	0.0	0.899
Number passed	2.7	2.6	0.1	0.460
Passed at least 5 exams (%)	34.1	32.6	1.4	0.608
Sample size (total = 993)	490	503		

Table S2.7 (continued)

NOTES: Sample sizes may vary because of missing values.

A two-tailed t-test was applied to the differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Differences across subgroup impacts were tested for statistical significance. Statistical significance levels (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

Years 1, 2, 3, 4, 5, and 6 cover the 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, and 2012-2013 school years, respectively.

The Regents measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

[a]In New York State, students who score at a level of 3 or higher on a 4-point scale are deemed "proficient."

Table S2.8

Impacts on Postsecondary Enrollment
for Students in Grade 7 at the Time of Random Assignment

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Ever within the 6-year follow-up period (%)				
Enrolled at any postsecondary institution	24.1	23.1	1.0	0.625
2-year	9.9	9.4	0.5	0.739
4-year	14.9	14.7	0.3	0.869
Highest level ever enrolled was full time	14.2	13.4	0.8	0.638
Highest level ever enrolled was part time	4.7	3.8	0.9	0.380
Enrolled in 4-year and full time	10.7	10.3	0.4	0.796
Enrolled in 2-year and full time	3.8	3.5	0.4	0.694
Sample size (total = 1,670)	823	847		

SOURCE: MDRC calculations using data from the National Student Clearinghouse.

NOTES: Sample sizes may vary because of missing values.

A two-tailed t-test was applied to the differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

Table S2.9

Impacts on Postsecondary Enrollment
for Students in Grade 9 at the Time of Random Assignment

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Ever within the 6-year follow-up period (%)				
Enrolled at any postsecondary institution	39.9	42.5	-2.6	0.204
2-year	20.5	22.5	-2.0	0.281
4-year	22.5	22.8	-0.4	0.841
Highest level ever enrolled was full time	27.5	28.8	-1.3	0.510
Highest level ever enrolled was part time	3.9	3.9	0.0	0.993
Enrolled in 4-year and full time	18.8	17.7	1.2	0.475
Enrolled in 2-year and full time	11.2	13.5	-2.3	0.127
Sample size (total = 1,978)	988	990		

SOURCE: MDRC calculations using data from the National Student Clearinghouse.

NOTES: Sample sizes may vary because of missing values.

   A two-tailed t-test was applied to the differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

   Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

   Rounding may cause slight discrepancies in calculating sums and differences.

Table S2.10

Impacts on Postsecondary Enrollment for Students in Grade 9 at the Time of Random Assignment, by Performance on English Language Arts (ELA) Test in the Prior Year (Grade 8)

| Outcome | Proficient on 8th Grade ELA Test[a] | | | Not Proficient on 8th Grade ELA Test[a] | | | |
	Program Group	Control Group	Difference (Impact)	Program Group	Control Group	Difference (Impact)	Sig.
Ever within the 6-year follow-up period (%)							
Enrolled at any postsecondary institution	62.5	61.2	1.4	33.8	38.9	-5.0 *	
2-year	21.3	26.3	-5.0	21.5	23.1	-1.6	
4-year	46.0	38.8	7.1 *	15.4	18.2	-2.8	††
Highest level ever enrolled was full time	49.9	40.6	9.3 **	21.4	26.8	-5.4 **	†††
Highest level ever enrolled was part time	4.7	4.9	-0.2	4.2	4.0	0.2	
Enrolled in 4-year and full time	40.9	31.2	9.7 **	12.2	13.5	-1.4	††
Enrolled in 2-year and full time	12.4	13.7	-1.3	11.9	14.8	-2.9	
Sample size (total = 1,700)	271	256		576	597		

SOURCE: MDRC calculations using data from the National Student Clearinghouse.

NOTES: Sample sizes may vary because of missing values.

A two-tailed t-test was applied to the differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Differences across subgroup impacts were tested for statistical significance. Statistical significance levels (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]In New York State, students who score at a level of 3 or higher on a 4-point scale are deemed "proficient."

Table S2.11

**Impacts on Postsecondary Enrollment for Students in Grade 9 at the Time of Random Assignment,
by Performance on Math Test in the Prior Year (Grade 8)**

Outcome	Proficient on 8th Grade Math Test[a]			Not Proficient on 8th Grade Math Test[a]			Sig.
	Program Group	Control Group	Difference (Impact)	Program Group	Control Group	Difference (Impact)	
Ever within the 6-year follow-up period (%)							
Enrolled at any postsecondary institution	64.1	66.0	-1.9	31.5	35.2	-3.7	
2-year	21.5	27.7	-6.2 *	21.2	21.8	-0.6	
4-year	48.1	43.1	5.0	12.8	15.2	-2.5	
Highest level ever enrolled was full time	49.8	47.1	2.6	20.6	22.9	-2.4	
Highest level ever enrolled was part time	4.7	7.3	-2.6	4.0	2.8	1.2	
Enrolled in 4-year and full time	41.8	34.6	7.2 *	10.7	11.0	-0.3	†
Enrolled in 2-year and full time	12.4	16.3	-3.9	11.9	13.5	-1.6	
Sample size (total = 1,726)	298	285		565	578		

SOURCE: MDRC calculations using data from the National Student Clearinghouse.

NOTES: Sample sizes may vary because of missing values.

    A two-tailed t-test was applied to the differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

    Differences across subgroup impacts were tested for statistical significance. Statistical significance levels (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

    Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

    Rounding may cause slight discrepancies in calculating sums and differences.

    [a]In New York State, students who score at a level of 3 or higher on a 4-point scale are deemed "proficient."

Table S2.12

**Impacts on Test Scores for Children Ages 2 Through 7
at the Time of Random Assignment**

Follow-Up Year, Grade Level, and Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Year 5, Grades 3-4				
ELA scale score	659.4	657.8	1.6	0.429
Scored at proficient level or higher on ELA[a] (%)	39.8	34.5	5.3	0.191
Math scale score	680.6	677.1	3.5	0.134
Scored at proficient level or higher on math[a] (%)	52.8	44.6	8.2 *	0.052
Average attendance rate (%)	87.6	87.4	0.2	0.927
Attendance rate 95% or higher (%)	45.6	43.7	1.9	0.649
Sample size (total = 597)	319	278		
Year 6, Grades 3-5				
ELA scale score	288.7	287.6	1.2	0.611
Scored at proficient level or higher on ELA[a] (%)	18.1	12.8	5.3 **	0.048
Math scale score	288.6	285.8	2.8	0.227
Scored at proficient level or higher on math[a] (%)	21.4	15.9	5.5 *	0.062
Average attendance rate (%)	85.8	85.1	0.7	0.686
Attendance rate 95% or higher (%)	39.2	39.2	0.0	0.996
Sample size (total = 788)	410	378		

SOURCE: MDRC calculations using data from New York City Department of Education administrative records.

