## OPPORTUNITY NYC | FAMILY REWARDS

# TOWARD REDUCED POVERTY ACROSS GENERATIONS

Early Findings from New York City's Conditional Cash Transfer Program

> James Riccio Nadine Dechausay David Greenberg Cynthia Miller Zawadi Rucks Nandita Verma



MARCH 2010

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#### Funders of the Opportunity NYC–Family Rewards Demonstration

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#### Overview

In 2007, New York City's Center for Economic Opportunity launched Opportunity NYC–Family Rewards, an experimental, privately funded, conditional cash transfer (CCT) program to help families break the cycle of poverty. CCT programs offer cash assistance to reduce immediate hardship, but condition these transfers on families' efforts to build up their "human capital," often by developing the education and skills that may reduce their poverty over the longer term. Family Rewards is the first comprehensive CCT program in a developed country.

Aimed at low-income families in six of New York City's highest-poverty communities, Family Rewards ties cash rewards to pre-specified activities and outcomes in children's education, families' preventive health care, and parents' employment. The three-year program is being operated by Seedco a private, nonprofit intermediary organization — in partnership with six community-based organizations. It is being evaluated by MDRC through a randomized control trial involving approximately 4,800 families and 11,000 children, half of whom can receive the cash incentives if they meet the required conditions, and half who have been assigned to a control group that cannot receive the incentives. This report presents initial findings during the program's early operating period.

#### **Key Findings**

Despite initial challenges in understanding the program's large number of incentives and related payment requirements, nearly all families eventually earned rewards — more than \$6,000, on average, over the first two years. In addition, effects from Family Rewards varied across a wide range of outcome measures — for example, the program:

- Reduced current poverty and hardship, including hunger and some housing and health care hardships
- Increased savings and the likelihood that parents would have bank accounts, and reduced the use of alternative banking institutions (such as check cashers)
- Did not improve school outcomes overall for elementary or middle school students, but *did* increase school attendance, course credits, grade advancement, and standardized test results among better-prepared high school students
- Somewhat increased families' continuous use of health insurance coverage, reduced their reliance on hospital emergency rooms for routine care, and increased their receipt of medical care
- Substantially increased families' receipt of preventive dental care
- Increased employment in jobs that are not covered by the unemployment insurance (UI) system but reduced employment in UI-covered jobs

Because only the first 12 to 24 months of the program are covered — including a "start-up" phase during which operational "kinks" were being worked out — it is too soon to draw firm conclusions about the full potential of Family Rewards. Future reports will present longer-term findings, eventually covering all three years of program operations plus two additional years after the cash incentives are no longer offered.

### Contents

Overview	iii
List of Tables, Figures, and Boxes	ix
Preface	XV
Acknowledgments	xvii
Executive Summary	ES-1

#### Chapter

1	Introduction	1
	Origins of the Family Rewards Demonstration	3
	Program Overview	5
	Theoretical Framework for Family Rewards	10
	The Family Rewards Incentives: Conditions and Amounts	17
	Family Rewards Compared with Other CCT Programs	27
	Expected Effects of Family Rewards	28
	Evaluation Overview and Data Sources	32
	Structure of This Report	34
2	<b>Recruitment and Characteristics of Participating Families</b>	35
	Identifying the Target Population	36
	Strategic Outreach	39
	Parents' Reasons for Joining the Study	44
	The Enrollment and Random Assignment Process	46
	Characteristics of the Study Sample	48
	How Well Does the Study Sample Reflect the Target Population?	57
	Conclusion	61
3	Operating Family Rewards	63
	The Organizational Structure of Family Rewards	64
	Orienting Participants	68
	Engaging Families by Marketing the Incentives	76
	Building the Cash Transfer System	81
	Providing Customer Service and Support	84
	Potential Implications of Operational Challenges and Successes	92
	Conclusion	94
4	Families' Receipt and Use of Program Rewards	95
	The Amount of Reward Money That Families Earned	96
	Parents' Understanding of the Incentives Offer	103

9	Conclusion	257
	Conclusion	255
	Effects for Key Subgroups	
		241 249
	Impacts on Employment and Earnings	239
	Impacts on Parents' Education and Training	237
	Receipt of Work and Training Rewards	236
	Data and Samples	236
8	The Work and Training Rewards Offer	235
8	Work-Related Rewards and Impacts	235
	Conclusion	234
	Effects for Key Subgroups	228
		218
	Impacts on Health Insurance Coverage and Health Care Health Outcomes	
	-	201 208
	Receipt of Health Care Rewards	201
	Measuring the Health-Related Impacts of Family Rewards The Health Care Rewards	196
1	Health Care Rewards and Health Impacts Measuring the Health Related Impacts of Family Rewards	193
7	Health Care Rewards and Health Impacts	195
	Conclusion	189
	Conclusion	181
	Effects for Key Subgroups	181
	Impacts on School Activities and Outcomes	158
	Receipt of Education Rewards	155
	A Brief Portrait of the Students and Their Schools	151
	Data and Samples	150
6	Education Rewards and Impacts The Education Rewards Offer	149
6	Education Dowards and Impacts	149
	Conclusion	145
	Effects for Key Subgroups	141
	Marriage and Family Composition	140
	Housing Stability	138
	Material Hardship	134
	Banking and Financial Services	128
	Income and Poverty	122
5	Income and Material Well-Being	121
_		101
	Conclusion	119
	How Families Spent Their Reward Payments	117
	Why Some Families Earned More Rewards than Others	111
	Parents' Efforts to Claim Rewards	109

vi	

#### Appendix

Supplementary Tables for Chapter 2: Characteristics of the Sample	261
Family Rewards Verification and Payment Processes	275
Supplementary Tables for Chapter 4: Reward Amounts Earned and Paid	279
Response Analysis for the 18-Month Survey	283
Supplementary Tables for Chapter 5	317
Supplementary Tables for Chapter 6: Elementary and Middle School Subgroup	325
Impacts Related to Education	
Supplementary Tables for Chapter 7: Impacts on Health Care and Health	335
Outcomes	
Family Rewards Sample Earnings Statement for Participants	343
ces	349
	Family Rewards Verification and Payment Processes Supplementary Tables for Chapter 4: Reward Amounts Earned and Paid Response Analysis for the 18-Month Survey Supplementary Tables for Chapter 5 Supplementary Tables for Chapter 6: Elementary and Middle School Subgroup Impacts Related to Education Supplementary Tables for Chapter 7: Impacts on Health Care and Health Outcomes Family Rewards Sample Earnings Statement for Participants

## List of Tables, Figures, and Boxes

#### Table

ES.1	Schedule of Rewards	ES-4
ES.2	Impacts on Selected Outcomes Measuring Poverty, Hardship, Health, and Work	ES-10
ES.3	Impacts on Selected Education Outcomes	ES-12
1.1	Key Neighborhoods in Selected Community Districts	7
1.2	Schedule of Incentive Payments, by Domain	19
1.3	Data Sources and Coverage Periods for This Report	33
2.1	Enrollment of Sample Members, by Month of Random Assignment	49
2.2	Characteristics of Families at the Time of Random Assignment	50
2.3	Characteristics of Parents at the Time of Random Assignment	52
2.4	Selected Baseline Characteristics of Parents in Families Receiving and in Families Not Receiving Government Transfer Benefits at the Time of Random Assignment	54
2.5	Characteristics of All Children at the Time of Random Assignment	55
2.6	Percentage of Students Scoring at Proficiency Levels on Prior Year (2007) English Language Arts (ELA) and Math Tests, by Grade Level	59
2.7	Characteristics of Parents in Family Rewards and Similar Parents in the American Community Survey	60
3.1	Neighborhood Partner Organizations (NPOs)	67
3.2	Participants' Experience of Family Rewards Program Operations	86
3.3	Customer Service Guidelines for Neighborhood Partner Organizations (NPOs)	91
4.1	Summary of Rewards Earned by Families	97
4.2	The Continuity with Which Families Earned Rewards	101
4.3	Parents' Understanding of the Family Rewards Incentives and Procedures	104
4.4	Comparison of Families Who Earned Reward Amounts in the Top, Middle, or Bottom Range of Earnings During Years 1 and 2 Combined	112
4.5	Variation in Average Amount of Reward Money Earned, by Family Size and Composition	116
4.6	Parents' Reports on Family's Use of Rewards Received	119
5.1	Impacts on Income and Income Sources	124

5.2	First-Year Impacts on Temporary Assistance for Needy Families (TANF) or Safety Net Assistance (SNA) and Food Stamp Receipt and Payments	127
5.3	Impacts on Banking, Savings, and Debt	130
5.4	Impacts on Material Hardship and Financial Strain	136
5.5	Impacts on Housing and Family Composition	139
5.6	Impacts on Income and Material Well-Being, by Parent's Education Level at the Time of Random Assignment	143
5.7	Impacts on Family Composition and Housing Status, by Parent's Education Level at the Time of Random Assignment	146
6.1	Education Rewards	151
6.2	Students in the Sample, by Grade Level	154
6.3	Selected Characteristics of Schools Attended by Study Sample and of All New York City Public Schools	155
6.4	Education Rewards Earned, by School Level at the Time of Random Assignment	159
6.5	Impacts on Parents' Engagement in Focal Child's Schooling and on Allowance Payments: Elementary School Students	162
6.6	Impacts on Focal Child's Educational Outcomes and Activities: Elementary School Students	164
6.7	Impacts on Attendance and Test Scores: Elementary School Students	166
6.8	Impacts on Parents' Engagement in Focal Child's Schooling and on Allowance Payments: Middle School Students	169
6.9	Impacts on Focal Child's Educational Outcomes and Activities: Middle School Students	170
6.10	Impacts on Attendance and Test Scores: Middle School Students	173
6.11	Impacts on Parents' Engagement in Focal Child's Schooling and on Allowance Payments: High School Students	175
6.12	Impacts on Focal Child's Educational Outcomes and Activities: High School Students	176
6.13	Impacts on Attendance and Credits: High School Students	178
6.14	Impacts on Regents Exams Taken and Passed for Ninth-Graders at the Time of Random Assignment	180
6.15	Impacts on Regents Exams Taken and Passed: All High School Students	182
6.16	Impacts on Graduation	184
6.17	Impacts on School Outcomes for Students in Grade 9 at the Time of Random Assignment, by Performance in the Prior Year (Grade 8)	186

6.18	Impacts on School Outcomes for Students in Grade 9 at the Time of Random Assignment, by Parent's Education	190
6.19	Impacts on School Outcomes for Students in Grade 9 at the Time of Random Assignment, by School Environment	192
7.1	Health Rewards	199
7.2	Rewards Earned for Parents' and Children's Doctor and Dentist Visits	202
7.3	Rewards Earned for Children's Doctor and Dentist Visits, by Child's Age or School Level	204
7.4	Health Insurance Rewards Earned for Maintaining Coverage, by Temporary Assistance for Needy Families (TANF) or Safety Net Assistance (SNA) Status at the Time of Random Assignment	206
7.5	Impacts on Families' Health Insurance Coverage and Parents' Receipt of Health Care Services	209
7.6	Impacts on Parents' Medicaid Receipt, by Temporary Assistance for Needy Families (TANF) or Safety Net Assistance (SNA) Status at the Time of Random Assignment	212
7.7	Impacts on Parents' Health Outcomes	220
7.8	Impacts on Focal Child's Receipt of Health Services and Health Status, by Child's Age or School Level	224
7.9	Impacts on Children's Receipt of Public Health Insurance	227
7.10	Impacts on Family Health Insurance and Parents' Receipt of Health Care, by Respondent's Education Level	230
7.11	Impacts on Parents' Medicaid Receipt, by Respondent's Education Level at the Time of Random Assignment	232
7.12	Impacts on Health Status, by Respondent's Employment Status at the Time of Random Assignment	233
8.1	Work and Training Rewards	237
8.2	Workforce Rewards Earned by Parents	238
8.3	Impacts on Participation in Employment and Education Activities	240
8.4	Impacts on Educational Attainment	241
8.5	First-Year Impacts on UI-Covered Employment and Earnings	243
8.6	Comparison of Employment and Earnings Impacts Based on Administrative Records and Similar Impacts Based on Survey Data, Among Respondents to the	245
~ -	18-Month Survey	246
8.7	Impacts on Job Characteristics	250

8.8	Impacts on Work and Earnings, by Respondent's Employment Status and Education Level at the Time of Random Assignment	252
A.1	Characteristics of Families at the Time of Random Assignment, by Research Group	263
A.2	Characteristics of Parents at the Time of Random Assignment, by Research Group	264
A.3	Characteristics of All Children at the Time of Random Assignment, by Research Group	266
A.4	Characteristics of Families at the Time of Random Assignment, by Community District	269
A.5	Characteristics of Parents at the Time of Random Assignment, by Community District	271
C.1	Summary of Rewards Earned by Families in Program Years 1 and 2 Combined, by Community District	281
C.2	Supplementary Information on Patterns of Reward Receipt	282
D.1	Characteristics of the Fielded Survey Sample at the Time of Random Assignment, Compared with Those Not Selected for the Survey	292
D.2	Characteristics of the Fielded Survey Sample at the Time of Random Assignment, by Response Status	296
D.3	Estimated Regression Coefficients for the Probability of Being a Respondent to the Family Rewards 18-Month Survey	299
D.4	Characteristics of the Survey Respondents at the Time of Random Assignment, by Research Group	300
D.5	Estimated Regression Coefficients for the Probability of Being a Program Group Respondent to the Family Rewards 18-Month Survey	303
D.6	Year 1 Impacts on UI-Covered Employment and Earnings for the Research, Fielded, and Respondent Samples	304
D.7	Impacts on Attendance, Test Scores, and Credits for the Research, Fielded, and Respondent Samples	305
D.8	Weighted Impacts on Material Hardship and Financial Strain	307
D.9	Weighted Impacts on Parents' Engagement in Focal Child's Schooling and on Allowance Payments: Elementary School Students	309
D.10	Weighted Impacts on Families' Health Insurance Coverage and Parents' Receipt of Health Care Services	310
D.11	Weighted Impacts on Parents' Health Outcomes	312
D.12	Weighted Impacts on Job Characteristics	314

E.1	Impacts on Income and Material Well-Being, by Employment Status at the Time of Random Assignment	319
E.2	Impacts on Household Composition and Housing Status, by Parent's Employment Status at the Time of Random Assignment	322
E.3	First-Year Impacts on Temporary Assistance for Needy Families (TANF) or Safety Net Assistance (SNA) and Food Stamp Receipt and Payment, by Parent's Employment and Education Level at the Time of Random Assignment	323
F.1	Impacts on School Outcomes for Elementary School Students at the Time of Random Assignment, by Performance in Prior Year	327
F.2	Impacts on School Outcomes for Elementary School Students at the Time of Random Assignment, by Parent's Education	328
F.3	Impacts on School Outcomes for Elementary School Students at the Time of Random Assignment, by School Environment	329
F.4	Impacts on School Outcomes for Middle School Students at the Time of Random Assignment, by Performance in Prior Year	331
F.5	Impacts on School Outcomes for Middle School Students at the Time of Random Assignment, by Parent's Education	332
F.6	Impacts on School Outcomes for Middle School Students at the Time of Random Assignment, by School Environment	333
G.1	Impacts on Child Medicaid Receipt, by Temporary Assistance for Needy Families (TANF) or Safety Net Assistance (SNA) Status at the Time of Random Assignment	337
G.2	Impacts on Parents' Health Status, by Respondent's Education Level at the Time of Random Assignment	339
G.3	Impacts on Family's Health Insurance Coverage and Parents' Receipt of Health Care, by Employment Status at the Time of Random Assignment	340
G.4	Impacts on Parents' Medicaid Receipt, by Respondent's Employment Status at the Time of Random Assignment	342

#### Figure

1.1	A Logic Model for Family Rewards	12
2.1	Recruitment and the Random Assignment Process	40
3.1	Family Rewards: Operational Structure and Major Points of Interaction	65
3.2	Family Rewards: Overview of Program and Procedures	69

3.3	Family Rewards Payment Cycle Timeline	71
3.4	Family Rewards Sample Coupon for Full-Time Work	77
3.5	Family Rewards Marketing Postcard	82
4.1	Total Amount of Reward Money Earned by Families in Program Years 1 and 2 Combined, by Domain	99
4.2	Family Rewards Activity List for Participants	107
6.1	First-Year School Attendance Levels and Proficiency Rates for Students in the Control Group, by Grade Level	157
7.1	Family Rewards Bilingual Nonemergency Medical Checkup Form for Children	200

#### Box

1.1	Family Rewards Demonstration Timeline	5
2.1	Eligibility for Family Rewards	37
2.2	Outreach Case Study: Appealing to the Target Community	43
2.3	Documentation Requirements	47
3.1	Introducing Family Rewards to Participants: An Example of a Successful Orientation	73
3.2	Example of an Unsuccessful Family Rewards Orientation Session	75
3.3	Motivational Messaging in the Family Rewards Orientations	76
3.4	Evolution of the Family Rewards Workshops	80
5.1	How to Read Impact Tables in This Report	123
6.1	Sharing Reward Money with Children	163
6.2	Parents' Involvement in Improving Test Scores and Academic Performance for Elementary and Middle School Students	185
6.3	Lower- Versus Higher-Performing High School Students	188
8.1	Income from Family Rewards and Work Decisions	244
8.2	UI-Covered and Non-UI-Covered Jobs	245
8.3	Documenting Work	248
D.1	Sample Definitions	286

#### Preface

Is it inevitable that poverty will be handed down from parent to child? Or is it possible to create an opportunity for parents to offer the next generation a better inheritance? In New York City, the experimental antipoverty program called Opportunity NYC–Family Rewards is trying to answer those questions by helping to reduce families' poverty and hardship today while simultaneously helping them to develop their "human capital" — that is, the skills and capacities that will allow parents and their children to escape poverty over the longer term and break the cycle of intergenerational poverty.

Not an easy task — particularly in a city as large and diverse as New York. But efforts have been made in that direction elsewhere — perhaps most famously, in Mexico's highly successful Oportunidades program, which is a conditional cash transfer (CCT) program and was one of the main inspirations for Family Rewards. CCT programs offer cash incentives to help families reduce their poverty in the short term if they take certain steps to improve their and their children's futures. Oportunidades provides direct cash payments to very poor families, which it initially offered in rural areas and later expanded to urban areas, that are conditioned in part on children's continued school enrollment, families' use of preventive health care, and good child nutrition practices.

But while CCT programs have shown some promise in Mexico and in other poor and middle-income countries, they have not been attempted on a large, broad-ranging scale in any developed country. In 2006, mindful of the differences between Mexico's rural poor (where the most evidence had been amassed) and the urban poor in this country, but impressed by the success of Oportunidades and other countries' CCT programs, Mayor Michael Bloomberg's Center for Economic Opportunity (CEO) began to explore whether a CCT program could be adapted for use in New York City's poorest neighborhoods. By 2007, Opportunity NYC–Family Rewards had been born. Aware that a CCT program would be controversial, CEO sought and obtained private funding for the initiative in the hope that, if it were successful, the federal government would provide additional support to expand the program to cities nationwide.

Despite much consternation on both the right and the left about the advisability and feasibility (and even the morality) of using conditional cash transfers, especially for educational outcomes, no hard data on the use of a comprehensive CCT program in an American city have been available to either refute or substantiate their objections — just theories and beliefs. Now, data collection and analysis have begun for Family Rewards, with the goal of hastening the time when ideology meets evidence. It was the vision of CEO and its philanthropic partners for this initiative that Opportunity NYC–Family Rewards had the potential to help low-income New Yorkers while also building evidence on a poverty reduction strategy that could have national and international importance. It is MDRC's hope that the findings from this program will inform efforts both here and abroad not only to reduce poverty in the short term but to prevent its ongoing recurrence in the future.

> Gordon Berlin President

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We appreciate the continuing support of all the funders of the demonstration. These include Bloomberg Philanthropies, The Rockefeller Foundation, The Starr Foundation, the Open Society Institute, the Robin Hood Foundation, the Tiger Foundation, The Annie E. Casey Foundation, American International Group, the John D. and Catherine T. MacArthur Foundation, and New York Community Trust. We are especially grateful to Judith Rodin, Darren Walker, and Margot Brandenburg of the Rockefeller Foundation and to Michael Weinstein of the Robin Hood Foundation for their inspiration, guidance, and steady encouragement from the very beginning of the demonstration.

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The Authors

#### **Executive Summary**

In 2007, New York City launched Opportunity NYC–Family Rewards, an experimental, privately funded, conditional cash transfer (CCT) program to help families break the cycle of intergenerational poverty. CCT programs offer cash assistance to reduce immediate hardship and poverty but condition this assistance — or cash transfers — on families' efforts to improve their "human capital" (typically, children's educational achievement and family health) in the hope of reducing their poverty over the longer term. Such programs have grown rapidly across lower- and middle-income countries, and evaluations have found some important successes. Family Rewards is the first comprehensive CCT program in a developed country.

Aimed at low-income families in six of New York City's highest-poverty communities, Family Rewards ties cash rewards to a pre-specified set of activities and outcomes in the areas of children's education, family preventive health care, and parents' employment. The program is available to 2,400 families for three years. Inspired by Mexico's pioneering Oportunidades program, Family Rewards' program effects are being measured via a randomized control trial.

The Family Rewards demonstration is one of 40 initiatives sponsored by New York City's Center for Economic Opportunity (CEO), a unit within the Office of Mayor Michael R. Bloomberg that is responsible for testing innovative strategies to reduce the number of New Yorkers who are living in poverty. Two national, New York-based nonprofit organizations — MDRC, a nonpartisan social policy research firm, and Seedco, a workforce and economic development organization — worked in close partnership with CEO to design the demonstration. Seedco, together with a small network of local community-based organizations, is operating Family Rewards, and MDRC is conducting the evaluation and managing the overall demonstration. A consortium of private funders is supporting the project.<sup>1</sup>

This report presents the initial findings from an ongoing and comprehensive evaluation of Family Rewards. It examines the program's implementation in the field and families' responses to it during the first two of its three years of operations. This evaluation period, beginning in September 2007 and ending in August 2009, encompasses a start-up phase as well as a stage when the program was beginning to mature. The report also presents early findings on the program's effects, or "impacts," on a wide range of outcome measures. For some measures, the results cover only the first program year, while for others they also cover part or all of the second year. No data are available yet on the third year. The evaluation findings are based on

<sup>&</sup>lt;sup>1</sup>These funders include Bloomberg Philanthropies, The Rockefeller Foundation, The Starr Foundation, the Open Society Institute, the Robin Hood Foundation, the Tiger Foundation, The Annie E. Casey Foundation, American International Group, the John D. and Catherine T. MacArthur Foundation, and New York Community Trust.

analyses of a wide variety of administrative records data, responses to a survey of parents that was administered about 18 months after random assignment, and qualitative in-depth interviews with program staff and families.

Overall, this study shows that, despite an extraordinarily rapid start-up and early challenges, the program was operating largely as intended by its second year. Although many families struggled with the complexity of the program, most were substantially engaged with it and received a large amount of money for meeting the conditions it established. During the period covered by the report, Family Rewards reduced current poverty (its main short-term goal) and produced a range of effects on a variety of outcomes across all three program domains (children's education, family health care, and parents' work and training).

#### The Program Model

All CCT programs condition immediate poverty relief on families' investments in human capital, especially in children. In adopting this core principle, the designers of Family Rewards understood that the model and its delivery structure would have to be adapted to suit a vastly different social, economic, and policy context. The nature of poverty and its underlying causes are not the same in New York City as in Mexico or other middle-income and lowerincome countries. The focus of Family Rewards on parents' work and children's academic achievement (not just school attendance), its delivery by not-for-profit organizations, and the way it complements existing social welfare programs and services are among the features that distinguish New York City's program from many other CCT programs.

#### **Types of Rewards**

New York City's program includes an extensive set of rewards with the following conditions:

- Education-focused conditions, which include meeting goals for children's attendance in school, achievement levels on standardized tests, and other school progress markers, as well as parents' engagement with their children's education
- **Health-focused conditions**, which include maintaining health insurance coverage for parents and their children, as well as obtaining age-appropriate preventive medical and dental checkups for each family member
- Workforce-focused conditions, aimed at parents, which include sustaining full-time work and participation in approved education or job training activities

The program offered a set of 22 different incentives during its first two years, ranging in value from \$20 to \$600. (See Table ES.1 for a detailed list.) By rewarding a wide range of activities, the program gave families many different ways in which to earn money and it was able to avoid attaching overly large amounts of money to any one activity or outcome. Based on assessments of the program's early operational experiences, including the complexity of administering so many different rewards, along with preliminary impact evidence, a number of rewards were discontinued for the third year. This was done to simplify the program, lower its costs, and make it easier to replicate should it prove to be successful.<sup>2</sup>

The program allows families to receive cash rewards totaling several thousand dollars per year over a three-year period. The actual amount that families receive depends on the particular rewards they earn (some carry higher payments than others) and the number of rewards they earn. In addition, larger families can earn higher payments because each child's actions can earn education and health rewards. In general, payments are made directly to the parents. However, some education-related payments for high school students are paid directly to the students; depending on the reward, the entire payment is made to the student (for example, for passing a Regents exam) or split with the parents (for example, for meeting the attendance standard).

Like all CCT programs, Family Rewards is based on the assumption that, for a variety of reasons, families may underinvest in their own human capital development. That lack of investment — while certainly not the only reason for their financial hardship — can make it difficult for parents and their children to escape poverty. The cash payments, in addition to being a short-term *income supplement* to reduce hardship immediately, are intended to function as *enabling resources* and as *inducements*. As enabling resources, the extra money families earn, as it begins to accumulate, may make it more feasible for them to support and promote their children's educational progress, obtain preventive health care, and pursue employment opportunities; as inducements, the rewards may encourage families to make extra investments of time and energy for those purposes. To maximize the potential incentive value of the rewards, the program imposes no restrictions on how families can spend the money.

As noted above, the Family Rewards model differs in important ways from CCT approaches in other countries. In many countries, CCT programs function as the main government-sponsored safety net, or as an important component of it, and they most commonly tie the payments only to children's school enrollment and attendance and to routine health checkups.

<sup>&</sup>lt;sup>2</sup>The discontinued incentives include the attendance reward for elementary and middle school students, the rewards to parents for discussing their children's annual English language arts (ELA) and math test results with teachers, rewards for obtaining library cards, all health insurance rewards, and the rewards for making doctor-recommended follow-up visits.

#### The Opportunity NYC Demonstration: Family Rewards

#### Table ES.1

#### **Schedule of Rewards**

Activity	Reward Amount
Education incentives	
Elementary and middle school students	
Attends 95% of scheduled school days (discontinued after Year 2)	\$25 per month
Scores at proficiency level (or improves) on annual math and English language arts (ELA) tests Elementary school students Middle school students	\$300 per math test; \$300 per ELA test \$350 per math test; \$350 per ELA test
Parent reviews low-stakes interim tests (discontinued after Year 1)	\$25 for parents to download, print, and review results (up to 5 times per year)
Parent discusses annual math and ELA test results with teachers ( <i>discontinued after Year 2</i> )	\$25 (up to 2 tests per year)
High school students	
Attends 95% of scheduled school days Accumulates 11 course credits per year Passes Regents exams Takes PSAT test Graduates from high school	<ul> <li>\$50 per month</li> <li>\$600</li> <li>\$600 per exam passed (up to 5 exams)</li> <li>\$50 for taking the test (up to 2 times)</li> <li>\$400 bonus</li> </ul>
All grades	
Parent attends parent-teacher conferences Child obtains library card ( <i>discontinued after Year 2</i> )	\$25 per conference (up to 2 times per year) \$50 once during program
Health incentives	
Maintaining public or private health insurance ( <i>discontinued after Year 2</i> ) For each parent covered If all children are covered	Per month: \$20 (public); \$50 (private) Per month: \$20 (public); \$50 (private)
Annual medical checkup	\$200 per family member (once per year)
Doctor-recommended follow-up visit (discontinued after Year 2)	\$100 per family member (once per year)
Early-intervention evaluation for child under 30 months old, if advised by pediatrician	\$200 per child (once per year)
Preventive dental care (cleaning/checkup)	\$100 per family member (once per year for children 1-5 years old; twice per year for fami- ly members 6 years of age or older)
Workforce incentives	
Sustained full-time employment	\$150 per month
Education and training while employed at least 10 hours per week (employment requirement discontinued after Year 2)	Amount varies by length of course, up to a maximum of \$3,000 over three years

Family Rewards includes many more conditions and rewards. In the education domain, it is unusual in rewarding children's school *achievement*, including test score results, not just school enrollment and attendance. Its work-related component for parents is also distinctive. And as a short-term intervention layered on top of an already well-developed social safety net, Family Rewards serves as a supplemental program rather than as the core welfare system, as in Mexico and a number of other countries. It is also unusual in being operated by private, nonprofit agencies rather than by the government.

#### The Delivery Structure

Seedco, the main implementing agency, assembled a network of local organizations in the designated community districts to assist in implementing Family Rewards. Called "Neighborhood Partner Organizations" (NPOs), these agencies recruited and enrolled eligible families into the research sample and now serve as the face of the program in the communities.<sup>3</sup> They provide ongoing customer service to participants who request assistance, such as in making claims for the rewards or for information about other services in the community. NPOs also conduct informational workshops on how to earn and claim rewards in each of the domains in which the incentives are offered. Seedco maintains a telephone helpline and Web site to provide additional information and assistance to families.

Once Seedco verifies that families have earned rewards (which it does using a combination of automated data from city agencies and special "coupon book" forms submitted directly by participants), it initiates a process of transferring payments electronically into participants' newly opened or existing bank accounts or, if they prefer, onto stored value cards (prepaid cards, like gift cards or prepaid phone cards, that are not connected to any individual account holder). To provide families with a safe banking option, New York City officials worked with several banks and credit unions to develop special "Opportunity NYC accounts" that carry no fees and come with debit cards that are impossible to overdraw. The reward payments are made every two months, and families can access the money at any time through any automatic teller machine (ATM).

Envisioned as an "incentives-only" intervention, the program model does not provide social services or case management. For example, it makes no provision for staff to work with families to develop personalized action plans for pursuing education, health care, or employment goals, and staff members do not provide ongoing counseling to families to address personal problems that make it difficult for them to take full advantage of the program. The pro-

<sup>&</sup>lt;sup>3</sup>These organizations are Urban Health Plan and BronxWorks (formerly Citizens Advice Bureau) in the Bronx; Brownsville Multi-Service Center and Groundwork, Inc., in Brooklyn; and Catholic Charities and Union Settlement Association in Manhattan.

gram also does not provide any direct services, such as tutoring, test preparation, job search classes, or skills training. However, it does include an information-and-referral component wherein the implementing agencies (Seedco and the NPOs) refer families (upon request) to other agencies in the community that provide relevant services.

#### The Study Sample and the Recruitment Process

Family Rewards is being evaluated through a randomized control trial involving approximately 4,800 families and 11,000 children who applied to the program. The program could not serve all applicants, and the selection of participants was determined on a random basis. Through a lottery-like process, half of the applicant families were picked for Family Rewards and offered the incentives and half were assigned to a control group that was not offered the incentives. Using such a random process to allocate sample members to one group or the other helps ensure that the program effects estimated by the evaluation are truly a result of the intervention.

Family Rewards was targeted toward families who lived in selected community districts and who had incomes at or below 130 percent of the federal poverty level. Eligible families had to have at least one child in the fourth, seventh, or ninth grade. These grades were selected because they are at or near the start of critical transition points in education. Once a family volunteered for the study, *all* children in the family who were school age or younger were eligible for the program. However, the parents as well as the children had to be legal residents of the United States in order to be eligible.

Following an initial design and fundraising effort that concluded in the spring of 2007, an intensive effort was quickly launched in the summer of 2007 to begin building the program infrastructure, recruit families, and implement the random assignment process in time for program operations to begin with the start of the new school year in September 2007. To ensure that the program reached a broad cross-section of children, not just the most motivated and active, potentially eligible families living in the targeted communities were identified from school lists maintained by the New York City Department of Education. Seedco and the NPOs then attempted to recruit a representative group of those families through mailings, phone calls, and home visits, inviting them to apply to be in the study. Those who agreed were randomly assigned to the program or control group. Several analyses comparing families who entered the sample with those who were not in the study suggest that, despite its voluntary nature, the recruited sample is not a distinctively more advantaged or less advantaged subset of the broader target population.

As it turned out, the challenges of recruiting so many families so quickly — particularly in light of the fact that much of the contact information that was available to the recruiters was

out of date — meant that it took longer than had been hoped to recruit the full sample, so the enrollment period was extended through December 2007. Thus, some families did not enter the program until a few months after it began (which is one reason why the first program year is considered a start-up phase).

A majority of the families (81 percent) who enrolled in Family Rewards were oneparent families at the time of random assignment, but they have a diverse set of background characteristics. For example, over half of all families (57 percent) had only one or two children, but 43 percent had three or more. About 47 percent of the families were Hispanic/Latino, while most others (51 percent) were black, non-Hispanic/Latino. Just over half of the parents (53 percent) were employed, with about 37 percent working full time. About a third (32 percent) had only a high school diploma or General Educational Development (GED) certificate, and about 18 percent had an associate's or bachelor's degree, while 50 percent had not completed high school and did not have a GED certificate. About 83 percent were U.S. citizens, while the rest (17 percent) were legal permanent residents.

#### Implementation and Reward Receipt

As the first comprehensive CCT program in the United States, Family Rewards was breaking new ground, and given the model's many facets and its many operational demands — recruiting, informing, verifying, and paying participants on a trial basis — its operational feasibility and success could not be taken for granted. The experience to date indicates that the model is feasible — though challenging — to operate.

• The organizations operating Family Rewards succeeded in implementing all the major program systems and procedures that the model requires, although it took until the second year for the program to operate as envisioned.

The rapid launch precluded a pilot phase to work out operational problems. Consequently, the first year of the program was one in which procedures for engaging families, educating them about the rewards, verifying claims, and making payments were still being refined, all while some sample members were still being enrolled into the study. Not surprisingly, some aspects of program delivery suffered as a result, especially in initial efforts to orient and explain the complex set of rewards to families. However, as the program matured and staff developed more experience in operating it, many of these early challenges were overcome, and, by the time the 18-month survey was conducted, participants gave high ratings to the assistance they received from the program. By the second year of implementation, program operations were much improved and the model was being operated in a way that was generally consistent with its designers' vision. Over the first two program years, more than \$14 million in rewards had been paid to families. Further improvements in operating procedures were being planned as the program entered its third and final year.