NOTES: Sample sizes may vary because of missing values.

A two-tailed t-test was applied to the differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

Years 5 and 6 cover the 2011-2012 and 2012-2013 school years, respectively.

The Year 6 proficiency percentages should not be compared directly with prior-year results. Unlike prior years, proficiency in Year 6 is based on the Common Core State Standard.

The ages used in this table are based on the age recorded in the Baseline Information Form. There are three age values that fall outside this range.

[a]In New York State, students who score at a level of 3 or higher on a 4-point scale are deemed "proficient."

III. Impacts on Receipt of Medicaid

Family Rewards offered cash payments for maintaining health insurance and for getting preventive medical and dental care, although the health insurance rewards were dropped in the final two years of the program. Effects on health were examined largely through the two surveys that were administered at 18 months and 42 months after random assignment. At the 18-month point, the program led to small improvements in several health-related behaviors and outcomes. Parents in the program group were more likely than those in the control group to have health insurance, to have visited the dentist, and to report treating a specific health condition. They also reported better health, as measured by the self-reported health status scale. By the 42-month point, however, only the effects on health coverage and dental visits had persisted.

Effects on health coverage were also examined using administrative records data on Medicaid coverage for adults and children. This section presents the findings through Year 6 of the study follow-up period. It also presents effects for those receiving Temporary Assistance for Needy Families/Safety Net Assistance (TANF/SNA) at study entry versus those who were not receiving TANF/SNA at study entry, since, according to the program design, TANF/SNA recipients did not receive rewards for maintaining health insurance coverage because that coverage was near automatic. MDRC's interim report documented that the program led to an increase in continuous Medicaid coverage (having coverage in all quarters of a given year) during follow-up Years 1 and 2 for adults, driven largely by adults who were not TANF/SNA recipients.[1] There were no effects for children.

Tables S3.1 (for parents) and S3.2 (for children) present the longer-term results. The tables examine effects on Medicaid coverage at a point in time — the fourth quarter of 2013, or roughly the end of the sixth year of follow-up for study participants.[2] In addition, the tables show Medicaid coverage overall and whether it is provided along with public assistance (that is, TANF or SNA) or independent of public assistance in the fourth quarter. Individuals receiving public assistance are automatically enrolled in Medicaid.

Impacts are estimated separately by TANF/SNA receipt at study entry. As mentioned, because individuals receiving TANF or SNA benefits are automatically enrolled in Medicaid, they did not receive rewards during the first two years of the program for maintaining health insurance coverage. Therefore, the program was less likely to increase coverage for public assistance recipients.

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[1]Riccio et al. (2013).

[2]Longer-term data were not collected on families' receipt of health insurance coverage through the Children's Health Insurance Program (CHIP), which previous reports showed was received by less than 5 percent of children in the study. CHIP targets uninsured children in families with incomes that are too high to qualify for Medicaid.

Table S3.1 (page 35) shows that the program had no effect on the rate of Medicaid coverage for adults during Quarter 4, 2013. Thus, despite the program's effects on sustained coverage during the first three years of follow-up (shown in the interim report),[3] there are no effects on Medicaid receipt at the end of Year 6. Table S3.2 (page 36) shows no effect overall for children, although the program did lead to a small increase in coverage for children in families who were receiving TANF/SNA at study entry. It is not clear what to make of this finding, given the lack of effects for children during the first three years of the study, and given that most of the earlier effects for adults were for those not receiving TANF/SNA at study entry.

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[3]Riccio et al. (2013).

Table S3.1

Impacts on Parents' Medicaid Coverage, Quarter 4, 2013

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Sig.
Full sample					
Covered by Medicaid in Q4 (%)	57.0	56.5	0.6	0.66	
With public assistance	14.0	14.7	-0.7	0.47	
Independent of public assistance	43.0	41.8	1.2	0.36	
Sample size (total = 4,995)	2,515	2,480			
Not receiving TANF/SNA at baseline					
Covered by Medicaid in Q4 (%)	51.7	51.1	0.6	0.69	
With public assistance	8.7	9.4	-0.7	0.44	
Independent of public assistance	43.0	41.7	1.3	0.40	
Sample size (total = 3,716)	1,848	1,868			
Receiving TANF/SNA at baseline					
Covered by Medicaid in Q4 (%)	73.8	72.8	1.1	0.68	
With public assistance	31.8	31.1	0.7	0.81	
Independent of public assistance	42.0	41.6	0.4	0.89	
Sample size (total = 1,128)	583	545			

SOURCE: MDRC calculations from the New York City Human Resources Administration (HRA) Medicaid coverage data.

NOTES: Sample sizes may vary because of missing values.

   A two-tailed t-test was applied to differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

   Differences across subgroup impacts were tested for statistical significance. Statistical significance levels (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

   Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

   Rounding may cause slight discrepancies in calculating sums and differences.

Table S3.2

Impacts on Child Medicaid Coverage, Quarter 4, 2013

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Sig.
Full sample					
Covered by Medicaid in Q4 (%)	54.3	53.4	0.9	0.45	
With public assistance	15.4	16.4	-1.0	0.28	
Independent of public assistance	38.9	37.0	1.9	0.12	
Sample size (total = 11,329)	5,680	5,649			
Not receiving TANF/SNA at baseline					
Covered by Medicaid in Q4 (%)	50.3	50.5	-0.1	0.93	†
With public assistance	9.3	10.2	-0.9	0.31	
Independent of public assistance	41.1	40.3	0.8	0.58	†
Sample size (total = 8,087)	4,026	4,061			
Receiving TANF/SNA at baseline					
Covered by Medicaid in Q4 (%)	64.7	60.0	4.6 *	0.06	†
With public assistance	31.7	33.0	-1.3	0.59	
Independent of public assistance	33.0	27.0	5.9 ***	0.01	†
Sample size (total = 2,910)	1,476	1,434			

SOURCE: MDRC calculations from the New York City Human Resources Administration (HRA) Medicaid coverage data.

NOTES: Sample sizes may vary because of missing values.

    A two-tailed t-test was applied to differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

    Differences across subgroup impacts were tested for statistical significance. Statistical significance levels (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent

    Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

    Rounding may cause slight discrepancies in calculating sums and differences.

IV.   Impacts on Parents' Employment and Earnings

Family Rewards differed from most other conditional cash transfer (CCT) programs in that it offered cash rewards for parents' work and work-related training. Parents who worked full time (defined as at least 30 hours per week for six of every eight weeks) could receive $300 every two months, or up to $1,800 per year. By increasing the payoff to work, the reward was intended to create an incentive for parents to find full-time jobs, to move from part-time into full-time work, or to stay in full-time work. The program also offered rewards for parents to complete approved training courses, although few parents took up this offer.