# • Parents understood the program's general offer and purposes but many were initially confused about some of the details, requiring the providers to make ongoing efforts to educate families about the specific rewards and how to claim them.

Survey and in-depth qualitative data reveal that parents possessed a good general awareness of the incentives, but their understanding was fuzzy in some places. For example, they tended to view more school-related activities and behavior as qualifying for incentives than was actually the case. This may indicate that participants believed that positive behavior in general would be rewarded. Such a misperception may have positive effects on families, but it shows that knowledge of the program offer was imprecise.

Qualitative data suggest wide variation in the level of understanding that children and youth who were enrolled in the program may have had about the rewards. While some parents discussed the program in detail with their elementary or middle school-age children and viewed the rewards as another tool to motivate their children, others provided only limited information, not wanting to emphasize money as a reason for achievement. High school students, who could receive some incentives directly, were the target of independent marketing efforts, although these efforts were not undertaken until the second year of operations as it became clear that many of the participating high school students did not fully understand — or believe — that they could earn money for their school attendance and performance.

## • Overall, families were substantially engaged with the program, earning reward payments of more than \$6,000, on average, in the first two years.

Nearly all families (98 percent) earned at least some rewards in both program years, and 65 percent earned payments in every period in which rewards were available. Payments averaged more than \$6,000 during the first two program years combined, with 78 percent earning at least \$3,000, and 37 percent earning \$7,000 or more. Families receiving the highest amounts of money included parents who, at the time of entering the study, were more educated, more likely to be working full time, and more likely to be married or in a legal domestic partnership than parents in other families. The higher-reward earners also had more children and were less likely to be receiving government safety net benefits. They also had greater levels of contact with the NPOs and Seedco and less difficulty keeping track of their claims for rewards.

Families' overall reward earnings came largely from meeting conditions in the education and health domains: 44 percent for meeting education conditions, 38 percent for meeting health-related conditions, and 18 percent for meeting work-related conditions.

## • Parents used the money earned from Family Rewards to provide for basic family needs and to celebrate their children's achievements.

Family Rewards imposed no restrictions on families' access to their reward money or how they could spend it, and families used the extra money in a variety of ways. Common uses included paying for basic living expenses, paying off bills, paying for school-related supplies or activities, saving for the future, buying electronic goods, and covering special recreational outings for the family, sometimes as a reward for school accomplishments. For many families, celebration of accomplishments took the form of spending time together on leisure activities, like eating out, going on a trip, or seeing a movie that would otherwise have been prohibitively expensive, especially for larger families with limited means. Many parents also used the money for children's allowances.

#### Interim Impacts

Findings on the program's impacts — that is, the differences in outcomes for the Family Rewards program group and the control group — are available on a wide variety of measures covering one to two years after each family's time of entry into the study, depending on the data source. Thus, the results reported here provide only an early indication of the program's effects. Given the nature of the model, it is reasonable to expect that, if Family Rewards is successful, its effects in the short term will be most evident for measures of poverty and material hardship, which can be directly influenced by transferring resources. Its impacts on human capital outcomes, which require changes in how family members spend their time and energy, and, in some cases, necessitate learning new skills, may take longer to emerge.

## • Family Rewards had a wide range of effects across a number of domains and outcome measures.

The overall pattern of impacts is noteworthy for its broad scope: early positive impacts on current poverty,<sup>4</sup> small or modest impacts on some measures of human capital, and no effect on a number of other important outcomes of interest. (See Tables ES.2 and ES.3.)

<sup>&</sup>lt;sup>4</sup>In this study, poverty estimates were computed by comparing parents' cash income (excluding tax credits) and food stamps with the federal poverty levels for families of various sizes.

#### The Opportunity NYC Demonstration: Family Rewards

#### Table ES.2

#### Impacts on Selected Outcomes Measuring Poverty, Hardship, Health, and Work

	Program	Control	Difference	Change
Outcome	Group	Group	(Impact)	(%)
Poverty and hardship (%)				
Household income at or below the federal poverty level	58.9	70.0	-11.1 ***	-15.8
Household income below 50% of the federal poverty level	16.7	30.0	-13.2 ***	-44.1
Family "sometimes" or "often" does not have enough food to eat	14.8	22.1	-7.3 ***	-32.9
Family usually did not have enough money to make ends meet at end of month	34.1	41.8	-7.8 ***	-18.5
Banking and savings				
Parent agrees "strongly" or "somewhat" that current financial situation is "better than last year" (%)	62.7	44.5	18.3 ***	41.1
Parent currently has bank account (%)	73.3	51.8	21.5 ***	41.4
Parent cashes check at check casher at least once a month (%)	29.2	36.5	-7.3 ***	-19.9
Family's average savings (\$)	575	354	221 **	62.6
Parent's use of health services and parent's health status (%	<u>%)</u>			
Had a period with no health insurance coverage since random assignment	16.1	19.4	-3.3 **	-17.0
Has a personal doctor or health care provider	94.4	93.4	1.0	
Has a usual source of health care	94.9	91.4	3.5 ***	3.8
Uses hospital emergency room for routine health care	3.3	5.3	-2.0 ***	-38.1
Saw a personal doctor in the past 12 months	86.1	82.3	3.8 ***	4.6
Had a health checkup since random assignment	93.2	91.7	1.5	
Currently being treated for any medical condition	47.2	44.4	2.8 *	6.3
Self-rated health is "excellent"	15.8	13.5	2.3 *	17.3
Had a dental visit since random assignment At least 1 visit At least 2 visits	86.0 67.4	83.0 57.9	3.0 ** 9.5 ***	3.6 16.3

(continued)

	Program	Control	Difference	Change
Outcome	Group	Group	(Impact)	(%)
High school student's use of health services (%)				
Had health checkup or got shots in past 12 months	96.1	95.8	0.3	
Has usual source of care when sick	96.1	96.0	0.1	
Hospital emergency room	9.8	15.9	-6.1 ***	-38.4
Other place	86.3	80.1	6.2 **	7.8
Had a dental visit since random assignment				
At least 1 visit	92.7	89.6	3.1	
At least 2 visits	70.3	57.2	13.1 ***	23.0
Employment				
Employment status, UI records <sup>a</sup>				
Ever employed, Year 1 (%)	56.2	58.6	-2.4 ***	-4.1
Average quarterly employment (%)	48.9	50.3	-1.4 *	-2.8
Average earnings, Year 1 (\$)	12,091	12,377	-286	
Employment status, survey (%)				
Currently working	59.9	54.3	5.6 ***	10.4
Worked full time (at least 30 hours per week)	48.6	43.0	5.6 ***	12.9
Parent's education and training (%)				
Ever participated in an education, training,				
or employment activity	37.3	39.6	-2.3	
Has any trade license or training certification	54.2	51.2	3.0 *	5.9
Highest degree or diploma				
Associate's degree	10.2	7.7	2.5 **	32.1
Bachelor's degree	8.4	8.3	0.1	
Sample size (total $=$ 3,082)	1,574	1,508		

#### Table ES.2 (continued)

SOURCES: MDRC calculations using data from the Family Rewards 18-Month Survey and New York State unemployment insurance (UI) wage records.

NOTES: See tables in the complete report for further details on the data in this table.

Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment

characteristics of families or sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between outcomes for the program and control groups.

<sup>a</sup>Dollar averages include zero values for sample members who were not employed.

#### The Opportunity NYC Demonstration: Family Rewards

#### Table ES.3

#### **Impacts on Selected Education Outcomes**

	Program	Control	Difference	Change
Outcome (%)	Group	Group	(Impact)	(%)
4th-grade cohort				
Had attendance rate of 95% or higher, Year 2	44.5	41.6	2.9	
Proficient on math test, Year 2	80.3	78.6	1.7	
Proficient on English language arts (ELA) test, Year 2	67.6	68.1	-0.4	
7th-grade cohort				
Had attendance rate of 95% or higher, Year 2	36.6	34.9	1.6	
Proficient on math test, Year 2	61.9	63.5	-1.6	
Proficient on English language Arts (ELA) test, Year 2	46.5	46.0	0.5	
9th-grade cohort_				
Had attendance rate of 95% or higher, Year 2	28.8	23.7	5.2 ***	21.8
Remained in 9th grade	16.3	18.0	-1.8	
Passed at least 2 Regents exams, Years 1-2	38.2	37.6	0.7	
Earned 22 or more credits, Years 1-2	41.0	41.1	-0.1	
<u>9th-grade cohort, by proficiency level</u> on 8th-grade standardized math test <sup>a</sup>				
Had attendance rate of 95% or higher, Year 2			+++	
More proficient subgroup	51.1	36.2	14.9 ***	41.2
Less proficient subgroup	21.8	19.3	2.5	
	2110	1710		
Remained in 9th grade, Year 2	3.0	8.8	† -5.8 ***	-66.3
More proficient subgroup Less proficient subgroup	3.0 22.1	8.8 21.8	-5.8 ****	-00.3
Less proncient subgroup	22.1	21.8	0.5	
Earned 22 credits, Years 1-2			++	
More proficient subgroup	72.7	64.5	8.1 **	12.6
Less proficient subgroup	38.1	40.1	-2.0	
Passed at least 2 Regents exams, Years 1-2			ţ	
More proficient subgroup	77.6	71.7	5.9 *	8.2
Less proficient subgroup	22.9	25.2	-2.3	

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

NOTES: 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 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 family or sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to the differences between outcomes for the program and control groups. Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively

<sup>a</sup>Proficiency levels are based on performance on the annual New York State math test administered in the eighth grade, prior to the student's entering the Family Rewards sample. In New York State, students who score at a level of 3 or higher on a 4-point scale are deemed "proficient." Similar results were attained when proficiency was defined in terms of performance on the annual ELA test.

#### **Poverty and Hardship**

• Family Rewards reduced current poverty and economic hardship, including reductions in difficulties securing enough food for the family and some housing and health care hardships.

The reduction of current poverty and hardship is a key short-term objective of Family Rewards, as it is for all CCT programs. In this area, Family Rewards substantially improved families' economic position in its first two years. Counting the value of the reward payments, it boosted average monthly income for the program group by \$338, or about 21 percent relative to the control group's income. As shown in Table ES.2, it reduced the proportion of families with household income at or below the federal poverty level by 11 percentage points and cut "severe poverty" (defined as having income less than 50 percent of the federal poverty level) by nearly half, reducing it from 30 percent of the control group to 17 percent among the program group. (All impacts discussed in this summary are statistically significant unless otherwise noted, thus indicating a high degree of confidence that the observed differences between program and control groups are most likely a result of the program rather than of chance.)

The extra income helped families reduce a variety of material hardships. For example, the proportion of families who suffered from "food insecurity" (as indicated by parents responding on the 18-month survey that their families "sometimes" or "often times" did not have enough to eat) dropped from 22 percent in the control group to 15 percent in the program group, a reduction of 7 percentage points (or 33 percent).<sup>5</sup> Relative to the control group, program group families were also less likely to report that they had to forgo medical care or avoid purchasing needed medicines because they could not afford them (not shown in table). They were more likely to report that they had enough money to "make ends meet" and that their financial situation had improved over the prior year.

## • Family Rewards increased the likelihood that parents would have bank accounts and that they would increase their savings. It also reduced the use of alternative banking institutions (such as check cashers).

The families in Family Rewards were 9 percentage points more likely than those in the control group to have any savings (25 percent compared with 16 percent, respectively). Average savings for the program group (counting those with no savings) increased by \$221 (a gain of 63 percent against a control group mean of \$354). The program also increased the likelihood that parents would have bank accounts at the time of the survey by 22 percentage points. At the same time, it reduced parents' reliance on alternative financial institutions, such as neighborhood check-cashing outlets, by 7 percentage points.

<sup>&</sup>lt;sup>5</sup>Slight discrepancies in percentages are a result of rounding.

#### Education

 Family Rewards did not improve school outcomes for elementary or middle school students.

The analysis examined the effects of Family Rewards on school attendance rates and on annual standardized test scores in math and English language arts (ELA) during the first two years of the program. Among elementary and middle school students, it found few statistically significant differences on these measures between students in the program group and those in the control group. (For selected measures, see Table ES.3.) The absence of effects on attendance measures is not surprising because, although there was still room for improvement, attendance rates were fairly high for the control group, averaging about 90 percent. Data from the parent survey indicate that Family Rewards increased the likelihood that middle school students were more likely than control group members to be involved in school-related activities, such as programs to help with schoolwork or homework, school clubs, school musical programs, and dance or art lessons. However, there is no indication so far that these extra efforts have translated into higher academic achievement in school.

## • Family Rewards substantially improved the educational achievement of high school students who were better prepared for high school at the time they entered the program.

The program had few effects on school outcomes for high school students overall. However, it had impressive effects for a subgroup of high school students who entered high school better prepared academically and may have been in a better position to take advantage of the incentives offer. For example, among ninth-graders who had scored at or above the basic proficiency level on their eighth-grade standardized tests prior to random assignment (a sub-group that made up about a third of the overall sample of ninth-graders), the program had substantial positive effects across a range of school outcomes. These include a 6 percentage point reduction in the proportion of students who repeated the ninth grade, a 15 percentage point increase in the likelihood of having a 95 percent or better attendance rate (in Year 2), an 8 percentage point increase in the likelihood of earning at least 22 credits (11 credits per year are needed to remain on track for on-time graduation), and an increase of 6 percentage points in the likelihood of passing at least two Regents exams.<sup>6</sup> These effects are noteworthy because they occurred without any changes in the schools themselves or in teachers' instructional practices. Moreover, they were observed among sample members who attended lower-performing schools and those who attended higher-performing schools. No statistically significant effects of these

<sup>&</sup>lt;sup>6</sup>Regents exams are administered to all public high school students in New York State. Students must pass at least five tests in specified subject areas in order to graduate with a diploma recognized by the New York State Board of Regents, which sets standards and regulations for all public schools.

kinds were observed for ninth-graders who had scored below the proficiency threshold on the eighth-grade standardized exams prior to random assignment, although there was evidence that these students were more likely than their control group counterparts to take a Regents exam.

Given that families were left largely on their own to find ways to earn the incentives in Family Rewards, it is understandable that the achievement gains would be larger for the more proficient subgroup. These students were staying afloat academically and probably had the personal and other resources necessary to take advantage of the incentives that were offered. The incentives offer may have provided enough inducement for many of them to expend the extra effort to meet educational benchmarks. In contrast, the less proficient students may have faced too many barriers, both academic and otherwise, and were too distant from educational benchmarks for the incentives to make a difference.

Some critics of educational incentives worry that these external rewards will reduce children's intrinsic motivation to learn, especially after the incentives end, thus harming their educational outcomes. So far, there is no indication that the Family Rewards incentives have caused any such negative effects, but a credible assessment of that risk can only be made after the rewards end and once longer-term data are available.

#### Health

• By small to modest amounts, Family Rewards increased families' consistent maintenance of health insurance coverage, reduced their reliance on hospital emergency rooms for routine care, and increased their receipt of medical care. It produced substantial increases in their receipt of preventive dental care.

The health-related incentives of the Family Rewards program were designed to encourage low-income families to adopt better preventive health care practices. It turned out that a higher proportion of families than the program's designers had expected were already receiving health insurance coverage and practicing preventive health care. This finding may reflect the success of efforts by New York State and New York City to expand access to health coverage in recent years. The State's and City's success limited the program's ability to improve some health practices and behavior further for this sample.

Nonetheless, the analysis found that Family Rewards has had a number of promising impacts to date on some important health-related indicators. For example, as shown in Table ES.2, it reduced the likelihood that parents or their children would experience an interruption in health insurance coverage by 3 percentage points, and it increased the likelihood that parents and high school students got the recommended two dental checkups/cleanings per year by 10 percentage points or more. The program also reduced reliance on emergency rooms for care for

routine illnesses among parents and high school students by 2 percentage points and 6 percentage points, respectively. It also caused small improvements in parents' self-ratings of their health and their likelihood of currently being treated for any medical condition.

#### Employment

• Family Rewards' early impacts on employment outcomes are mixed. The early findings point to gains in the likelihood of full-time employment and average earnings but not in jobs covered by the unemployment insurance (UI) system.

According to the 18-month survey of parents, the program increased the likelihood of working at the time of the interview by 6 percentage points, driven by an increase in full-time work (see Table ES.2). However, the program also led to a small *reduction* in average quarterly employment rates (by 1.4 percentage points) in *UI-covered* jobs over a 12-month follow-up period, according to administrative records data. The effect on average annual earnings in UI-covered jobs (a decline of \$286) was not statistically significant.

It is important to recall that some jobs are not covered by the UI system, such as selfemployment, federal government employment, and domestic work. In addition, the UI system also misses informal (casual or irregular) jobs that are never reported to state agencies. It is not clear why the effects of the program would vary across types of employment. Perhaps for some parents, non-UI jobs were easier to get in today's economy, particularly those that offered the full-time hours necessary to qualify for the program's work rewards. Such jobs may also have been more attractive options if they were more conveniently located, easier to obtain, or offered more flexible schedules than UI-covered jobs.

It is also not clear why the program did not lead to larger increases in all types of employment (UI-covered and not), a finding that stands in contrast to previous work incentives programs. Perhaps during the first year, families were not focused on the work rewards which were not heavily marketed by the program until Year 2. For example, some of the early messaging from the community-based organizations that recruited and explained the program to participants emphasized completing the paperwork to get rewards for activities in which family members were *already engaged*, rather than stressing the value of new activities, like taking a job. In addition, to engage participants and gain their trust, the organizations initially conveyed a strong sense that the program was primarily about their children's education and health. If participants concluded that it was their job to make sure their children were attending and doing well in school, they may have been less focused on the program's employment incentives. In addition, the added income that families received from the education and health rewards may have offset the program's work incentive for some participants. Longer-term follow up will be important for assessing how the increased marketing of the workforce rewards in Year 2, coupled with the worsening of the economy at that time, affect these results.

## **Family Composition**

# • Family Rewards increased by a small amount the proportion of parents who married, as well as the proportion who divorced.

According to self-reported data from the 18-month survey, the proportion of parents who were married and living with their spouses increased by almost 4 percentage points above the control group mean of 16 percent. At the same time, the proportion saying that they were divorced was 3 percentage points higher than the 12 percent rate among the controls. Although the reasons for these effects are not clear, one possibility is that the increased financial stability that some parents experienced made them feel better positioned to change their marital status.

# Conclusion

Evaluations of CCT programs in other countries have convincingly shown that such programs can reduce poverty and improve the consumption of goods and services (for example, food consumption) among very poor families — their main short-term objective. CCT programs have also had some positive effects on human capital development outcomes (although the evidence here is more mixed). Overall, the initial results from the New York City project show that the concept is feasible to implement and can make a difference in the lives of poor families in a developed country. More generally, they provide supporting evidence that the CCT approach can both reduce immediate poverty and material hardship and promote at least some improvements in human capital investment across the domains of children's education, family health care, and parents' employment. Importantly, these effects on poverty did not lead to major unintended consequences.

Still, the effects that have been observed so far are generally not large, and, so far, the program has not improved educational outcomes for elementary and middle school children. Given the start-up issues that the program confronted and the fact that the third and final year of operation is still under way, it is too soon to draw firm conclusions about the program's potential. The available impact findings largely reflect the effects of the program during its launch year (for some outcome measures) or not long afterward (for other measures). Thus, most of the story of Family Rewards remains to be written, and it will be important to assess whether the program's effects grow over time as families' exposure to it increases. Ultimately, the consistency and magnitude of the program's impacts over the longer term will determine the relevance of a comprehensive CCT approach for government antipoverty policy in an American context.

The third and final year of the Family Rewards program began in September 2009 and will end in August 2010. Although the decision to discontinue some rewards in order to reduce the program's operating complexity and costs will reduce the maximum amount of money families can earn, the simplification of the model — combined with ongoing improvements in program marketing and delivery — may help families focus on high-priority rewards that have a better chance of increasing their human capital. It remains to be seen whether these operation-al improvements, and the additional time that a third year provides for families to respond to the incentives, increase the magnitude of the impacts that have been observed so far.

Further evaluation reports, to be issued periodically over the next few years, will present longer-term findings on the program's operations, families' reactions and experiences, the program's impacts, and its economic costs and benefits. The research team will follow program and control group families for a total of five years from the time they entered the study, allowing the evaluation to show whether any positive effects achieved during the three years in which the program operated persist or grow, or perhaps even turn negative for education or other outcomes, after the incentives end. The final evaluation report is slated to be completed in 2013.

#### Chapter 1

# Introduction

In 2007, New York City launched a major new antipoverty initiative called Opportunity NYC–Family Rewards, a conditional cash transfer (CCT) program to help families break the cycle of intergenerational poverty. The first of its kind in the United States, the program ties cash rewards for very low-income families to a variety of activities and outcomes related to children's educational efforts and achievement, family preventive health care practices, and parents' employment. The intent of the program, which is available to the participating families for three years, is to use these rewards to reduce family poverty and hardships in the short term while simultaneously supporting and encouraging families to invest in their own health, education, and employment potential — or "human capital development" — for their longer-term economic security. Family Rewards was inspired by similar initiatives in other countries, particularly Mexico's Oportunidades program, and it is being tested in six of New York's highest-poverty communities through a randomized control trial.

This report presents initial findings from an ongoing and comprehensive evaluation of the project. It examines the experiences of implementing Family Rewards and families' responses to the program during the first two of its three years of operations. This period encompasses a start-up phase as well as a stage when the program was beginning to mature. The report also presents interim findings on the program's effects, or "impacts," on a wide range of family outcomes. For some impact measures, the results are limited to the first program year, while for others they cover part or all of the second year.

Overall, the report shows that, while it was challenging to launch Family Rewards, this version of a comprehensive conditional cash transfer program is feasible to operate in a large American city, and that its participating families have already received substantial amounts of income through the program. Initial impact findings show that the program has begun to achieve its primary short-term goal of reducing current poverty and material hardship. The program has also generated some encouraging short-term effects on a number of educational, health, and employment outcomes, although it has not done so consistently across all outcomes in those domains. The report includes no information on the operation or effects of the program during its third year, which was just getting under way as this initial analysis was being concluded. Hence, any lessons suggested by this report are necessarily preliminary. Subsequent evaluation documents will offer a longer-term and more complete assessment, eventually covering the program's effects on families through five years after Family Rewards began (including two years after the incentives offer ends).

Family Rewards is one of 40 initiatives sponsored by New York City's Center for Economic Opportunity (CEO). A unit within the Office of Mayor Michael R. Bloomberg, CEO was created to test a wide range of innovative antipoverty strategies that grew out of a special "Poverty Commission" appointed by the Mayor in 2006.<sup>1</sup> Family Rewards is one of three incentives-based poverty reduction strategies launched by CEO in 2007. The other two are:

- Work Rewards, a project that offers work and training incentives to lowincome recipients of government rent subsidies from New York City's Housing Choice Voucher (Section 8) program<sup>2</sup>
- *Spark*, a school-based education incentives program that was designed to improve the school performance of fourth- and seventh-graders by rewarding good performance on a series of standardized tests administered over the course of the academic year<sup>3</sup>

These three projects differ in important ways, but all offer cash rewards to help lowincome families build human capital. Together they make up a set of demonstration projects known collectively as Opportunity NYC, and each is being rigorously evaluated through a randomized control trial in which study participants are randomly assigned to either a program group, which receives the intervention, or a control group, which does not. Considered the "gold standard" for evaluating program effects, random assignment helps ensure that any observed differences in outcomes between the two groups are truly a result of the program. A consortium of private funders is supporting these studies.<sup>4</sup>

Two national, New York-based nonprofit organizations — MDRC and Seedco — worked in close partnership with CEO to design the Family Rewards and Work Rewards demonstrations. MDRC is a nonpartisan, social policy research firm with extensive experience conducting large-scale demonstration projects using random assignment research designs to build rigorous evidence on what works to improve the well-being of low-income families. Seedco works with local organizations to create economic opportunities for disadvantaged individuals and communities. The design team, made up of staff from CEO, MDRC, and

<sup>&</sup>lt;sup>1</sup>For more information on CEO and its history and work, see New York City Center for Economic Opportunity (2009).

<sup>&</sup>lt;sup>2</sup>See Tessler, Verma, and Riccio (2009).

<sup>&</sup>lt;sup>3</sup>Spark is being evaluated by Harvard Education Labs, which developed the project in partnership with the New York City Department of Education. See www.edlabs.harvard.edu for more information.

<sup>&</sup>lt;sup>4</sup>The Opportunity NYC demonstration funders include the Bloomberg Philanthropies, The Rockefeller Foundation, The Starr Foundation, the Open Society Institute, the Robin Hood Foundation, the Tiger Foundation, The Annie E. Casey Foundation, American International Group, the John D. and Catherine T. MacArthur Foundation, New York Community Trust, and (for Spark only) the Broad Foundation.

Seedco, also conferred extensively with other New York City agencies and outside experts.<sup>5</sup> Seedco, together with a small network of local, community-based organizations, is operating the Family Rewards and Work Rewards programs, and MDRC is conducting the evaluations.

The remainder of this chapter focuses on the origins of the Family Rewards demonstration, the program model, and the overall approach for evaluating the intervention. Subsequent chapters present findings to date on the program's implementation experiences and impacts.

# Origins of the Family Rewards Demonstration

In 2006, New York City officials began to explore bold new ways of using financial incentives to address some of the root causes of poverty. They initiated this effort after learning about successful efforts with CCT programs in Latin America and a growing number of lowerand middle-income countries throughout the world. Mexico had pioneered this movement, and its experience was known best. Its program, originally called Progresa and now known as Oportunidades, provides immediate relief to very poor families, mostly in rural areas, through direct cash payments that are conditioned in part on children remaining in school. Traditionally, many children drop out of school, particularly in the middle school grades, often to work in the fields to help their families earn much-needed income. Oportunidades also offers payments to families who get preventive health care and adopt certain child nutrition practices.<sup>6</sup>

Of course, the urban poverty of New York City is vastly different from the largely rural poverty of Mexico, and the reasons for children dropping out of school or performing poorly are not the same. Moreover, New York City, like the rest of the United States, already has a well-developed social safety net, including income support systems for poor families. In contrast, Mexico had no national income support system, and its CCT program was instituted as the country's main cash welfare system for poor families.<sup>7</sup> A CCT program in New York City

<sup>&</sup>lt;sup>5</sup>Staff from the New York City Department of Health and Mental Hygiene, Department of Education, Human Resources Administration, Department of Consumer Affairs, and Department of Small Business Services were the main planning partners on Family Rewards, while the Department for Housing Preservation and Development and the New York City Housing Authority were the main planning partners for the Work Rewards demonstration.

<sup>&</sup>lt;sup>6</sup>For a comprehensive review of the history and evaluation of Oportunidades, see Levy (2006). For a detailed review of CCT programs worldwide and a synthesis of available evaluation findings, see Fiszbein and Schady (2009). Summarizing those findings, Fiszbein and Schady state (pp. 3-4): "CCTs have led poor households to make more use of health and education services, a key objective for which they were designed. Nevertheless, the evidence on improvements in final outcomes in health and education is more mixed." The authors point to the findings such as positive effects on school enrollment but not on learning outcomes as measured by achievement tests, and although some CCT programs have produced positive health outcomes, such as reduced stunting and improved nutrition, others have not.

<sup>&</sup>lt;sup>7</sup>Oportunidades now serves about five million households, accounting for almost a fifth of the entire Mexican population (Fiszbein and Schady, 2009).

would thus have to be adapted to very different conditions. Still, the basic principle of CCTs — structuring cash transfers in such a way that promotes human capital development while simultaneously alleviating immediate poverty and hardship — was compelling.

Inspired by the Mexican example, New York City officials wondered whether some form of a CCT program could work in their own city, and they began to explore the idea of a trial project. To support and assist that exploration, CEO entered into a partnership with the Rockefeller Foundation, which envisioned that such a project could provide a new opportunity to help low-income New Yorkers while also building evidence on a poverty reduction strategy that would have national and international importance. With a special grant from the Rockefeller Foundation, CEO asked MDRC to help design the project, including a rigorous evaluation. Subsequently, MDRC engaged Seedco in the planning process, and the three organizations worked closely together to come up with a plan for a CCT demonstration project. During this planning process, they conferred with officials and researchers involved with Mexico's Oportunidades program, meeting with them in New York City and visiting their program in Mexico. The design team also sought guidance and feedback on the idea from the World Bank, the Inter-American Development Bank, and experts in universities, foundations, other social policy organizations, and various New York City government agencies.

City officials recognized that a CCT program in New York City would be controversial (see below) and that publicly funding this unconventional approach, even on a trial basis, would be widely opposed. Consequently, they sought to support the demonstration with private resources.<sup>8</sup> However, they hoped that, in the future, if the CCT approach proved to be successful, the federal government would invest in such a strategy on a larger scale in New York and other cities across the country.

CEO granted the "go-ahead" for the project in the late spring of 2007. Initial funding was secured and agreements were established for Seedco to operate the program and for MDRC to evaluate it.<sup>9</sup> With the end of the mayor's second term in office a little more than two years away, CEO sought to have the project begin operations very quickly, serving families by the start of the coming school year in September 2007. Waiting until the subsequent school year (beginning in 2008) would have meant, from the City's perspective, too long a delay before any evidence on the program's effectiveness became available. (See Box 1.1 for the demonstration timeline.)

<sup>&</sup>lt;sup>8</sup>See footnote 4 for the full list of funders.

<sup>&</sup>lt;sup>9</sup>For this project, MDRC is a contractor to the Mayor's Fund for the City of New York, a 501(c)(3) entity through which private funds can be donated to the City for specific charitable uses. Seedco is a subcontractor to MDRC. The entire demonstration budget, including three years of payments to participants, all costs of operating the program, and all evaluation costs covering five years of follow-up, totals approximately \$43 million.

#### Box 1.1

#### **Family Rewards Demonstration Timeline**

- Sample recruited: July 2007 to December 2007
- First program year: September 2007 to August 2008
- Second program year: September 2008 to August 2009
- Third program year: September 2009 to August 2010
- Evaluation reports: 2010 to 2013

An intensive effort was thus launched in the summer of 2007 to begin building the program infrastructure, recruit families, and implement a random assignment process. Over the summer and fall, about 4,800 families were enrolled in the study (with half assigned to the control group), with the enrollment period continuing after the start of program operations through December 2007.<sup>10</sup> This extraordinarily rapid start-up of a complex project precluded any pilot phase to work out operational problems. Consequently, the first year of program operations should be viewed as a start-up phase, and the effects of the program during that period do not necessarily reflect the program's longer-term potential.

#### Program Overview

Like other CCT programs in lower- and middle-income countries, Family Rewards is a two-generation initiative with both shorter-term and longer-term poverty-reduction goals. It includes no new social services or case management. Instead, it attempts to use the offer of a new set of cash transfers in strategic ways to lessen immediate income-related hardships for poor families while simultaneously helping and encouraging those families to increase — or sustain — positive efforts to improve their own futures. The transfers are to function as an *income supplement* to improve families' economic security in the shorter term, as *enabling resources* to help make short-term human capital investments feasible for them, and as *inducements* to encourage them to make those investments. Payments, which are available for three years, are awarded when households meet specific conditions in three key areas, or "domains":

<sup>&</sup>lt;sup>10</sup>Since random assignment was conducted at MDRC after participants were enrolled into the study at the NPOs, some families were allocated to the program or control group in January 2008.

- Education-based conditions, which include children's superior attendance in school, meeting certain performance levels on standardized tests and other school outcomes, and parents' engagement with their children's education
- Health-based conditions, which include maintaining health coverage for parents and their children, as well as age-appropriate preventive medical and dental checkups for each family member
- Workforce-related conditions, aimed at parents, which include sustaining full-time work and participating in approved education or job-training activities

#### **Target Communities and Families**

The model is being tested in a total of six community districts — two each from the Bronx, Brooklyn, and Manhattan (see Table 1.1). These six areas were chosen because they are among New York's most persistently disadvantaged communities. Indeed, they have suffered from high rates of poverty and unemployment even when economic conditions in the city as a whole were good. For example, in 2006, when the Mayor's Poverty Commission deliberated, the official poverty rate in the city was 18 percent. In the six Family Rewards community districts, the official poverty rate averaged 35 percent, and it approached or exceeded 40 percent (a level of poverty that many experts define as "extreme poverty") in three of those communities.<sup>11</sup> The unemployment rate across the districts was also disproportionately high, averaging 19 percent, compared with a 5 percent citywide rate. Considerably higher proportions of residents of these communities than the city's population as a whole relied on public benefits, including Temporary Assistance for Needy Families (TANF), food stamps, and Medicaid. School outcomes were also troubling. The proportion of residents 25 years of age or older without high school diplomas averaged 43 percent across the six districts, compared with 28 percent for the city as a whole.<sup>12</sup>

While all six areas are high-poverty neighborhoods, these communities are also diverse in many ways, allowing the evaluation to assess the effectiveness of the program across a range of local contexts. For example, many neighborhoods within the community districts have distinct racial and ethnic identities. The Bronx neighborhoods are predominantly Latino, as is East Harlem (which also has a large African-American population). However, East Harlem is one of the city's traditional seats of Puerto Rican culture, while Community District 5 in the

<sup>&</sup>lt;sup>11</sup>Levitan (2008). Poverty rates within four of the six districts were somewhat lower but still very high according to an alternative poverty measure developed by CEO that was based on recommendations of the National Academy of Sciences.

<sup>&</sup>lt;sup>12</sup>These estimates are based on data from the 2000 Census (www.census.gov/main/www/cen2000.html).

#### The Opportunity NYC Demonstration: Family Rewards

#### Table 1.1

Borough and District	Key Neighborhoods		
Bronx			
Community District 5	Morris Heights, University Heights, Fordham, Mount Hope		
Community District 6	East Tremont, Bathgate, Belmont, West Farms		
Brooklyn			
Community District 5	East New York, New Lots, Starrett City		
Community District 16	Brownsville, Ocean Hill		
Manhattan			
Community District 10	Central Harlem		
Community District 11	East Harlem		

#### Key Neighborhoods in Selected Community Districts

Bronx has a large Dominican population. Central Harlem (Manhattan) and Ocean Hill-Brownsville (Brooklyn) are predominantly African-American, while Brooklyn's Community District 5 has a more equal mix of African-American and Latino populations relative to the other areas.