As noted in the final report, the program led to modest increases in employment in jobs that were not reported to the unemployment insurance (UI) system. However, it had little overall effect on employment in UI-covered jobs, and, according to subgroup analyses, led to a small reduction in UI-covered employment and earnings among more disadvantaged adults in the study.[1]

This section presents effects on UI-covered employment and earnings through Year 5 of the study, for the full sample and three key subgroups, defined by education level, prior employment, and income level. Tables S4.1 through S4.4 (pages 38 to 44) present the results. For the full sample, Table S4.1 shows that the program had little effect on UI-covered employment, with the exception of a small reduction in work in Year 1. This lack of effects for the full sample masks negative effects for more disadvantaged adults. The remaining tables illustrate that the more disadvantaged groups — for example, the less educated, those with less work history, and those with less income at baseline — experienced more sustained reductions in work as a result of participating in the program. Although the differences in impacts between groups are not always statistically significant, the pattern suggests one in which those with a more marginal connection to the labor force cut back their work effort in response to the program. This pattern is seen particularly for the group that had income below 50 percent of the federal poverty level at baseline, where the program reduced employment rates in every year and led to a reduction in total UI earnings of about 16 percent (or nearly $3,000). The reductions in UI-covered work among more disadvantaged parents may be driven by a so-called income effect — a reduced motivation to find employment because of the substantial rewards that these families were earning in the program's health and education domains.

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[1]Riccio and Miller (2016).

Table S4.1

**Impacts on UI-Covered Employment and Earnings,
Study Follow-Up Years 1 to 5**

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Ever employed (%)				
Years 1-5	66.8	69.1	-2.3 **	0.021
Year 1	56.3	58.7	-2.4 ***	0.008
Year 2	55.0	56.2	-1.2	0.240
Year 3	52.5	53.4	-0.9	0.422
Year 4	52.2	52.8	-0.6	0.619
Year 5	51.6	53.2	-1.6	0.171
Average quarterly employment (%)				
Years 1-5	46.8	47.6	-0.9	0.270
Year 1	49.1	50.4	-1.3 *	0.098
Year 2	47.8	48.8	-1.0	0.273
Year 3	46.1	46.8	-0.7	0.500
Year 4	45.8	45.3	0.4	0.664
Year 5	44.9	46.7	-1.8 *	0.082
Total earnings ($)				
Years 1-5	62,036	62,947	-911	0.496
Year 1	12,154	12,376	-221	0.323
Year 2	12,363	12,631	-268	0.351
Year 3	12,421	12,598	-177	0.587
Year 4	12,612	12,596	16	0.964
Year 5	12,485	12,746	-261	0.476
Sample size (total = 4,993)	2,513	2,480		

SOURCE: MDRC calculations using data from New York State unemployment insurance (UI) wage records.

NOTES: Sample sizes may vary because of missing values.

A two-tailed t-test was applied to differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics for sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who were not employed.

This table includes only employment and earnings in jobs covered by the New York State UI program. It does not include employment outside of New York State, nor in jobs not covered by the UI system (for example, "off-the-books" jobs and federal government jobs).

Table S4.2

Impacts on UI-Covered Employment and Earnings, by Respondent's Education Level at the Time of Random Assignment

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Sig.
High school diploma/GED certificate **or higher at baseline**					
Ever employed (%)					
Years 1-5	74.1	76.0	-2.0	0.114	
Year 1	65.3	66.6	-1.3	0.261	
Year 2	63.4	63.1	0.3	0.844	†
Year 3	60.6	60.0	0.6	0.663	
Year 4	60.6	59.8	0.7	0.618	
Year 5	59.1	60.2	-1.1	0.451	
Average quarterly employment (%)					
Years 1-5	55.1	54.5	0.6	0.561	††
Year 1	57.9	58.7	-0.8	0.435	
Year 2	56.5	55.6	0.9	0.442	††
Year 3	54.4	53.3	1.1	0.401	††
Year 4	54.0	51.9	2.1	0.122	†
Year 5	52.7	53.0	-0.3	0.810	
Total earnings ($)					
Years 1-5	81,411	81,466	-55	0.978	
Year 1	15,730	16,084	-354	0.276	
Year 2	16,233	16,234	-2	0.996	
Year 3	16,378	16,238	140	0.775	
Year 4	16,674	16,361	313	0.555	
Year 5	16,395	16,548	-153	0.783	
Sample size (total = 2,863)	1,404	1,459			
No high school diploma/GED certificate **at baseline**					
Ever employed (%)					
Years 1-5	57.5	60.7	-3.1 *	0.081	
Year 1	44.2	48.4	-4.2 ***	0.007	
Year 2	43.9	47.4	-3.5 **	0.042	†
Year 3	41.8	44.6	-2.8	0.116	
Year 4	41.4	43.4	-2.0	0.271	
Year 5	41.5	43.8	-2.3	0.227	

(continued)

Table S4.2 (continued)

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Sig.
Average quarterly employment (%)					
Years 1-5	35.5	38.5	-3.0 **	0.018	††
Year 1	37.1	39.6	-2.5 **	0.049	
Year 2	36.2	40.0	-3.8 **	0.010	††
Year 3	35.2	38.1	-2.9 *	0.060	††
Year 4	34.8	36.6	-1.8	0.256	†
Year 5	34.4	38.1	-3.8 **	0.024	
Total earnings ($)					
Years 1-5	34,579	37,512	-2,934 *	0.074	
Year 1	7,011	7,249	-238	0.414	
Year 2	6,902	7,713	-811 **	0.033	
Year 3	6,850	7,586	-736 *	0.062	
Year 4	6,873	7,426	-553	0.182	
Year 5	6,942	7,538	-596	0.168	
Sample size (total = 1,960)	1,021	939			

SOURCES: MDRC calculations using data from New York State unemployment insurance (UI) wage records.

NOTES: Sample sizes may vary because of missing values.

A two-tailed t-test was applied to differences between outcomes for the program and control groups. The p-value indicates the likelihood that the differences between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Differences across subgroup impacts were tested for statistical significance. Statistical significance levels (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who were not employed.

This table includes only employment and earnings in jobs covered by the New York State UI program. It does not include employment outside of New York State, nor in jobs not covered by the UI system (for example, "off-the-books" jobs and federal government jobs).