Harder to measure, but potentially relevant to the functioning of the initiative, is the social service infrastructure of these neighborhoods. While many community and citywide social services providers operate in all these districts, the neighborhoods vary in terms of the availability of social and educational services. At one extreme is Central Harlem, a relatively rich service environment, with strong provider organizations such as the Harlem Children's Zone, and with historic ties to African-American political and cultural institutions. East New York (Brooklyn) falls at the other extreme, sometimes described as a neighborhood that struggles to maintain social services following extreme disinvestment and high crime rates that have taken their toll on the area since the 1970s.<sup>13</sup>

Family Rewards is targeted toward families in these six community districts who had incomes at or below 130 percent of the federal poverty level.<sup>14</sup> This standard is the same as the eligibility standard used for food stamps and a number of other benefit programs that serve very

<sup>&</sup>lt;sup>13</sup>The design paper for the Family Rewards demonstration (MDRC, 2008) includes more detailed information on the characteristics of the study neighborhoods.

<sup>&</sup>lt;sup>14</sup>In the continental United States, the 2007 federal poverty level for a family of three was \$17,170, and 130 percent of the poverty level for such a family was \$22,321. See http://aspe.hhs.gov/POVERTY/07poverty.html.

low-income families, making it a widely accepted benchmark for identifying families in need of government cash transfer programs. As a two-generation intervention, the program is intended for parents and their school-age children.<sup>15</sup> Furthermore, all parents and children must be legal residents of the United States.<sup>16</sup>

Eligible families had to have at least one child in the fourth, seventh, or ninth grade. However, once a family enrolled in the program, *all* school-age or younger children were eligible to participate in it.

The demonstration targeted students in the fourth, seventh, and ninth grades because these grades are at or near the start of critical educational transition years. For example, by fourth grade, children are making a transition from "learning to read" to "reading to learn" — in other words, applying their newly developed reading skills to acquire content knowledge. Without making that transition smoothly, future school work becomes more difficult, and children who fall seriously behind by the third or fourth grade tend to have difficulty catching up later.<sup>17</sup> The designers of Family Rewards thus hoped that offering three years of education incentives for the fourth-grade target group would help them do better in that critical year and successfully weather the transition to the first full year of middle school, which typically begins in grade 6 in New York City. Similarly, rewards targeted to the cohort of seventh-graders were intended to help support and encourage those students to perform well in middle school through the end of ninth grade (the first year of high school), another critical transition stage.

While the incentives for the seventh-grade cohort end after ninth grade, rewards for the ninth-grade cohort continue through the end of eleventh grade. Many high school students in low-income communities struggle in ninth grade. They begin to have more serious attendance problems and fall behind in credits, which puts them on a slippery slope toward dropping out of school. Students who succeed through the eleventh grade, however, are highly likely to graduate. Thus, offering students education-focused incentives beginning in the ninth grade — often considered a "make-or-break" year — may help boost achievement at this very critical stage; continuing incentives for two more years may put them on a solid path toward graduation.

<sup>&</sup>lt;sup>15</sup>Adults were eligible only if they were the custodial parents or legal guardians of the eligible children, or a custodial parent's cohabiting spouse or legally registered domestic partner.

<sup>&</sup>lt;sup>16</sup>Undocumented residents were not included in the target population because they do not have a legal right to work in the United States. That means that they are not be eligible for the program's full-time work bonus. Consequently, including them would have impeded a full test of the two-generation CCT model in which workforce incentives for parents are an important program component.

<sup>&</sup>lt;sup>17</sup>For one study showing this pattern, see Clotfelter, Ladd, and Vigdor (2006).

#### **Program Delivery Structure**

Seedco assembled a network of six local organizations in the designated community districts to assist in implementing Family Rewards.<sup>18</sup> Called Neighborhood Partner Organizations (NPOs), these agencies recruited and enrolled eligible families into the research sample and now serve as the face of the program in the communities, providing ongoing customer service to participants who request assistance, such as in making claims for the rewards or for obtaining information about other services in the community. NPOs also conduct informational workshops on how to earn and claim rewards in each of the domains in which the incentives are offered. Seedco maintains a telephone helpline and a Web site to provide additional information and assistance to families.

Seedco verifies that families have earned rewards by using a combination of automated data from some City agencies and special "coupon book" forms submitted directly by participants). After verification, it initiates a process of transferring payments electronically into bank accounts that participants newly open or into their existing accounts that they attach to the program, or, if they prefer, onto stored value cards (which are similar to debit cards but are not assigned to an individual account holder, such as prepaid telephone cards). The payments are made every two months and families can access the money at any time through any automatic teller machine (ATM).

To provide families with a safe banking option, the New York City officials worked with several banks and credit unions to develop special "Opportunity NYC accounts" that carry no fees and come with debit cards that carry no overdraft risk.<sup>19</sup> (See Chapter 3 for a fuller description of the payment process and banking options.) Family Rewards offered participants a one-time \$50 bonus for opening up an Opportunity NYC account, or for using an existing account into which reward payments could be deposited electronically. This bonus was not offered to individuals selecting stored value cards as their payment vehicle, which carry extra fees for their users.

By design, Family Rewards includes no case management. This means that it makes no provision for staff to develop action plans to address barriers in participants' lives or to intervene in personal crises that might make it difficult for them to succeed in the program. It also makes no provision for staff to follow up with participants about their individual progress in meeting their goals or getting the services they need, or to intervene directly with service

<sup>&</sup>lt;sup>18</sup>These organizations are Urban Health Plan and BronxWorks (formerly Citizens Advice Bureau) in the Bronx; Brownsville Multi-Service Center and Groundwork, Inc., in Brooklyn; and Catholic Charities and Union Settlement Association in Manhattan. See Chapter 3 for a description of these agencies and the services they normally provide apart from Family Rewards.

<sup>&</sup>lt;sup>19</sup>The City's Office of Financial Empowerment developed these accounts and negotiated with the banks.

providers on behalf of individual families, such as by helping to arrange tutoring for children, taking into account their children's specific learning needs, or arranging child care that is appropriate to a family's particular circumstances. Family Rewards also does not provide any direct services, such as tutoring, test preparation, job search classes, basic educational instruction, or occupational training.

The program's designers excluded these forms of assistance and services for four main reasons. First, they wanted to test the power of the cash incentive alone. Second, in contrast to participants in CCT programs in poorer nations, they expected that many families would have access to services through other programs in the community, and that Family Rewards should not duplicate those services. Third, they reasoned that if the New York City model could succeed without those extra elements, it would be easier and less expensive to scale up as an ongoing policy. And fourth, they hoped that the program would be less burdensome to families if they were not required to have regular appointments with staff while also trying to balance work and family obligations. Thus, just as low-income workers need not take part in services in order to benefit from the Earned Income Tax Credit (EITC), it is possible for Family Rewards participants to be "fully engaged" with the program without ever meeting with staff from Seedco and the NPOs, aside from the sessions in which they pick up their coupon books (which, as noted above, contain forms that participants use to verify that they have met specific conditions and to claim their rewards). At the same time, the designers recognized that many families would need at least some guidance on where they could find the kinds of services and assistance that might enhance their success in the program — for example, where they could find tutoring or after-school programs, dental clinics, job search programs, and training programs. For this reason, the designers included as part of the model an information-and-referral component through which Seedco and the NPOs were expected to help educate families about relevant resources that are available in the community, such as by disseminating written resource guides listing agencies that might be appropriate for parents to contact, and by reminding families about those resources in workshops and in marketing materials.

# Theoretical Framework for Family Rewards

Family Rewards rests on the premise that financial incentives can influence individuals' short-term choices and actions in ways that will serve their best interests over the longer term. Economists, psychologists, and other scholars cite evidence, for example, that people often "discount the future," meaning that they do not attach sufficient value to investments in education or health-related practices that can make them more economically secure or healthier because they do not fully recognize or appreciate the future payoffs that come from such

investments.<sup>20</sup> In addition, for young children in particular, the future is very distant, and longterm rewards may be too abstract to be significant motivating forces. Community or peer group norms, fed by observations of persistent intergenerational poverty, may also reinforce these perceptions, especially in high-poverty communities. At the same time, the simple lack of resources and other structural constraints among poor families can make it challenging to build human capital. For example, poor families may encounter difficulties getting access to good schools and enrichment programs for their children; paying for tutoring for children who need extra help; affording reliable child care when parents work; getting paid for time off from work to take their children to medical or dental checkups; finding dentists who are willing to take Medicaid; and even paying for transportation to and from low-wage jobs or job interviews, health visits, and school activities — in addition to the many additional impediments with which poor families must often contend.

Financial incentives are envisioned as one way to change the equation, at least partially. In the face of more immediate and tangible rewards, people may take steps that serve their longer-term best interests, and perhaps even develop new habits, regardless of whether they fully recognize or believe in the longer-term value of those efforts. Furthermore, if the rewards are sizable, the extra resources can help make it more feasible for low-income people to undertake certain educational, health care, and work-related efforts in the short term. As resources accumulate from some activities, such as school attendance and doctor visits, they might help cover the costs of other activities and materials, such as the costs of educational materials or tutoring for children, transportation to a free dental clinic, the dental checkup itself (if not free or covered by insurance), clothes for a job interview, or tuition payments for a training program. In this sense, the conditioned rewards may function not only as financial *inducements*, but also as *enabling resources*.

The following sections more fully describe the logic model on which Family Rewards is based, identifying the main processes through which the incentives payments are expected to reduce current and future poverty (see Figure 1.1). A number of key assumptions and hypotheses underlying the model are important to highlight.

#### Improving Children's Educational Outcomes

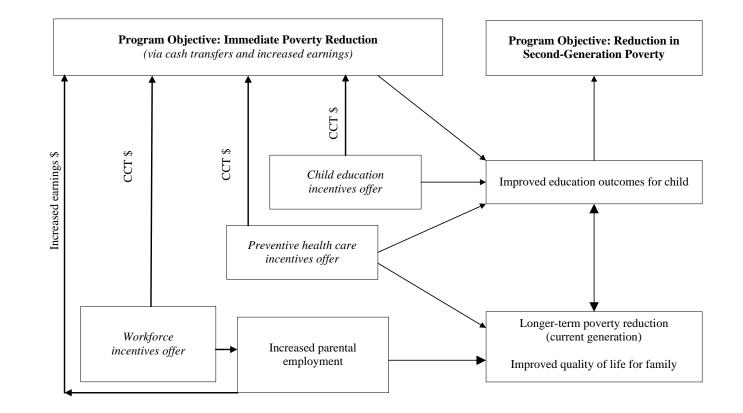
Longitudinal research that follows children through adolescence and into adulthood shows that poor academic achievement and dropping out of school are associated with worse future employment outcomes and earnings, contributing to intergenerational poverty. Consequently, succeeding in school is one of the most important ways that children growing up in

<sup>&</sup>lt;sup>20</sup>See, for example, Fiszbein and Schady (2009) for a fuller discussion of this issue.

The Opportunity NYC Demonstration: Family Rewards

## Figure 1.1

## A Logic Model for Family Rewards



NOTE: CCT = conditional cash transfer.

poor families can avoid being poor themselves in the future. For this reason, children's school performance and academic achievement are a central focus of Family Rewards.

Reflecting the important role that parents can play in their children's success in school, the incentives in this domain are intended to encourage parents to become more fully engaged with their children's education. In this way, Family Rewards differs from school-based incentive programs that only offer rewards directly to students, largely bypassing their parents. In Family Rewards, the education incentives for elementary and middle school students are paid entirely to the parents, and children learn about the rewards only if their parents choose to tell them. In addition, the schools play no direct role in the program, and teachers may not know which of their students are in it unless the families inform them.

At the high school level, the focus shifts somewhat. Although some incentives are still paid to the parents, others are partially or completely paid to the students directly. This policy was made based on the recognition that high school students increasingly take more responsibility for their own behavior, and so paying them directly would give them an immediate financial stake in their school performance.

Beyond whatever direct effects it has on parents' and children's school engagement, Family Rewards may also boost children's educational attainment in other, indirect ways. For example, its health care rewards may promote early diagnosis and treatment of certain health and developmental problems that might otherwise make it difficult for students to sustain regular attendance and to perform well in school, or for very young children to enter school ready to learn. More generally, an increase in the family's overall income — from increases in parental earnings combined with the direct cash transfers from all CCT payments, regardless of domain — might also enhance children's school performance and other child development outcomes. For example, if the increased income helps to reduce family stress, maternal depression, or housing instability (brought about, for example, by persistent difficulties making rent payments) or to increase the purchase of educational materials and experiences for children or the nutritional quality of food intake, children's developmental trajectories may improve.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup>Over the last few years, scientific evidence showing that very low-income, material hardship, and financial strain have causal influences on children's life trajectories has grown more convincing. Supporting the claim of causal influences are findings from longitudinal studies (Dahl and Lochner, 2005; Duncan and Brooks-Gunn, 1997; Gershoff, Aber, and Raver, 2003; Mayer, 2002; McLoyd, 1998; Seccombe, 2000) and from natural and policy experiments that have effectively raised the income of poor families and evaluated the impact of these increases on children (Costello, Compton, Keeler, and Angold, 2003; Miller et al., 2008; Morris and Gennetian, 2003). Among the latter studies are evaluations of programs offering earnings supplements and, in the case of the Milwaukee New Hope project (Miller et al., 2008), subsidies for child care and health insurance that found improvements in young children's school performance, social behavior, and other developmental outcomes.

#### Improving Family Preventive Health Care Practices

For a variety of reasons having to do with a lack of resources, knowledge, information, or administrative hurdles posed by the health care system, many low- and moderate-income families do not get routine preventive health care. To some extent this problem results from their lack of health insurance coverage or gaps in that coverage. For example, some families who are eligible for public insurance do not realize they are eligible and remain uninsured. Others who may believe they are eligible do not follow through with the application process, which can be burdensome or confusing, typically requiring that documentation be presented to establish eligibility. Similar documentation requirements lead to the termination of public insurance for many families who are working and are eligible to participate in employer-sponsored health insurance plans cannot afford the required copayments.

Families who lack health insurance are understandably less likely to have a regular family physician and tend to rely on more costly hospital emergency rooms when they need care.<sup>23</sup> However, even families with health insurance, particularly public health insurance, may neglect to maintain good preventive care or to follow up on recommended treatments — a problem that cuts across social classes. Low-income families who rely on public insurance can face the added challenge of finding doctors who will accept their insurance, sometimes because of low reimbursement rates, which may discourage them from getting regular preventive care. Similarly, many dentists do not accept Medicaid, so getting preventive dental care may require lowincome families to search for dental clinics that offer free care or charge based on a sliding scale according to a family's income. Furthermore, parents who are working in low-wage jobs that do not offer paid personal or sick days may face an added opportunity cost in getting preventive care if they lose pay when they miss work for a doctor's visit.

Not surprisingly, a number of studies have shown that poor children tend to have worse health outcomes than their peers who are not poor. These outcomes include higher rates of low

<sup>&</sup>lt;sup>22</sup>A number of states are attempting to develop third-party administrative records data-matching to substitute for applicant-provided documentation as a way to simplify the enrollment and retention of people who are eligible for Medicaid and the Children's Health Insurance Program (CHIP) and thus increase coverage. See Edwards et al. (2009).

<sup>&</sup>lt;sup>23</sup>One study summarizing relevant literature on this topic points to the important role of insurance, stating that, "There is substantial evidence that people who are insured are more likely than uninsured people to have a usual source of care other than the emergency room. Having health insurance and a usual source of care are generally among the strongest predictors of health services utilization, and they have been shown consistently to enhance timely use of medically necessary health services, increase use of preventive health care, increase the continuity of care for chronic conditions, and reduce costly emergency room utilization." See Polit, London, and Martinez (2001).

birth weight, infant mortality, diarrhea, asthma, developmental disabilities, and lead poisoning.<sup>24</sup> Some studies suggest that poor children are also twice as likely as other children to experience an unmet medical need, are more likely to receive pediatric care from hospital emergency rooms rather than pediatric practices, and are less likely to be insured.<sup>25</sup> In addition, studies of welfare recipients and other low-income populations suggest that health problems are a common impediment to steady work among the parents in low-income families.<sup>26</sup>

Anticipating that these broad, nationally observed trends would be significant problems in the New York City high-poverty communities that were targeted for Family Rewards, and following the practice of international CCT programs, the designers of Family Rewards placed a major emphasis on preventive health care. They attached rewards to the maintenance of health insurance as well as to getting regular medical and dental checkups. The designers hoped that sustained insurance, better preventive care, and quicker responses to emerging health problems would help to reduce poverty by removing barriers to steady employment among parents and by minimizing school absences and improving school performance among children.

#### Improving Parents' Earnings

Family Rewards may increase family income through the direct cash transfers themselves, but only temporarily. *Sustained* reductions in child and family poverty after the payments end require that parents maintain regular employment. The program thus includes a workforce component that is designed to promote steady, full-time work and the acquisition of skills to help participants qualify for better-paying jobs. A cash transfer program that includes a component that explicitly supports and encourages families' pursuit of self-sufficiency may also have broader appeal across the political spectrum than one that does not. This component is the first of its kind in a CCT program, and thus holds special interest to the international community.

Of course, work does not guarantee an escape from poverty, as the growing number of "working poor" families attests.<sup>27</sup> Skills deficits and wage stagnation are important factors contributing to this outcome. But it is also true that, for most families, it is impossible to improve family income and escape poverty *without* work. Indeed, data from 2005-2007 show that among all New York City families, those without workers had a poverty rate of 47 percent, compared with 10 percent of all families who had at least one worker, and 5 percent of all

<sup>&</sup>lt;sup>24</sup>Aber, Bennett, Conley, and Li (1997).

<sup>&</sup>lt;sup>25</sup>Gershoff, Aber, and Raver (2003).

<sup>&</sup>lt;sup>26</sup>Bloom (1997); Polit, London, and Martinez (2001); Zedlewski and Loprest (2001).

<sup>&</sup>lt;sup>27</sup>In 2005, over 46 percent of poor households in New York City were "working poor" — that is, they had incomes below the poverty level despite the fact that the head of household worked at least part of the year. See New York City Center for Economic Opportunity (2006).

families in which the householder (that is, the person in whose name the house is owned, rented, or being purchased) worked full-time, year-round.<sup>28</sup>

Family Rewards offers incentives to encourage parents to seek and sustain full-time employment. It offers a second incentive for parents to complete education and training activities. Sustained employment is important because studies have suggested that high job turnover among less skilled workers may negatively affect skills, wage levels, wage growth, and fringe benefits.<sup>29</sup> Moreover, simply acquiring more work experience in the short term may increase the likelihood of steady employment in the longer term. There is also a strong body of evidence demonstrating that financial work incentives can increase employment stability and earnings. The program rewards full-time work rather than part-time work because full-time work is more likely to come with higher wages and benefits. In addition, the designers were concerned that rewarding part-time work might encourage some participants to reduce their work hours.

The program's workforce-related incentives may boost family income in several ways. Not only would those rewards increase family income directly, they would also increase that income indirectly through higher earnings if they encouraged parents to increase their hours or duration of employment, or if the training incentives helped them boost their earnings potential by acquiring more skills. Furthermore, the increased earnings could draw additional income from the EITC.

#### Mutually Reinforcing Effects

Although each of these components targets specific problems that contribute to longterm and intergenerational poverty, the Family Rewards model builds on the recognition that *sustained* achievements in any one of these areas may be aided by progress in the others (see Figure 1.1). For example, children may make more progress in school if their health care is improved and efforts are made to catch and address health problems early. Their health and education may benefit if they grow up in a household that has increased economic resources at its disposal, for which parents' sustained employment is critical. Children's health as adults may also be influenced by their education, which can affect their understanding of good health practices and healthy lifestyle choices. In sum, the health rewards are not just important to health outcomes, the education rewards are not just important to education outcomes, and the workforce rewards are not just important to work outcomes. For all these reasons, combining all three components into a single, two-generation package may be more powerful than focusing on any one or two of these components alone. In addition, as noted previously, the extra income from all

<sup>&</sup>lt;sup>28</sup>Based on the "2005-2007 American Community Survey 3-Year Estimates," American FactFinder Fact Sheet (U.S. Census Bureau). See http://factfinder.census.gov.

<sup>&</sup>lt;sup>29</sup>Lane (1999).

three components, which serves the program's immediate poverty reduction goal, may have important beneficial effects on child outcomes simply by reducing the hardships of poverty.

# The Family Rewards Incentives: Conditions and Amounts

Family Rewards offers families an opportunity to receive cash rewards that total several thousand dollars per year over a three-year period. The actual payment amount depends on the degree to which families meet the qualifying conditions and, importantly, on the number of children in the family, each of whom can be a source of substantial rewards.<sup>30</sup>

#### **Overall Design Considerations**

In developing the rewards schedule, the design team (CEO, MDRC, and Seedco) was guided by the following key principles:

- 1. Incentives should be attached to activities and achievements that represent investments in human capital development.
- 2. The conditions for incentive payments should be achievable with a reasonable level of effort.
- The incentives should not be tied to activities (such as attendance in early Head Start programs) that are not generally available or reasonably accessible to participants.
- 4. To the extent feasible, more money should be attached to conditions that are more challenging to meet (for example, students' passing standardized tests and parents' sustaining full-time work should earn more than a parent's attendance at a parent-teacher conference).
- 5. The activities and achievements that earn payments should be verifiable in ways that are practical, timely, and resistant to fraud.
- 6. Incentives for children's school performance should avoid putting undue pressure on students or put them at risk of abuse if their families lose out on extra money because of their poor performance.

<sup>&</sup>lt;sup>30</sup>The design team had considered capping the total amount of rewards that any given family could earn. However, rather than impose arbitrary limits, it chose to use the evaluation to learn how actual reward receipt would vary across families in the absence of any restrictions.

- 7. The amounts for any given activity should be substantial enough for families to take the offer seriously.
- 8. The amounts for any given activity and overall must not be so high as to appear extremely unreasonable by policymakers and the public, and, hence, politically unsustainable.
- 9. High compliance with the conditions by all family members across all domains should yield a substantial total cash transfer (in the range of 25 percent of family income in the absence of the program).<sup>31</sup>
- 10. A broad range of incentives should be included to give families many different ways to earn rewards and to earn meaningful amounts of money within each of the three domains.

Allowing families many different ways to earn rewards was considered a way to achieve the program's short-term goal of immediate poverty reduction without attaching excessive amounts of money to any given reward. However, with 22 different rewards offered in the first year, this also made the program more complex than was desirable. That complexity meant that more intensive efforts would be needed to educate families about the full incentives offer, and that families would undoubtedly take more time to respond to the full range of rewards, than would be true in a simpler program.

The design team faced another important constraint in trying to ensure that rewards would be paid close to the time when families met the required conditions. Because of the large number and diverse types of rewards, the process of verifying compliance was complicated, and for practical reasons it was decided that payments would be made only every two months. There was also no way to avoid the long natural lags between activities and payments for certain rewards that were based on administrative data for verification. For example, it took time to pay out rewards for achievement on tests because the New York City and New York State school departments took several months to score the tests and provide that information to the program.

Table 1.2 summarizes the incentives schedule, showing the specific types of behavior and achievements that earn payments and the amounts of those payments. (As discussed shortly, this schedule was modified somewhat for the third program year.) In general, the payment amounts for the education and health components involve larger sums than has been true of most prior tests of incentives strategies in those two fields. In contrast, the full-time work bonus is somewhat smaller than similar incentives tried in demonstration projects that have tested or are currently testing wage supplementation strategies, but they are still substantial.

<sup>&</sup>lt;sup>31</sup>This is roughly in line with the standard used in the original design of Mexico's program (Levy, 2006).

# The Opportunity NYC Demonstration: Family Rewards

# Table 1.2

# Schedule of Incentive Payments, by Domain

Domain	Schedule of Incentive Payments		
Children's educational efforts and achieven	<u>ient</u>		
Grades 1-8 (payments made to parents) Attendance	\$25 per child per month (maximum: \$25 per month of school year) for superior attendance (95% of scheduled days, with provision for extended illness). <i>Discontinued for Year 3</i> .		
Parent-teacher meetings	\$25 per meeting, twice per year (maximum: \$50 per year per child) for parent's attendance at parent-teacher conferences. In Year 3, includes other parent-teacher consultations.		
Library card	\$50 paid once during program per child for having a public library card. <i>Discontinued for Year 3</i> .		
Reviewing results of low-stakes interim tests	\$25 for parents to acquire and review on their own their children's performance on interim standardized tests intended to help teachers diagnose students' progress (up to 5 times per year; maximum: \$125 per year per child). <i>Discontinued for Year 3.</i>		
Test scores (starting in grade 3) For grades 3-5	\$300 per child for scoring at a level 3 (indicating proficiency) or above on standardized ELA test, or (starting in grade 4) for improving by at least 1 level over prior year's level; same for standardized math test. (Maximum: \$600 per year per child.)		
For grades 6-8	\$350 per test for meeting the same conditions as above. (Maximum: \$700 per year per child.)		
Discussing results of annual ELA and math tests with school (starting in grade 3)	\$25 per test, once per year (maximum: \$50 per year per child) for parents to discuss child's test results with teachers or principal. <i>Discontinued for Year 3; incorporated into parent-teacher meeting reward</i> .		
Grades 9-12 (payments split between parents and students, as indicated below) Attendance	\$50 per child per school month (maximum: \$500 per year) for superior attendance (95% of scheduled days, with provision for extended illness). (50% paid to student, 50% paid to parent.)		
Parent-teacher meetings	\$25 per meeting, twice per year (maximum: \$50 per year per child), for parent's attendance at parent-teacher conferences. (100% paid to parent.) <i>Modified for Year 3 to include other parent-teacher consultations</i> .		

(continued)

Domain	Schedule of Incentive Payments		
Grades 9-12 (continued)			
Library card	\$50 paid once during program per child for having a public library card. (100% paid to student.) <i>Discontinued for Year 3</i> .		
Test scores	\$600 per child for passing (scoring 65 or above on) each of 5 Regents tests (maximum: \$3,000 during program). (100% paid to student.)		
Credit accumulation	\$600 per year per child for accumulating 11 credits during a school year. (50% paid to student, 50% paid to parent.)		
PSAT	\$50 for taking PSAT test up to 2 times (maximum: \$100 during program). (100% paid to student.)		
Graduation	\$400 payment for graduating from high school. (50% paid to student, 50% paid to parent.)		
Family preventive health care practices			
Maintaining health insurance	\$20 per month (maximum: \$240 per year) for each parent for maintaining public health insurance (including Medicaid and Family Health Plus coverage) for each parent. <i>Discontinued for Year 3.</i>		
	\$20 per month (maximum: \$240 per year) for maintaining Medicaid or CHIP coverage for all children (together). (Not for TANF recipients due to near-automatic Medicaid enrollment.) <i>Discontinued for Year 3</i> .		
	\$50 per month (maximum: \$600 per year) for each parent for maintaining private/employer health insurance for each parent. \$50 per month (maximum: \$600 per year) for maintaining private/employer insurance for all children (together). <i>Discon-</i> <i>tinued for Year 3</i> .		
Nonemergency health screenings and early intervention	\$200 per family member per year for completing an annual nonemergency medical checkup. Physician must fill out "preventive health care form" indicating that a minimum set of age-appropriate screenings and assessments was conducted and that other health information was reviewed with the patient and/or parent.		
	\$100 per family member per year for completing a physician- advised follow-up visit within a specified time frame. <i>Discon-</i> <i>tinued for Year 3</i> .		
	For young infants and toddlers (children under 30 months of age): \$200 per child for completing a pediatrician-advised early-intervention evaluation.		
	Dental care: \$100 per family member for cleaning and checkup; once per year for ages 1-5 and twice per year for ages 6 and older.		

# Table 1.2 (continued)

Domain	Schedule of Incentives Payments	
Adult workforce efforts		
Sustained full-time employment	\$300 for working full time (an average of 30 hours per week for 6 or more weeks in each 2-month payment period — that is, approximately 75% of the time) (maximum: \$1,800 per year at \$150 per month).	
Education and training while employed	Payments for completing an approved education or training course while holding a job. Must work at least 10 hours per week while attending course. ( <i>Discontinued for Year 3.</i> ) \$200 per each course lasting 35-70 hours; \$400 per each course lasting 71-140 hours; \$600 for each 141-hour increment of a course lasting at least 141 hours (maximum: \$3,000 per adult during program). (Training may include ESL, basic skills, and GED courses.)	

#### Table 1.2 (continued)

When combined, the full set of transfers represents a potentially very significant increase in the incomes of the very poor families, allowing them to receive several thousands of dollars in extra income per year. The cash transfers do not affect eligibility or payment amounts for most existing government transfer benefits, including TANF, food stamps,<sup>32</sup> Medicaid, CHIP, housing assistance, or the EITC.<sup>33</sup> This strategy avoided undercutting the value of the incentives offer and greatly simplified the implementation of the program.

# **Education Rewards**

The first panel of Table 1.2 presents the schedule of payments pertaining to children's education. For all students, rewards during the first two program years were attached to superior school attendance, obtaining a library card, and parents' participation in parent-teacher conferences.

For students in elementary and middle school (starting with children in grade 3), additional rewards were offered for scoring at or above a threshold level on annual standardized

<sup>&</sup>lt;sup>32</sup>The federal Food Stamp program was renamed the Supplemental Nutrition Assistance Program (SNAP), beginning on October 1, 2008. However, this report refers to the program as the Food Stamp program, because that is the name by which it is more commonly known at this time.

<sup>&</sup>lt;sup>33</sup>However, the CCT payments may affect the Supplemental Security Income (SSI) payments of participating families who were contending with physical or mental health disabilities and receiving such benefits. A waiver had been sought from the Social Security Administration but the request was not approved.

tests in English language arts (ELA) and math.<sup>34</sup> Payments were made if a student achieved a score that fell within the "proficient" range (a level 3 or 4 on a four-level proficiency scale) or improved his or her score in a given year over the prior year by at least one full level on that four-level scale.<sup>35</sup> The expectation was that these rewards may encourage parents to engage more deeply with their children on activities that, in general, might help improve their performance in school in ways that would eventually be reflected in their standardized test scores, such as by monitoring their homework more closely, talking with them more about how they can perform better in school, taking advantage of other programs and school resources in the community that might support their performance, and talking more with their teachers. As a more direct incentive for increased interaction with the schools, the program offered an additional reward for parents to discuss the results of the annual tests with their children's teachers or school principals.<sup>36</sup> (It is noteworthy that most other countries' CCT programs do not attach rewards to achievement outcomes.)

For high school students, Regents exams are the relevant tests. These exams are administered statewide each year by the New York State Board of Regents, an entity that sets standards and regulations that apply to all public schools and universities in the state. In order to graduate from high school with a diploma that is recognized by the Board of Regents, students must pass at least five tests in the following subject areas at some point during their high school career: English, mathematics, global history and geography, U.S. history and government, and science. Family Rewards offers students a separate payment for passing each of these five main content-area exams (that is, obtaining a score of at least 65).<sup>37</sup> High school students can also earn a small additional payment for taking up to two Preliminary Scholastic Aptitude Tests (PSATs), which they can do without charge in New York City. (These tests are designed to help students prepare for the Scholastic Aptitude Tests, or SATs, that many colleges and universities

<sup>&</sup>lt;sup>34</sup>Recognizing that standardized tests are given only once a year, the design team considered trying to attach incentives to certain types of effort that could be assessed more regularly, such as satisfactory completion of homework (as indicated on elementary school report cards) and improvement in grades. However, some administrators in the New York City Department of Education strongly advised against these options, primarily because of inconsistencies in teachers' homework and grading standards, and because of a concern that the incentives might generate conflict between families and teachers, with some parents and students pressuring teachers to change grades and assessments so they could earn rewards.

<sup>&</sup>lt;sup>35</sup>Because standardized testing begins in grade 3, the opportunity to earn a reward through improvement from the prior year does not apply. It also does not apply to students who are new to New York City schools and have no prior-year standardized test score.

<sup>&</sup>lt;sup>36</sup>Originally, rewards were also offered for parents to obtain and review their children's scores on interim diagnostic tests that are administered over the course of the school year. However, parents did not understand these tests very well (see Chapter 4), and the reward was discontinued in Year 2 after the Department of Education explained that not all schools were offering these exams.

<sup>&</sup>lt;sup>37</sup>Special education students with individualized education plans (IEPs) need to pass the Regents Competency Test, a simpler version of the Regents exam.

require for admission.) Additional payments are attached to earning a minimally acceptable number of credits in a given academic year (11 each year toward a total of 44 credits needed to graduate). This reward was created to encourage students to pass all their courses each academic year (taking advantage of summer school opportunities if necessary) so that they would remain on track to graduate in four years.<sup>38</sup> An additional reward is available for graduating.

#### **Preventive Health Care Rewards**

The second panel of Table 1.2 ("Family preventive health care practices") shows the preventive health care rewards. These rewards cover activities that pertain to health insurance, preventive health care checkups, and dental care.

Many families who enrolled in the study were eligible for publicly provided health insurance through Medicaid, or in some cases through the Children's Health Insurance Program (CHIP) or Family Health Plus (FHP) in New York State.<sup>39</sup> However, families must comply with annual recertification requirements for these programs, and many eligible families fail to complete the process. Consequently, "churning" on the rolls can be significant, with many otherwise eligible families losing their coverage.<sup>40</sup> Family Rewards incentive payments for maintaining health insurance were offered to address this problem, encouraging families to keep their coverage in place. The program also offered payments to families in which the parent was not eligible for public health insurance but had access to private, employer-sponsored health insurance. Some families may forgo that insurance because of copayment costs for premiums or services; in these cases, the rewards, which were set at a higher amount than for maintaining public insurance, were intended to encourage families to make those copayments and get the insurance. Participants who were receiving TANF or Safety Net Assistance (SNA) benefits

<sup>&</sup>lt;sup>38</sup>A study of high school students in Chicago public schools found that attendance, course grades, and credit accumulation in ninth grade are correlated with the likelihood of graduating from high school (Allensworth and Easton, 2007). Moreover, a New York City study of high school students highlights the problem of students quickly falling behind in their accumulated credits: "Overage and under-credited students fall behind early, and once they become off-track, they leave the system rapidly. Eighty-four percent of students who are 16 years old with fewer than eight credits end up leaving the system." See Cahill, Hamilton, and Lynch (2006).