Table S4.3

Impacts on UI-Covered Employment and Earnings, by Respondent's Employment Status at the Time of Random Assignment

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)		P-Value	Sig.
Employed at baseline						
Ever employed (%)						
Years 1-5	87.4	88.6	-1.1		0.236	
Year 1	83.1	84.2	-1.1		0.255	†
Year 2	79.5	80.3	-0.9		0.486	
Year 3	76.5	76.4	0.1		0.968	
Year 4	75.3	74.3	1.0		0.514	
Year 5	72.8	74.1	-1.3		0.391	
Average quarterly employment (%)						
Years 1-5	71.6	71.3	0.3		0.783	†
Year 1	77.2	77.8	-0.6		0.533	
Year 2	73.3	73.0	0.4		0.777	
Year 3	70.9	70.1	0.8		0.572	
Year 4	69.6	67.3	2.3		0.120	††
Year 5	66.9	68.2	-1.3		0.374	
Total earnings ($)						
Years 1-5	102,409	102,931	-522		0.809	
Year 1	20,522	20,837	-315		0.372	
Year 2	20,326	20,731	-405		0.381	
Year 3	20,496	20,469	26		0.961	
Year 4	20,741	20,458	283		0.619	
Year 5	20,325	20,435	-110		0.856	
Sample size (total = 2,633)	1,324	1,309				
Not employed at baseline						
Ever employed (%)						
Years 1-5	43.5	47.4	-3.9	**	0.040	
Year 1	25.7	30.0	-4.3	**	0.011	†
Year 2	27.3	29.1	-1.8		0.295	
Year 3	25.6	27.7	-2.1		0.221	
Year 4	26.2	28.8	-2.6		0.145	
Year 5	27.4	29.8	-2.3		0.195	

(continued)

Table S4.3 (continued)

Subgroup and Outcome	Porgram Group	Control Group	Difference (Impact)		P-Value	Sig.
Average quarterly employment (%)						
Years 1-5	18.7	21.1	-2.4	**	0.036	†
Year 1	17.2	19.7	-2.6	**	0.042	
Year 2	19.0	21.6	-2.6	*	0.057	
Year 3	18.3	20.7	-2.4	*	0.094	
Year 4	18.9	20.8	-1.9		0.183	††
Year 5	20.0	22.6	-2.5	*	0.088	
Total earnings ($)						
Years 1-5	16,412	18,051	-1,640		0.268	
Year 1	2,685	2,862	-177		0.502	
Year 2	3,390	3,529	-139		0.671	
Year 3	3,311	3,751	-440		0.208	
Year 4	3,399	3,788	-389		0.293	
Year 5	3,628	4,122	-494		0.196	
Sample size (total = 2,282)	1,147	1,135				

SOURCES: MDRC calculations using data from New York State unemployment insurance (UI) wage records.

NOTES: Sample sizes may vary because of missing values.

A two-tailed t-test was applied to differences between outcomes for the program and control groups. The p-value indicates the likelihood that the differences between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Differences across subgroup impacts were tested for statistical significance. Statistical significance levels (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who were not employed.

This table includes only employment and earnings in jobs covered by the New York State UI program. It does not include employment outside of New York State, nor in jobs not covered by the UI system (for example, "off-the-books" jobs and federal government jobs).

Table S4.4

Impacts on Employment and Earnings, by Respondent's
Poverty Level at the Time of Random Assignment

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Sig.
Income at or above 50% of FPL at baseline					
Ever employed (%)					
Years 1-5	84.0	84.3	-0.4	0.732	†††
Year 1	76.1	77.7	-1.7	0.100	
Year 2	74.1	74.5	-0.5	0.704	
Year 3	70.5	70.0	0.5	0.690	††
Year 4	68.8	68.2	0.7	0.634	†
Year 5	67.3	67.8	-0.5	0.722	
Average quarterly employment (%)					
Years 1-5	64.3	64.2	0.1	0.928	††
Year 1	69.0	70.0	-1.0	0.259	
Year 2	66.2	66.6	-0.4	0.736	
Year 3	63.6	63.2	0.4	0.732	††
Year 4	62.3	60.5	1.8	0.166	††
Year 5	60.4	60.8	-0.4	0.764	††
Total earnings ($)					
Years 1-5	91,639	91,822	-183	0.926	
Year 1	18,355	18,646	-291	0.381	
Year 2	18,350	18,616	-266	0.531	
Year 3	18,373	18,316	57	0.906	
Year 4	18,423	18,153	270	0.600	
Year 5	18,138	18,091	47	0.931	
Sample size (total = 3,062)	1,584	1,478			
Income less than 50% of FPL at baseline					
Ever employed (%)					
Years 1-5	39.0	45.3	-6.3 ***	0.002	†††
Year 1	24.2	29.1	-4.9 ***	0.005	
Year 2	24.1	27.8	-3.7 **	0.042	
Year 3	23.4	27.4	-4.0 **	0.027	††
Year 4	25.4	28.8	-3.4 *	0.072	†
Year 5	26.1	30.4	-4.3 **	0.026	

(continued)

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Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Sig.
Average quarterly employment (%)					
Years 1-5	18.3	21.8	-3.5 ***	0.005	††
Year 1	17.0	19.9	-3.0 **	0.021	
Year 2	18.1	21.2	-3.2 **	0.031	
Year 3	17.8	21.2	-3.5 **	0.020	††
Year 4	18.9	21.7	-2.8 *	0.078	††
Year 5	19.6	24.7	-5.1 ***	0.002	††
Total earnings ($)					
Years 1-5	14,624	17,514	-2,890 **	0.046	
Year 1	2,239	2,517	-278	0.221	
Year 2	2,804	3,202	-398	0.204	
Year 3	2,894	3,587	-693 **	0.038	
Year 4	3,294	3,855	-561	0.141	
Year 5	3,393	4,353	-959 **	0.017	
Sample size (total = 1,931)	929	1,002			

SOURCES: MDRC calculations using data from New York State unemployment insurance (UI) wage records.

NOTES: Sample sizes may vary because of missing values.

A two-tailed t-test was applied to differences between outcomes for the program and control groups. The p-value indicates the likelihood that the differences between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Differences across subgroup impacts were tested for statistical significance. Statistical significance levels (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who were not employed.

This table includes only employment and earnings in jobs covered by the New York State UI program. It does not include employment outside of New York State, nor in jobs not covered by the UI system (for example, "off-the-books" jobs and federal government jobs).

FPL is federal poverty level.

V. Estimates of Program Costs

This section summarizes the cost analysis of Family Rewards. It first presents the estimates of program costs, and then presents detailed information on cost estimation data and methods. Because Family Rewards is one of the first conditional cash transfer (CCT) programs in the United States, it is useful to examine the cost of running this type of program. Conditional cash transfer programs started in low- and middle-income countries, and the cost is likely to be quite different in a high-income country like the United States.

Cost Analysis Results

The Family Rewards program cost was $13,093 per household over the three-year program period, as presented in Table S5.1 (page 54). The cash rewards that were transferred to families ($8,900 per family) made up the largest share of overall program costs (68 percent).[1] The balance of expenditures went toward managing, administering, and operating the program ($4,193 in all, or 32 percent). Almost all individuals within a family earned rewards (not shown in table): on average, cash rewards cost $2,581 per person and administrative costs were $1,217 per person over the three-year program period ($3,798 per person total cost); the cost was $205 per reward payment, comprising $139 for the cash reward and $66 for administrative costs.[2] Administrative costs are a true cost to the economy because real resources (that is, any necessary staff and equipment) are used to administer the program, whereas the cash rewards are simply a transfer of funds from the government to low-income families.[3] These administrative costs are undoubtedly higher than what such costs would be if the program were operated on a much larger scale and not as part of a relatively small demonstration project. Administrative costs under Family Rewards included start-up costs as well as costs to figure out best practices over the course of the demonstration; these costs would not be incurred in an ongoing program, but are typical in a demonstration where a new program is in place for the first time. Furthermore, if the program operated at a larger scale, economies of scale could be achieved; for example, fixed costs — such as expenditures on office space, equipment, and maintenance of the management information system (MIS) — would be spread over more families, decreasing the administrative cost per family.

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[1]The reward payments amount of $8,900 cited here is different from the amount cited in earlier reports ($8,707) because reward payments have been inflation-adjusted and discounted in this report to be consistent with other cost estimates provided.

[2]This supplement and the accompanying report use the terms "administrative costs," "administrative expenditures," and "non-reward costs" interchangeably.

[3]In a benefit-cost analysis, the simple transfer of funds reflects a cost to the government and a benefit to the participant, and therefore a net of zero (neither cost nor benefit) to society.

Costs of Administering the Program

Administrative costs were incurred by the organizations that were responsible for central operations (Seedco) and local operations (Neighborhood Partner Organizations, or NPOs). Seedco developed a payment tracking system; processed administrative records to determine whether automatically verified rewards had been earned; created special coupon books that families had to submit, along with any necessary documentation, in order to claim any given rewards and prove that they had earned them; verified that requirements for coupon payment rewards were met; maintained up-to-date bank account information to make sure payments were disbursed to the correct accounts; issued earnings statements during each payment period to mail to families; created and maintained a helpline to answer questions; made payments to families who earned rewards; marketed the program; performed general program management; and oversaw the NPOs. The NPOs conducted program orientations, refresher sessions, social events, and workshops for participants. The NPOs were also responsible for distributing coupon books and providing general customer service. (MDRC's early and interim reports on Family Rewards describe program implementation in detail and provide further information on the division of responsibilities between Seedco and the NPOs.)

The central operations costs were higher than local operations costs ($2,878 versus $1,052 per family, respectively, on average). Small costs were also incurred at both the central and local levels for recruiting households into the program (about $249 per family[4]) and for agencies to provide data to compute automatic rewards payments (about $14 per family).

During the demonstration period, the cost of transferring $1.00 of reward payments was 47¢ (as shown in Table S5.1), but this estimate also includes start-up costs, which makes the estimate higher than it would be for an already existing program. This estimate is also high compared with the cost of mainstream government transfer programs, which operate at a vastly larger scale and thus enjoy large economies of scale. Moreover, Family Rewards became more efficient over time. In the final year, it cost 34¢ to transfer $1.00 of reward payments, although the number of rewards was also reduced (not shown in table).

If Family Rewards were run at a larger scale, it would most certainly get to a point where the administrative cost per reward dollar paid would decrease substantially. For example, if this program were as efficient as Temporary Assistance for Needy Families (TANF), administrative costs would be 17¢ per $1.00 of reward dollars paid, as shown in Table S5.2 (page 55). Applying this assumption, and using the same average dollar value of reward payments, total administrative costs would be $1,486 per family, and overall program costs would be $10,386 per family.[5] As another example, if Family Rewards became as efficient as Medicaid, the ad-

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[4]Recruitment costs were measured as a whole and were not broken out by central and local operations.
[5]This calculation assumes that recruitment costs are eliminated.

ministrative costs would be 5¢ per $1.00 of reward payment. Applying this assumption, total administrative costs would be $463 per family, and overall program costs would be $9,362 per household.[6]

In general, the low economies of scale facing Family Rewards when operated as a special demonstration project, and natural inefficiencies associated with getting a new program up and running and new systems in place, contributed to the size of the program's administrative costs. The high costs of operating a program in New York City (for salaries and space, for example) was another factor; different geographic areas might be able to administer the program at a lower cost. These factors are important to keep in mind in interpreting the cost estimates.

The Costs of the Rewards, by Domain

Reward payments were made across three domains: education, health, and work. The program offered a set of 22 different rewards during its first two years and 15 different rewards in the last year. Reward amounts ranged from $20 to $600 per reward, and some rewards could be earned multiple times a year by several family members.

Rewards were divided into those that required a family to submit a coupon with documentation showing that the reward requirements had been met, and those that were automatically verified through administrative records provided by the New York City Department of Education (DOE) and the New York City Human Resources Administration (HRA). When possible, rewards were made automatic so that it would be easy for families to claim them; however, for most of the behaviors that were rewarded, no administrative data were available, so the family was required to submit a coupon and proof of completing the activity in order to show that a reward had been earned. In the first two years of the program period, 14 of the 22 rewards required submission of a coupon, and in the third year, 9 of the 15 rewards required submission of a coupon. Many of the education rewards and the public health insurance rewards were verified through administrative data supplied by those agencies directly to Seedco. These are referred to as "automatically verified" rewards, and they required no effort on the part of families to claim payments. Administrative records were not available for any of the other rewards; thus, for those rewards, families had to verify their compliance and submit claims manually using the special coupons that were created for the program.

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[6]Administrative cost per $1.00 of reward payment is from Redcross, Deitch, and Farrell (2010). The administrative cost assumptions used here are similar to the administrative costs estimated in Isaacs (2008) under the administrative costs excluding work programs. Isaacs (2008) reports the administrative cost per benefit dollar as 16¢ for the TANF broad definition (that is, TANF cash and non-cash benefits) compared with 17¢ in Redcross, Deitch, and Farrell (2010). Isaacs (2008) reports SNAP administrative costs of 16¢ per $1.00 of benefits, compared with 20¢ per $1.00 in Redcross, Deitch, and Farrell (2010). Both studies estimate 5¢ of administrative costs per $1.00 of Medicaid benefits.

Costs can be broken down by reward domain.[7] This is fairly simple to do for reward payments, but is more speculative for administrative costs. For that reason, Table S5.3 (page 56) shows administrative costs by domain using two different assumptions, which yield similar results.