<sup>&</sup>lt;sup>39</sup>Medicaid is available to pregnant women and children under age 6 whose family income is at or below 133 percent of the federal poverty level, for children ages 6 to 19 with family income up to 100 percent of the federal poverty level, and for families receiving government income support through the federal TANF program or New York State's Safety Net Assistance program. CHIP is a federal public health insurance program, administered by states, for families with children who have incomes that are too high to qualify for Medicaid but are within 200 percent of the federal poverty level. FHP is a New York State public health insurance program for adults who are age 19 to 64 and who have income or resources too high to qualify for Medicaid; those with children can qualify with family incomes up to 150 percent of the federal poverty level.

<sup>&</sup>lt;sup>40</sup>One unofficial estimate that the New York City Human Resources Administration provided during the Family Rewards design phase suggested that 31 percent of Medicaid cases did not complete a recertification annually and were closed, although 27 percent of those closed cases were reopened within nine months.

were not eligible for the program's health insurance rewards.<sup>41</sup> This was because families who were receiving those benefits were routinely enrolled in Medicaid at the time of application and did not have to reestablish their eligibility as long as they remained on TANF or SNA.

The second set of health care incentives was designed to encourage families to get comprehensive, nonemergency physical examinations — the cornerstone of good preventive health care practice. The main objective was to ensure that family members got comprehensive medical assessments that could lead to the early diagnosis and treatment of health problems that might become more serious over time, and that could also alert them to or reinforce the importance of healthy lifestyle choices (for example, healthful eating, exercise, and protection against sexually transmitted diseases). At the same time, it was hoped that by promoting preventive health care visits, families would be more likely to establish a "medical home" — that is, a relationship with a regular doctor (or health care institution) who would maintain their medical records and understand their medical history, and to whom they could turn when problems arose, rather than resorting first to hospital emergency rooms.

To encourage thorough exams during these visits, the program designers, in consultation with the New York City Department of Health and Mental Hygiene, created a special "preventive care checklist form" that identifies a set of common health conditions that doctors are expected to explore or screen for in any thorough annual physical examination. This form, which has to be signed by the participant's doctor, is tailored to the different needs of adults, teenagers, and younger children. For infants and toddlers, the form includes a standard set of questions to encourage the doctor to screen for developmental problems and to make an appropriate referral for a fuller early intervention evaluation when warranted. An additional payment is offered to parents to encourage them to follow through with such a comprehensive evaluation (which is free in New York City) if they are advised to do so by their pediatricians.

The design team sought to create incentives for getting follow-up care that would make it practical for those who needed such care to get it, but without encouraging those who do not need care to try to get it just to earn the extra rewards, which would waste medical resources and program dollars. The decision was made to attach an incentive payment for one follow-up visit per family member per year in cases where the doctor indicated the need for it on the initial health care checklist (and specified the purpose and time frame for making the follow-up visit on a subsequent form). The payment amount for the second visit was set at half that of the first visit, to help temper the incentive to seek unneeded medical care.

<sup>&</sup>lt;sup>41</sup>Safety Net Assistance is a New York State welfare program for various in-need 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 non-federal funds.

Finally, the health component includes incentives for preventive dental care (regular cleanings and checkups). Although many dentists do not accept Medicaid, a number of dental clinics around the city offer free or reduced-cost dental care. Identifying them, getting to them, and paying them (if they charge a fee) were expected to be significant burdens for low-income families. The incentives payments were intended to help compensate for those extra burdens and costs.

#### **Workforce Rewards**

The third panel of Table 1.2 ("Adult workforce efforts") presents the workforce component, which is aimed at the parents and has two main features. The first is a payment for sustained full-time employment. Operationally, this means that a participating parent must work at least 30 hours per week for six out of every eight weeks. Allowing for some "downtime" is a way of recognizing that, for many low-wage workers, job turnover is common, sometimes because the job itself ends. Those who are in this situation or who leave work for other reasons would have a strong incentive to seek another full-time job quickly.<sup>42</sup>

The workforce incentives also incorporated payments for completing approved education and training activities that can help build parents' human capital so that they can qualify for higher-skilled and better-paying jobs. The courses may be shorter term or longer term, and the incentive payments were tailored with that in mind, providing a higher payment for a longerterm course. Instruction can include not only specific occupational skills training, but also instruction in English as a Second Language (ESL), adult basic education (ABE), and General Educational Development (GED) preparation.<sup>43</sup> To discourage participants from dropping out of the labor force in order to undergo training, which would be inconsistent with New York City's welfare-to-work policies, the program's designers further required that the training reward be available only to parents who were working at least 10 hours per week.

#### Year 3 Modifications

The program's designers recognized early on that the incentives described above might need to be modified as the program unfolded. They knew before the program was rolled out that their estimates of how many families would earn rewards, and, hence, the cost of those incen-

<sup>&</sup>lt;sup>42</sup>This reward is modeled after a bonus that is being tested in an employment retention and advancement demonstration project in the United Kingdom; see Riccio et al. (2008).

<sup>&</sup>lt;sup>43</sup>In order to earn the payments for these activities, participants in ABE, GED preparation, or ESL classes, for which standards of completion are often ambiguous and compliance hard to measure, must provide documented evidence from their providers indicating that they have made satisfactory progress in their classes and that they have participated for the required number of hours established by Family Rewards for a given level of payment.

tives, were largely guesses. Furthermore, in the absence of a pre-study operational pilot, they could not fully anticipate all the practical difficulties that would be involved in marketing, verifying, and processing the long list of incentives to be offered. However, a better understanding began to emerge as operational experience grew and some preliminary impact findings became available. In the summer of 2009, as the end of the second program year was approaching, CEO, Seedco, and MDRC agreed on a set of modifications to the incentives schedule for the program's third and final year that would simplify the program and reduce its overall costs, both of which would make the program more feasible to replicate if successful. These modifications include the following:

- Children's education. First, the attendance reward was discontinued for • elementary and middle school students because average attendance rates proved to be very high already for these grade levels, as evidenced by the control group's patterns, and it appeared that the program was producing little further gain (see Chapter 6). Second, the reward for parents to discuss their children's annual ELA and math test results with teachers was discontinued as a separate reward, and the parent-teacher conference rewards were no longer limited to attendance at the official semi-annual parent-teacher nights sponsored by the schools. Instead, a single, consolidated reward for parent-teacher exchanges was created and offered to parents twice a year (once during the first half of the year and once during the second half), to encourage them to talk with teachers about test scores and any other issues concerning their children's school performance, and at times of the parents' choosing.<sup>44</sup> Third, payments for library cards were discontinued because most children who were likely to get them were believed to have done so within the first two years.
- Family health care. First, all health insurance rewards, a costly component, were discontinued for Year 3. This was done partly because preliminary data from the evaluation suggested that insurance coverage rates were already very high for adults and children in the study. Second, rewards for doctor-recommended follow-up visits were discontinued because of the complexity of distinguishing visits that were truly separate follow-up visits.

<sup>&</sup>lt;sup>44</sup>Over the first two years of the program, it appeared that many parents were claiming parent-teacher conference rewards for meetings they had with teachers at times other than the official parent-teacher nights, perhaps even when discussing the standardized test results. The design team believed that consolidating these rewards into one would promote parent-teacher interactions in ways that might be more meaningful to the parents, while also helping to simplify the incentives schedule by eliminating a reward.

• **Parent's work and training.** The requirement that parents must be working at least 10 hours per week while in education or training programs in order to earn that workforce reward was eliminated. As later chapters show, very few adults received that reward during the first two years, a problem that may have been exacerbated by the poor economy, which made it more difficult to find work. Future analyses will examine whether dropping the work requirement helped to boost the receipt rate of the training incentives.

Because all these changes apply to the program's third year, which is not covered by this report, later reports will assess their implications for program operations and impacts.

# Family Rewards Compared with Other CCT Programs

Family Rewards shares important principles with CCT programs in other countries, particularly its dual emphasis on immediate hardship reduction and human capital development. However, CCT programs in most other countries are at the heart of their social protection systems and are the main or only source of government cash assistance. In contrast, Family Rewards is layered on top of an already well-developed safety net in New York City. It offers families a chance to secure extra income. Indeed, as Chapter 2 shows, many of the families in the program receive food assistance, public health insurance, cash welfare, and/or rent subsidies. New York also includes a broad network of social services programs. Thus, Family Rewards had to be adapted to a context in which the underlying social protection system is very different.

Family Rewards shares with other CCT programs a central focus on children's education and family preventive health care. However, the reasons children may not remain in and progress in school or get the preventive care they need are also different from those found in Mexico and elsewhere, and the reward structure reflects these differences. More generally, New York's program is distinguished by the sheer number of rewards it offers (22 separate ones initially). It is also unusual in including rewards for educational achievement, not just attendance, and for work and training. In further contrast to most other CCT programs, Family Rewards is a short-term, time-limited intervention and is being delivered entirely by private, nonprofit organizations rather than by government institutions. As an entirely urban program, it operates in a very different social and economic environment than the more heavily rural CCT programs in the rest of the world. And, of course, as a start-up project, it is operating on a much smaller scale than most other CCTs.<sup>45</sup>

# Expected Effects of Family Rewards

The idea of making income transfers conditional, or of trying to influence educational, health, or employment behaviors with financial incentives, is certainly not new in the United States, and past experience offers some guidance on what effects might be expected from Family Rewards. This section presents some of those past lessons and highlights a number of criticisms that have been lodged against the program, often from different ideological standpoints and pointing to possible consequences beyond the experiences of the families who are involved in the program.

#### **Evidence on Other Incentive-Based Policies and Programs**

In contrast to Family Rewards, most conditional cash transfer programs in this country have focused on work-related activities. The EITC is the best example of a work-conditioned cash transfer program. It offers payments (in the form of a refundable tax credit) only to low-income adults who are working. The TANF program, the main cash welfare system for families with children, requires parents to seek or prepare for employment or face the possibility of a financial penalty — namely, a reduction in or termination of the family's welfare grant.<sup>46</sup> Most states also use earnings disregards to encourage work among TANF recipients. These policies disregard a portion of earned income in calculating the welfare grant, allowing some working recipients to retain a portion of the grant as an earnings supplement. Finally, a number of special demonstration projects have tested work incentives that are delivered as special wage supplements or as bonuses for sustained employment. Overall, findings from evaluations of welfare-to-work and other employment programs that have featured work incentives and/or work requirements have generally found them to have positive effects on employment and earnings.<sup>47</sup>

<sup>&</sup>lt;sup>45</sup>It is possible that, if operating on a larger scale, Family Rewards might affect community norms in a way that it cannot as a small-scale initiative. Any such potential, of course, cannot be measured in the current evaluation.

<sup>&</sup>lt;sup>46</sup>For its part, the government offers some services to aid in that search, making the principle of "mutual obligation" (akin to the "coresponsibility" principle of Oportunidades and other CCT programs) a central tenet of the policy.

<sup>&</sup>lt;sup>47</sup>For information about the effects of the EITC, see Meyer and Rosenbaum (2001) and Holt (2006). For findings from evaluations of welfare-to-work and other employment programs that included financial incentives alone or combined with work mandates and employment-focused case management, see Michalopoulos (2005); Bloom, Riccio, and Verma (2005); Riccio et al. (2008); and Martinson and Hendra (2006).

Incentive-based policies have also been growing in the education and health fields. Prominent examples from a number of cities that have been the subject of careful evaluations include programs that paid for performing well on Advanced Placement tests for high school students, for exceeding certain levels of performance on standardized English and math exams or meeting other performance measures, and (in Israel) for passing a series of national high school exams that are required by universities and some jobs. In addition, some community colleges are experimenting with "performance-based scholarships," which tie tuition and other financial support to school performance in an effort to increase persistence and rates of degree completion. In all these examples, the school offers the education incentives directly to the students. Alternative approaches include "learnfare" programs have attached financial rewards and penalties to performance on outcomes such as attendance, GED certificate receipt, and high school graduation. Some evaluations of education-focused incentive programs have found small to modest positive effects on certain education outcomes. This finding suggests that such incentives can work in some contexts, although in a number of cases they had no effects.<sup>48</sup>

In the health field, evidence is accumulating on the effectiveness of financial incentives for important health-related behavior such as losing weight, refraining from smoking, and complying with treatment regimes. A number of mostly small-scale clinical trials have found some positive short-term effects on the desired outcomes, but information on the longer-term effects of such interventions remains very limited.<sup>49</sup>

As these examples illustrate, a growing body of experimental literature suggests that, under certain circumstances, financial incentives in each of the areas targeted by Family Rewards can generate small to moderate improvements in education, health care, and workforce outcomes. This evidence, along with the results from evaluations of CCT programs in other countries, offers some empirical justification for predicting that Family Rewards, too, can have

<sup>&</sup>lt;sup>48</sup>See, for example, Angrist and Lavy (2002) for information on the Israeli experiment; Jackson (2010) for information on the evaluation of the Advanced Placement test incentives program in Texas; Harvard Education Labs (www.edlabs.harvard.edu) for overviews of incentives experiments that are under way in schools in New York City (Spark), Washington, D.C. (Capital Gains), and Chicago (The Paper Project). Other relevant studies include experiments involving a large Canadian university (Angrist, Lang, and Oreopoulos, 2007), elementary schools in a poor Appalachian community in Ohio (Bettinger, 2008), and primary schools in Kenya (Kremer, Miguel, and Thornton, 2007). See Bos and Fellerath (1997) and Mauldon et al. (2000) regarding learnfare experiments; Battistin et al. (2004) on the UK Educational Maintenance Allowance regarding a policy that offered financial incentives for teenagers to remain in school past the age of 16; and Brock and Richburg-Hayes (2006) on a test of performance-based scholarships in a community college.

<sup>&</sup>lt;sup>49</sup>For a review of 47 studies that tested the use of financial incentives to promote preventive health care activities, see Kane, Johnson, Town, and Butler (2004). For an earlier meta-analysis reviewing 11 randomized trials that used financial incentives to enhance patient compliance with medication regimens and medical appointments, see Giuffrida and Torgerson (1997). For more recent evidence on a weight loss incentives trial, see Volpp et al. (2008), and on smoking cessation, see Volpp et al. (2006).

positive effects, and possibly larger and a broader range of effects, given its unusually comprehensive nature.<sup>50</sup> At the same time, the fact that some studies of incentives have found no or small effects underscores the importance of testing the Family Rewards model carefully for proof that it can succeed.

#### **Controversies**

From the time of its announcement, the idea of a CCT program for New York City has been controversial. Critics point to possible negative effects that could arise from this type of intervention, including ramifications that extend beyond the program's effects on the participating families.

Some critics on the political right have argued vociferously that "paying" people to be "good parents" and to "behave responsibly" is morally wrong and may weaken norms that signal and guide socially appropriate behavior for parents and children. While believing that poor families' own motivational problems or bad choices contribute to their lower incomes, lower educational attainment, and, in some cases, health problems, such critics contend that incentives are not the right way to try to change that behavior. Some have also expressed a fear that, if offered on a larger scale, this approach will feed expectations among low-income families — and perhaps others — that they should be paid for fulfilling their "moral obligation" as parents and citizens.<sup>51</sup>

Some scholars have strongly opposed attaching financial rewards to education, arguing that such an approach will harm children's educational achievement over time. Drawing largely on psychological theory and laboratory-like experiments, these scholars contend that extrinsic rewards can undermine an intrinsic motivation to achieve particular goals — including the motivation to learn — and that persistence in pursuing those goals may weaken once the rewards are terminated. For example, the desire to learn for its own sake may be diluted when students are rewarded with money or prizes to engage in learning activities.<sup>52</sup> Some critics also fear that participants who have difficulty earning rewards may become discouraged and be more likely give up trying to achieve certain outcomes as a result. But other scholars challenge

<sup>&</sup>lt;sup>50</sup>In the United States, at least two very small-scale initiatives — the Family Independence Initiative, originating in Oakland, California, and Pathways to Rewards, operated by Chicago's Project Match for public housing residents — similarly offer rewards across a broad range of activities. The programs have not been rigorously evaluated. See www.fiinet.org and www.pmatch.org for further information.

<sup>&</sup>lt;sup>51</sup>One critic, Heather MacDonald of the Manhattan Institute, is quoted in the *New York Times Magazine* as saying: "If Opportunity NYC goes large scale, it will further break down the moral obligation to care for one's child and adopt the repertoire of parenting behaviors the middle class takes for granted. It will replace that with the expectation that I'm only going to do it if you pay me." See Rosenberg (2008).

<sup>&</sup>lt;sup>52</sup>See, for example, Deci, Koestner, and Ryan (1999).

the claim that external rewards undermine intrinsic motivation, countering with other evidence and on theoretical and empirical grounds.<sup>53</sup>

Some commentators, especially from the political left, have objected that the program distracts attention from what they deem to be the main causes of poverty, which are more structural in nature — for example, poor schools, poor services, and a lack of good jobs. They are thus skeptical that the program can make a substantial difference. Some also view it as paternalistic and "insulting" to poor parents to assume that they need to be paid to do what is right for their families.<sup>54</sup>

City officials have a different view. They have argued that they want to test new strategies to tackle persistent, entrenched poverty where other approaches have failed, and that, given the positive results that other CCT programs and incentive-based strategies have sometimes achieved, this approach is worth testing in New York City. The evidence will show, for example, whether students' achievement is helped (or harmed), whether family poverty is reduced or left unchanged, and whether preventive health care practices and parents' employment prospects are improved. Thus, they have urged that final judgments about the merits of Family Rewards and whether it has any place in public policy should wait until the results of the evaluation are available.