Program management, administration, and operations and the costs of the data matches were separated by domain using two different assumptions: (1) assuming equal cost for all rewards, and (2) assuming that coupon rewards require more effort than automatic verification. Assuming equal cost for all rewards involves applying, by domain, the percentage of earned rewards and "never successful" rewards (that is, rewards that were never successfully processed) to the program management, administration, and operations cost. Table S5.4 (page 57) shows the number of rewards by domain and the percentages by domain that were used to estimate administrative cost by domain under the two assumptions. To demonstrate how costs by domain could vary if our assumption about coupon rewards requiring more effort is correct, each coupon reward payment was counted as four payments before computing the percentage of rewards by domain that was then applied to the program management, administration, and operations costs, however, precise data on how much more effort was involved for coupon rewards are not available. As shown in Table S5.3, the administrative cost by domain is not sensitive to these assumptions.

Under both of these assumptions, rewards that were never successfully processed are included in the number of rewards. All rewards that were never successfully processed are coupon rewards, which also increases the cost of the coupon payments relative to the cost of automatic payments. The number of times a coupon claim had to be processed before being successfully processed is unknown. An example of the calculation is shown under each assumption using the education domain in Box S5.1.

Education rewards were the most costly. On average, these reward payments totaled $4,000 per family, and administrative costs for education rewards ranged from $1,200 to $1,529, depending on which assumption was used to calculate costs per family. Health reward payments were a little lower, but the administrative costs were higher. Health reward payments were $3,056 per family, and the cost of administering them ranged from $2,005 to $2,135 per family. Health rewards had the highest average number of rewards earned per family and also had more coupon payments earned than education rewards, contributing to

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[7]Reward payments were separated by domain by assuming that the percentage of reward dollars paid by domain is the same as the percentage of reward dollars earned by domain. Payments by domain are not available in the MIS, but rewards earned by domain are available in the MIS. The total payments are shown for each pay period, and a payment can include multiple rewards, and thus cover multiple domains.

Box S5.1

**Estimation of Administrative Cost, by Assumptions
for the Education Domain**

Using the values presented in the table on the next page, under the "Assumes Equal Cost" assumption, the percentage of administrative costs attributed to the education rewards is calculated as follows:

(Number of automatic education rewards earned
+ Number of coupon education rewards approved
+ Number of coupon education rewards denied)

Total number of rewards earned + rewards applied for but denied, in all domains

or

$$(17 + 9 + 1) / (30 + 33 + 6) = 39 \text{ percent}$$

Using the values presented in the same table, under the "Assumes Coupon Rewards Require More Effort" assumption, the percentage of administrative costs attributed to the education rewards is calculated as follows:

[Number of automatic education rewards earned
+ (Number of coupon education rewards approved $\times$ 4)
+ (Number of coupon education rewards denied $\times$ 4)]

[Total number of automatic rewards earned in all domains
+ (Total number of coupon rewards approved $\times$ 4)
+ (Total number of coupon awards denied $\times$ 4)]

or

$$[17 + (9 \times 4) + (1 \times 4)] / [30 + (33 \times 4) + (6 \times 4)] = 31 \text{ percent}$$

(continued)

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Box S5.1 (continued)

Reward Type	Assumes Equal Cost	Assumes Coupon Rewards Require More Effort and Incur Greater Cost
Education domain rewards (N)		
Automatic	17	17
Approved coupons	9	$9 \times 4 = 36$
Denied coupons	1	$1 \times 4 = 4$
Total	27	57
All domain rewards (N)		
Automatic	30	30
Approved coupons	33	$33 \times 4 = 132$
Denied coupons	6	$6 \times 4 = 24$
Total	69	186
Percentage of administrative costs attributed to education rewards	$27 / 69 = 39\%$	$57 / 186 = 31\%$

their higher administrative costs. Work and training rewards were the least costly overall, in large part because not many families claimed them. For example, 53 percent of families earned a work-related reward over the three-year period, compared with 98 percent of families earning a reward under the other two domains (not shown in table). Fewer work-related rewards were earned, on average, compared with education and health rewards. Payments for work rewards were $1,843 per family, and administrative costs ranged from $411 to $610 per family. However, because payments had to be claimed for these rewards entirely by coupons, which required more administrative costs to process, the administrative costs would have been higher had receipt of work-related rewards been higher.

Cost Analysis Data and Methods

The remainder of this section provides more technical detail on how the cost estimates reported above were calculated.

Overall Scope, Data, and Assumptions

Reward payment information was collected from the Family Rewards MIS. The MIS captures data on all payments made to families, including the $50 bonus payment offered to families at the start of the program for establishing an Opportunity NYC bank account or providing information on an existing no-fee bank account to enable direct deposit of reward

payments.[8] Administrative costs were calculated using expenditures in Seedco's general ledger. All reward payments and administrative costs over the life of the program were included, regardless of the timing of the expenditure (the three-year program period during which rewards could be earned extended from September 2007 through August 2010, and costs were included for April 2007 through December 2010). For example, some payments were made after the end of the third program year for activities that families completed before the program ended; these payments were included in the cost estimates.

Cost information was collected on sample recruitment, program start-up, and program wrap-up costs as well as on the ongoing operation of the program. Some of these costs would not be part of operating Family Rewards outside the context of a research demonstration project. For example, the NPOs and Seedco provided estimates of their costs to recruit the study sample, which were used to show recruitment costs in Table S5.1.[9] Recruitment costs include research-related costs of conducting random assignment, gathering informed consent, and administering the baseline survey given at enrollment, which would not be conducted if the program were not part of an evaluation. At the same time, other aspects of recruiting participants to a program would be incurred as part of normal operations. It is difficult to separate these different elements of recruitment, and the cost analysis does not exclude them. Thus, overall program costs include expenditures for some activities that should be considered relevant for research purposes only; however, the research costs included in the estimate are likely small.

Some other expenditures that are relevant only for research purposes could also not be excluded. For example, the NPOs and Seedco staff spent time providing information to the research team that would not have been necessary if the program had not been evaluated.

The cost of conducting the data matching for automatically verified rewards was calculated by assuming that it took one week to set up each program, and two to three hours for each subsequent match.[10] The research team assumed that the salary rate was $80,000 per year, and that fringe benefits were 60 percent of salary costs. (The fringe benefit rate includes retirement costs; without retirement costs, the rate would be 30 percent.) Overhead was assumed to be 25

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[8]In previous MDRC reports on the Family Rewards program, rewards earned are often shown in tables; this amount is different from the amount paid, which is used in the cost estimate. For Family Rewards, there were $70,622 in overpayments and $457,930 in unclaimed payments. (This estimate is not inflation-adjusted or discounted.) The overpayments are included in the cost estimate and the underpayments are excluded from the cost estimate. Overpayments were made in error and underpayments were often due to incomplete or missing bank account information.

[9]Recruitment costs were incurred for both the Family Rewards program group and the control group, but only the Family Rewards group costs are shown. In the absence of the study, a control group would not be recruited.

[10]Start-up costs of the data matches were included in the estimates because all other start-up costs were included in the cost estimates. Even when start-up costs are included, the cost of matching the data to the administrative agencies' information is minimal, as shown in Table S5.1.

percent of salary costs. The estimated salary rate and amount of time needed was reported to the research team by a data contact at HRA, and the analysis was based on the assumption that the rate and time needed would be similar for DOE. The fringe benefits rate is based on information from the New York City Office of Management and Budget Financial Plan. Overhead rates were estimated using Agency Expense Budget Summary information from the New York City Comptroller.[11] The analysis assumed that HRA had to set up two programs to automatically verify the reward for maintaining health insurance: one for the adult reward and one for the child reward. The matches were done six times per year (once for every two-month activity period). This reward was discontinued in Year 3, so the costs are included for Years 1 and 2 only.

Automatically verifying rewards also included verification processes that used data from DOE. To estimate DOE's cost in providing these data, the analysis assumed that the program received an attendance file five times per year, a Regents file twice per year, a credits file twice per year, a graduation file twice per year, and an English language arts (ELA) and math test scores file once per year.[12]

Costs incurred by New York City's Office of Financial Empowerment are not included in the cost estimate. This unit worked with several banks and credit unions to develop special Opportunity NYC accounts that carried no fees and came with debit cards that carried no overdraft risk. This expense was a one-time start-up cost. Also, no effort was made to estimate the costs incurred by the banks to establish special accounts for Family Rewards. However, the banks' efforts may have helped them fulfill federal requirements. Moreover, the banks may have broken even from gaining new customers and interest on Family Rewards deposits. The cost of transmitting cash payments was not estimated separately in this analysis. However, the cash transmission costs are captured as part of the central operations administrative costs. Program budgets assumed $1.20 per transaction and a $3 set-up fee per debit card, in addition to bank fees.

Estimating Average Costs Per Family and Per Individual

Average estimated program costs are shown per family in Table S5.3. Program costs were averaged over all program group families. The main program intervention is the reward payment and almost all families earned a reward (with 99.6 percent earning at least one reward during the three-year program period). Program costs were also averaged over all program

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[11]The fringe benefits rate was 58, 60, and 63 percent for fiscal years 2008 to 2010, respectively. Administration costs as a percentage of Personal Services for the Department of Social Services was 20 percent in 2008 and 29 percent in 2009; for the Department of Housing Preservation and Development, it was 23 percent in 2008 and 24 percent in 2009; these rates were used to construct an overhead rate assumption for this analysis.

[12]In Year 3 the attendance reward was discontinued for grades 1 through 8; however, the reward was still available for grades 9 through 12, so this change did not reduce the number of files from DOE in Year 3.

group individuals, and most individuals earned a reward (with 96 percent earning at least one reward during the three-year program period); as noted earlier, on average, cash rewards cost $2,581 per person and administrative costs were $1,217 per person over the three-year program period ($3,798 per person total cost).

Discounting and Inflation Adjustment

All costs were discounted assuming a 3.5 percent discount rate and inflation-adjusted to 2014 dollars using the Consumer Price Index (not seasonally adjusted) from the Bureau of Labor Statistics for the New York-Northern New Jersey-Long Island area.[13] The inflation adjustment accounts for the fact that the value of the dollar changes over time; inflation adjusting provides a common dollar metric for programs that operated in different time periods. The dollar values are discounted to account for changes in the value of a dollar over the three-year follow-up period; discounting converts dollars to their present value. A dollar today is worth more than a dollar tomorrow because of the opportunity cost of money; in other words, a dollar today can be invested and be worth more than a dollar tomorrow. Using discount rates of 2 percent and 6 percent, costs ranged from $12,541 to $13,440 per family, respectively. The administrative cost per reward payment dollar ranged from 47¢ to 48¢, depending on the discount rate. (See Table S5.5 (page 58) for full cost estimates using a 2 percent, 3.5 percent, and 6 percent discount rate.)

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[13]See Boardman, Greenberg, Vining, and Weimer (2010), who recommend using a 3.5 percent social discount rate and conducting sensitivity tests for the discount rate. As shown in Table S5.5, the costs are not sensitive to the discount rate that was used for this analysis.

Table S5.1

Estimated Program Costs per Family (in 2014 Dollars)

Program Component	Program Group
Reward payments	$8,900
Non-reward costs	
Central operations[a]	$2,878
Local operations[b]	$1,052
Recruitment	$249
Data match for automatically verified rewards	$14
Total non-reward costs	$4,194
Total cost per family	$13,093
Non-reward cost per dollar of reward payment	$0.47

SOURCE: MDRC calculations using Seedco's Family Rewards program data and administrative cost data.

NOTES: Estimates reflect discounting at 3.5 percent and adjustment for inflation.

    Rounding may cause slight discrepancies in calculating sums.

    [a]Includes development of a payment tracking system, processing administrative records to determine whether automatically verified rewards had been earned, creating coupon books for reward payments that required families to submit documents showing that they earned the reward, verifying requirements for coupon payment rewards were met, maintaining up-to-date bank account information to make sure payments were disbursed to the correct accounts, issuing earnings statement each payment period to mail to families, creating and maintaining a helpline to answer questions, making payments to families who earned rewards, marketing the program, general program management, and oversight of the Neighborhood Partner Organizations.

    [b]Includes all activities performed by the Neighborhood Partner Organizations, which include program orientations, refresher sessions, coupon book distribution, customer service, social events, and workshops.

Table S5.2

**Estimated Cost per Family Under Different Cost-Per-Reward-Dollar Assumptions
(in 2014 Dollars)**

Program Component	Applying TANF Assumptions	Applying SNAP Assumptions	Applying Medicaid Assumptions
Reward payments	$8,900	$8,900	$8,900
Non-reward costs	$1,486	$1,789	$463
Total cost	$10,386	$10,688	$9,362
Non-reward cost per dollar of reward payment	$0.17	$0.20	$0.05

SOURCE: MDRC calculations using Seedco's Family Rewards program data and administrative cost per dollar of reward payment (Redcross, Deitch, and Farrell, 2010).

NOTES: Rewards estimates reflect discounting at 3.5 percent and adjustment for inflation.

Rounding may cause slight discrepancies in calculating sums.

Redross, Deitch, and Farrell (2010) measured the combined federal, state, and local administrative costs for TANF, food stamps, and Medicaid as a percentage of the value of the payments (by dividing total administrative costs by total payments) in 2003. Data on the TANF costs and payments were obtained from the financial data that states submit to the Administration for Children and Families (data reporting form ACF-196). Food Stamp Program outlays and obligations data were obtained from the Food and Nutrition Service in the U.S. Department of Agriculture. Financial data on the Medicaid program were obtained from the Center for Medicare & Medicaid Services (CMS) Quarterly Expense Report (CMS-64).

Table S5.3

Estimated Cost per Family, by Domain (in 2014 Dollars)

Program Component	Assumes Equal Cost for All Rewards		Assumes Coupon Rewards Require More Effort	
	Cost ($)	Percentage of Total	Cost ($)	Percentage of Total
Reward payments				
Education	4,000	30.6	4,000	30.6
Health	3,056	23.3	3,056	23.3
Work	1,843	14.1	1,843	14.1
Subtotal	8,900	68.0	8,900	68.0
Non-reward costs				
Education	1,529	11.7	1,200	9.2
Health	2,005	15.3	2,135	16.3
Work	411	3.1	610	4.7
Subtotal	3,944	30.1	3,944	30.1
Total cost				
Education	5,529	42.2	5,200	39.7
Health	5,061	38.7	5,190	39.6
Work	2,254	17.2	2,453	18.7
Recruitment	249	1.9	249	1.9
Total	13,093	100.0	13,093	100.0

SOURCE: MDRC calculations using Seedco's Family Rewards program data and administrative cost data.

NOTES: Assumptions are explained in the text on page 48.
  Estimates reflect discounting at 3.5 percent and adjustment for inflation.
  Rounding may cause slight discrepancies in calculating sums.

Table S5.4

Number of Rewards per Family, by Domain

Domain	Automatic Rewards Earned (N)	Approved Coupon Rewards (N)	Denied Coupon Rewards (N)	All Rewards[a] (%)	Coupons Worth 4 Times[b] (%)
Education	17	9	1	38.7	30.3
Health	13	18	4	50.9	54.2
Work	0	6	1	10.5	15.5
Total	30	33	6	100.0	100.0

SOURCE: MDRC calculations using Seedco's Family Rewards program data.

NOTES: Rounding may cause slight discrepancies in calculating sums.
[a]Assumes equal cost for coupon rewards and automatic rewards.
[b]Assumes coupon rewards require more effort to process.

Table S5.5

Estimated Cost per Family (in 2014 Dollars): Sensitivity Test of the Discount Rate

Program Component	2% Discount Rate	3.5% Discount Rate	6% Discount Rate
Reward payments	$9,149	$8,900	$8,502
Non-reward costs			
Central operations[a]	$2,941	$2,878	$2,777
Local operations[b]	$1,085	$1,052	$1,000
Recruitment	$250	$249	$248
Data match for automatically verified rewards	$14	$14	$14
Total non-reward costs	$4,291	$4,194	$4,039
Total cost	$13,440	$13,093	$12,541
Non-reward cost per dollar of reward payment	$0.47	$0.47	$0.48

SOURCE: MDRC calculations using Seedco's Family Rewards program data and administrative cost data.

NOTES: Estimates reflect discounting and adjustment for inflation.
    Rounding may cause slight discrepancies in calculating sums.
    [a]Includes development of a payment tracking system, processing administrative records to determine whether automatically verified rewards had been earned, creating coupon books for reward payments that required families to submit documents showing that they earned the reward, verifying requirements for coupon payment rewards were met, maintaining up-to-date bank account information to make sure payments were disbursed to the correct accounts, issuing earnings statements each payment period to mail to families, creating and maintaining a helpline to answer questions, making payments to families who earned rewards, marketing the program, general program management, and oversight of Neighborhood Partner Organizations.
    [b]Includes all activities performed by the Neighborhood Partner Organizations, which includes program orientations, refresher sessions, coupon book distribution, customer service, social events, and workshops.

References

Boardman, Anthony, David Greenberg, Aidan Vining, and David Weimer. 2010. *Cost-Benefit Analysis: Concepts and Practice.* Fourth edition. The Pearson Series in Economics. Upper Saddle River, NJ: Prentice Hall, Inc.

Isaacs, Julia. 2008. *The Costs of Benefit Delivery in the Food Stamp Program: Lessons from a Cross-Program Analysis.* Alexandria, VA: Food and Nutrition Service, U.S. Department of Agriculture.

Redcross, Cindy, Victoria Deitch, and Mary Farrell. 2010. *Benefit-Cost Findings for Three Programs in the Employment Retention and Advancement (ERA) Project.* New York: MDRC.

Riccio, James A., Nadine Dechausay, David M. Greenberg, Cynthia Miller, Zawadi Rucks, and Nandita Verma. 2010. *Toward Reduced Poverty Across Generations: Early Findings from New York City's Conditional Cash Transfer Program.* New York: MDRC.

Riccio, James A., Nadine Dechausay, Cynthia Miller, Stephen Nuñez, Nandita Verma, and Edith Yang. 2013. *Conditional Cash Transfers in New York City: The Continuing Story of the Opportunity NYC−Family Rewards Demonstration.* New York: MDRC.

Riccio, James A., and Cynthia Miller. 2016. *New York City's First Conditional Cash Transfer Program: What Worked, What Didn't.* New York: MDRC.

Wolf, Sharon. 2014. "Mediators and Moderators of Impacts of Conditional Cash Transfer Programs: Theoretical Issues and Empirical Findings." Ph.D. dissertation, New York University.

About MDRC

MDRC is a nonprofit, nonpartisan social and education policy research organization dedicated to learning what works to improve the well-being of low-income people. Through its research and the active communication of its findings, MDRC seeks to enhance the effectiveness of social and education policies and programs.

Founded in 1974 and located in New York City and Oakland, California, MDRC is best known for mounting rigorous, large-scale, real-world tests of new and existing policies and programs. Its projects are a mix of demonstrations (field tests of promising new program approaches) and evaluations of ongoing government and community initiatives. MDRC's staff bring an unusual combination of research and organizational experience to their work, providing expertise on the latest in qualitative and quantitative methods and on program design, development, implementation, and management. MDRC seeks to learn not just whether a program is effective but also how and why the program's effects occur. In addition, it tries to place each project's findings in the broader context of related research — in order to build knowledge about what works across the social and education policy fields. MDRC's findings, lessons, and best practices are proactively shared with a broad audience in the policy and practitioner community as well as with the general public and the media.

Over the years, MDRC has brought its unique approach to an ever-growing range of policy areas and target populations. Once known primarily for evaluations of state welfare-to-work programs, today MDRC is also studying public school reforms, employment programs for ex-offenders and people with disabilities, and programs to help low-income students succeed in college. MDRC's projects are organized into five areas:

- Promoting Family Well-Being and Children's Development
- Improving Public Education
- Raising Academic Achievement and Persistence in College
- Supporting Low-Wage Workers and Communities
- Overcoming Barriers to Employment

Working in almost every state, all of the nation's largest cities, and Canada and the United Kingdom, MDRC conducts its projects in partnership with national, state, and local governments, public school systems, community organizations, and numerous private philanthropies.