They have also challenged the moral arguments against incentives, stressing that incentives are already used widely throughout society to influence the choices and activities of middle-class and wealthy people, including tax deductions designed to encourage home purchases and tax breaks to steer a multitude of business investment decisions in particular directions.<sup>55</sup> Furthermore, the program offers a substantial amount of extra resources to poor families, adding to — not competing with — other benefits that are already available to them.

Finally, City officials asserted that they are not ignoring infrastructure conditions, but that they are responding to those conditions through their broader policy agenda, not Family Rewards. For example, they have pointed out that, through other CEO initiatives and those of other agencies, they have made important investments in the public schools, community colleges, health and food policies, child tax credits, low-income housing, and other institutions

<sup>&</sup>lt;sup>53</sup>See, for example, Cameron and Pierce (2002).

<sup>&</sup>lt;sup>54</sup>For an example of contrasting views, see The Becker-Posner Blog, www.becker-posner-blog.com.

<sup>&</sup>lt;sup>55</sup>In a speech at a conference on CCT programs hosted by the Organization for American States in September 2009, Mayor Bloomberg said: "Financial incentives have already proved to be a powerful tool in so many areas. The federal government puts them in our tax code, through policies such as the mortgage interest tax deduction for homeowners. And the private sector uses them too, in the form of compensation packages. So why shouldn't local governments also harness the power of incentives?"

and policies that address a variety of structural causes of poverty and quality-of-life issues in low-income communities.<sup>56</sup>

## Evaluation Overview and Data Sources

The Family Rewards evaluation will show whether the program has the positive effects its designers hope for, or the negative effects that some critics fear. This report is the first major installment in that evaluation, which is assessing the program's implementation, impacts on families, and economic costs and benefits. The follow-up period for the impact analysis will eventually cover five years from the time of each family's date of random assignment. This time period will make it possible to assess the program's effects during the three years in which the incentives are offered to families, as well as during two additional years after the program and the incentives end. The post-program period will be especially important for determining whether any positive impacts that are achieved while the incentives are available will be sustained or will grow, or whether negative effects on education or other outcomes emerge after the incentives are no longer offered.

The evaluation is using an extensive set of quantitative and qualitative data. This information includes administrative records on school outcomes, employment, earnings, public health insurance, welfare and food stamp payments, and housing subsidies obtained from various New York City and New York State agencies; three waves of a survey in which a subset of parents in the program and control groups are interviewed (only the first wave — the 18-month survey — is covered in this report); program-related data on reward payments obtained from Seedco; and qualitative data obtained through in-depth, qualitative interviews with a sample of program participants and through observations of staff carrying out program activities at Seedco and the NPOs.

For this initial report, the follow-up periods vary in length for different parts of the analysis that use different data sources (see Table 1.3). For example, the impact estimates for education outcomes that are based on school administrative records cover two complete school years for all sample members. In contrast, impact estimates for employment and earnings based on New York State unemployment insurance wage records primarily cover only the first program year, while impact estimates based on the Family Rewards 18-month survey of parents cover the period through about midway into the second program year, on average. The exact

<sup>&</sup>lt;sup>56</sup>See, for example, New York City Center for Economic Opportunity (2009).

#### The Opportunity NYC Demonstration: Family Rewards

## Table 1.3

#### **Data Sources and Coverage Periods for This Report**

Data Source	Months for Which Data Were Collected	Length of Follow-Up Period for Quantitative Measures	End of Follow-Up Period Relative to Program Years 1 and 2
Unemployment insurance wage records <sup>a</sup>	July 2007 - March 2009	12 months from each family's random assignment date	Near beginning of second program year for most sample members
Temporary Assistance for Needy Families/Safety Net records	July 2007 - March 2009	12 months from each family's random assignment date	Near beginning of second program year for most sample members
Food stamp records	July 2007 - March 2009	12 months from each family's random assignment date	Near beginning of second program year for most sample members
Medicaid records <sup>b</sup>	July 2007 - April 2009	18 months from each family's random assignment date	Near beginning of second program year for most sample members
Children's Health Insurance Program records <sup>c</sup>	October 2007 - February 2009	15 months from each family's random assignment date	Near end of first program year for most sample members
School records	September 2007 - August 2009	2 complete program years	End of second program year for all sample members
Family Rewards data from Seedco <sup>d</sup>	September 2007 - August 2009	2 complete program years	End of second program year for all sample members
Parent survey	November 2008 - July 2009	18 months (average)	Middle of second program year for most sample members
Program observations and in-depth interviews	July 2007 - August 2009	NA	NA

NOTES: NA = not applicable.

<sup>a</sup>Unemployment insurance wage records are provided in calendar quarters (Quarter 3, 2007, through Quarter 1, 2009).

<sup>b</sup>Medicaid receipt was measured by collecting snapshots of the sample's Medicaid status during the first day of each calendar quarter.

<sup>c</sup>Data for the Children's Health Insurance Program were measured by collecting snapshots of the children's status three times a year, in February, June, and October.

<sup>d</sup>This refers to the data that Seedco collects on the rewards that program participants earned. These data do not include information on payments made to participants.

calendar months covered by the survey vary according to family members' random assignment dates and when they were reached for interviews. The survey had an overall response rate of 82 percent, with similar results for the program and control groups.<sup>57</sup>

# Structure of This Report

This report covers the implementation and impacts of Family Rewards through the first year of program operations, which should be viewed largely as a "start-up" phase, and to some extent into the second year (depending on the data source). It thus offers a preliminary assessment of the program's operations and effectiveness. Future reports will assess program results covering longer periods of time.

Chapter 2 begins the analysis by describing the process for recruiting and enrolling families into the study and the characteristics of the families. Chapter 3 examines the operation of the program by Seedco and the NPOs, explaining how those operations have evolved over time as the agencies have gained more experience. Chapter 4 focuses on families' understanding of the incentives offer, the number and amounts of rewards they earned, and their reactions to the program. Chapter 5 reports on the initial impacts of Family Rewards on a variety of outcomes that are most closely associated with the program's short-term poverty-reduction goals. It is reasonable to expect that effects on such outcomes might be larger in the short term than the effects on human capital development, which may emerge more slowly. In addition to measuring impacts on income and poverty, that chapter also examines the program's effects on commonly used indicators of material hardship, economic well-being, financial and banking behaviors, and asset building. Chapters 6 through 8 take a closer look, by domain, at the extent to which program participants earned particular types of rewards, and at the program's early impacts on children's education, family health care outcomes, and parents' workforce outcomes. Chapter 9 offers concluding thoughts and highlights topics that will be addressed in future reports as the evaluation continues to unfold.

<sup>&</sup>lt;sup>57</sup>See Appendix D for further details on the survey and response bias analysis. The next two waves of the survey, in which the same sample members will be contacted for interviews, will be conducted at approximately three and five years after random assignment.

## Chapter 2

# **Recruitment and Characteristics of Participating Families**

In the summer of 2007, an intensive effort was launched to begin building the Family Rewards infrastructure, recruit families, and implement the random assignment process in time for program operations to begin with the start of the new school year in September. The Neighborhood Partner Organizations (NPOs) were charged with rapidly recruiting 5,100 eligible low-income families for the Family Rewards demonstration, beginning in July. They had to contact and enroll families who were identified through lists of students compiled from New York City Department of Education (DOE) data. Ideally, the NPOs would have completed the process by the time the program officially began in September 2007, but they encountered a number of challenges that required extending the recruitment period until the end of 2007. The NPOs succeeded in enrolling a final sample of approximately 4,800 volunteer families within six months, or about 94 percent of the original target.

This chapter describes the recruitment and enrollment strategies that were devised for the project and how they were executed in the field. It explains the procedures for contacting families, marketing the study to them, administering the intake process, obtaining the parents' informed consent to take part in the research, and conducting random assignment. The chapter also describes the characteristics of the study sample. In addition, with the goal of assessing whether the results of the evaluation can be generalized beyond the study sample, the chapter compares the sample's characteristics with the characteristics of families in the larger eligible population who were not enrolled. Data for the analyses that are presented here come from program documents, observations of the outreach and enrollment process, in-depth interviews with parents and program staff, responses on a Background Information Form that parents completed just prior to random assignment, school records from the DOE, and special tabulations using data from the American Community Survey.

As the chapter shows, the NPO staff quickly discovered that, for many families, the telephone numbers and home addresses on the DOE's list of potentially eligible families were outof-date. This situation required the NPOs (together with Seedco and MDRC) to search for alternative contact information, slowing the recruitment process. Adding to that difficulty was the fact that many families, upon hearing of the offer of "substantial cash payments," were skeptical and questioned the program's legitimacy. The NPOs' marketing job was made even tougher by the nature of the random assignment research design, which cannot *guarantee* that families who agree to participate in a study will get a slot in the program being evaluated; thus, the NPOs could only offer families a *chance* to enter the program through a lottery-like process. As with any voluntary study, the risk that those who enroll might not broadly represent the kinds of families for whom the program was intended was an important concern. In an attempt to minimize that risk, MDRC and Seedco formulated a recruitment strategy aimed at reaching more than just the families who were the "most motivated," easiest to contact, or most willing to "join programs." This step added yet another level of complexity to the recruitment task.

Despite numerous hurdles, the NPOs were able to find and enroll a sample that appears to be fairly similar to the intended target population on many dimensions. However, the recruitment struggles resulted in some delays in building the sample, with the consequence that half of enrolled families entered the study after the program had already begun. This delay means that the first year in the program was truncated for some participants, and, as discussed in Chapter 3, it complicated program operations during the initial months by requiring that NPO staff split their attention between completing recruitment and working with the families who were already enrolled.

## Identifying the Target Population

The initial timeline for Family Rewards included a short enrollment period over the summer of 2007 in anticipation of the program beginning at the start of the school year in September. The NPOs recruited families from lists provided by MDRC and Seedco of potentially eligible students who were selected from an initial list prepared by the DOE, according to the criteria described in Box 2.1. Working with predefined and prescreened lists, the NPOs knew exactly which families they were charged with recruiting, rather than having to launch a general advertising campaign in the communities to find eligible families. The lists contained the names and contact information of the students and parents, including phone numbers and addresses. All students on the list lived within zip codes associated with the targeted community districts, were enrolled in the National School Lunch Program (a federally funded program that provides free lunches for children in families with incomes at or below 130 percent of the federal poverty level),<sup>1</sup> and were slated to enter the fourth, seventh, or ninth grade in the fall. Enrollment in the National School Lunch Program was a proxy for determining a family's income eligibility for the program, which avoided the need for a new and burdensome meanstesting process. Some schools are also designated as "universal feeding schools," where all students are eligible for the free lunch program regardless of family income. These schools are

<sup>&</sup>lt;sup>1</sup>For more information on the National School Lunch Program, see www.fns.usda.gov/cnd/ Lunch/AboutLunch/NSLPFactSheet.pdf.

## Box 2.1

## **Eligibility for Family Rewards**

As described in Chapter 1, program designers created the Family Rewards program to address intergenerational poverty among specific types of low-income families. The program's designers set eligibility criteria in the following categories: family income, entering grade of child in September 2007, home location, and citizenship status.

**Family income:** The program designers defined "low income" using the federal poverty guideline. In order to qualify for the study, enrollees had to have family income at or below 130 percent of the federal poverty level, the income eligibility requirement for the Food Stamp program.

**Entering grade of child:** The program targeted families with children in grades 4, 7, and 9, each of which is considered to be the start of a critical transition period in education. Families had to have at least one child in one of those grades in order to be eligible for the study. This requirement ensured that samples would be large enough so that the program's educational effects could be analyzed separately for cohorts of students in each of these critical transition periods.

**Home location:** Enrollees had to be living in the targeted areas, which consisted of six of the highest-poverty areas in New York City located in the Bronx, Brooklyn, and Manhattan. These areas include Community Districts 5 and 6 in the northwest Bronx, 5 and 16 in northeast Brooklyn, and 10 and 11 in northeast Manhattan. (See Chapter 1 for the included neighborhoods.)

**Citizenship status:** Eligibility requirements restricted enrollment by citizenship status because of the two-generation intervention design targeting both children and parents. Parents enrolling in the program had to be either U.S. citizens, by birth or naturalization, or legal permanent residents. This ensured that all enrolling parents had the legal right to work and would not experience legal barriers preventing the take-up of work-focused incentive payments.

The following eligibility requirements were also in place: Both parents in a married couple or legal domestic partnership and all children in their legal custody under the age of 18 could enroll in the Family Rewards program, provided that they met the documentation requirements (described in Box 2.3). In order for an eligible couple to sign up, both parents were required to be present at the time of enrollment. While there are not many married parents or partners in the sample, this rule led some parents to enroll without their spouse or partner because of scheduling conflicts. Any children and parents for whom documentation was not provided at the time of enrollment. Only new additions to a family were eligible for incentive payments, which were limited to the addition of a child through birth or adoption and the addition of a spouse through marriage or the addition of a partner through a legal domestic partnership. Data about these additional family members are not included in the information presented in this report. Since it is not possible to identify similar family additions for the control group, those individuals were not added to the research sample.

located in low-income neighborhoods where most families would qualify for free lunch, and a number of such schools were in the neighborhoods that were targeted for Family Rewards.<sup>2</sup>

In June 2007, the DOE compiled a list of 37,000 potentially eligible students and sent it to MDRC, where staff pared this initial recruitment list down to about 22,000. This process involved removing cases that had been deemed ineligible according to additional criteria.<sup>3</sup> With the final target population defined, MDRC split the larger recruitment list of approximately 22,000 families into random batches of smaller groups of families.<sup>4</sup> MDRC then distributed these smaller lists to the NPOs one batch at a time. The NPOs were required to do as much as they could to contact all families in a given batch before requesting the next batch from MDRC. This approach was put in place to ensure that the recruiters did not "give up" too quickly on harder-to-find cases, who might have been systematically different types of people (for example, perhaps more disadvantaged) than the easier-to-find cases. The exclusion of these families could have resulted in a study sample that misrepresented the larger target group of interest.

NPOs were required to call each family in a given batch six to eight times and conduct several home visits before MDRC issued a new batch. In the case that a family was harder to reach because of a bad, disconnected, or out-of-service phone number, the program's outreach protocols required home visits in an attempt to ensure that even those families would be invited to sign up. However, home visits were not always possible because of incorrect or changed addresses. Home visits were also deployed to increase the chances of enrolling families who initially ignored attempted contacts because they were skeptical about the program. The NPOs eventually exhausted all batches because of the large quantity of bad contact information. To help them meet their recruitment goals, the program's designers expanded the geographical target areas somewhat, adding approximately 5,000 more families to the list of potentially eligible families.<sup>5</sup>

<sup>&</sup>lt;sup>2</sup>See http://www.fns.usda.gov/cnd/governance/prov-1-2-3/prov2guidance.pdf.

<sup>&</sup>lt;sup>3</sup>These cases included families who were receiving reduced price lunches, which has a higher family income cut-off, or who were not participating at all in the National School Lunch Program; families living in parts of zip code areas that were outside the designated community district boundaries; and families who were among the target populations for Work Rewards and Spark, the two other Opportunity NYC evaluations (see Chapter 1). Any substantial overlap of samples across the three incentives-based Opportunity NYC studies would threaten the integrity and clarity of the findings for all three evaluations, since control group members in one study could become program group members in either of the other studies, and vice-versa.

<sup>&</sup>lt;sup>4</sup>Dividing the batches randomly ensured that all batches would include similar types of families, including those who were easier to recruit as well as those who were harder to recruit.

<sup>&</sup>lt;sup>5</sup>These additional families lived in bordering community districts in zip code areas that overlapped with the target areas.

## Strategic Outreach

The original recruitment goal of enrolling 5,100 families before the beginning of the school year was extremely ambitious, considering that enrollment did not start until July.<sup>6</sup> Eventually, this deadline was extended to December 31, 2007.<sup>7</sup> Over the course of the sixmonth enrollment period, targeted families received several forms of program advertising. As shown in Figure 2.1, Seedco first sent them a postcard that described Family Rewards and its eligibility guidelines and included information on how to sign up or learn more about the program. The NPOs then followed up with phone calls and home visits.<sup>8</sup> Often, the NPOs sent letters reminding families of the opportunity to enroll or inviting them to recruitment events to learn more about the program and enjoy free food and entertainment. These events included end-of-summer and back-to-school parties. For some families, particularly those who were skeptical, these invitations were an effective inducement to get them to consider the opportunity to sign up for the study. The NPOs also advertised a \$20 MetroCard as a "thank you" sign-up gift for all families who enrolled in the program.

To help the NPOs meet their recruitment goals, the program designers allowed them to enroll up to 85 families (10 percent of their total enrollees) who were not on the recruitment list but expressed interest in joining the study and met all other eligibility requirements.<sup>9</sup> These families included those who had recently moved to the neighborhood, had not applied for the free school lunch program (but met the income standard), had children who were held back to a target grade for the 2007 fall semester, or had a change in family income that made them eligible. Outreach workers posted flyers around the neighborhood in select locations, passed out flyers as they made home visits, and provided information at events to recruit these additional families.<sup>10</sup>

<sup>&</sup>lt;sup>6</sup>Seedco created weekly recruitment targets for each NPO, which required enrolling over 100 families each week in order to meet the September deadline.

<sup>&</sup>lt;sup>7</sup>Since random assignment was conducted at MDRC after participants were enrolled into the study at the NPOs, some families were allocated to the program or control group in January 2008.

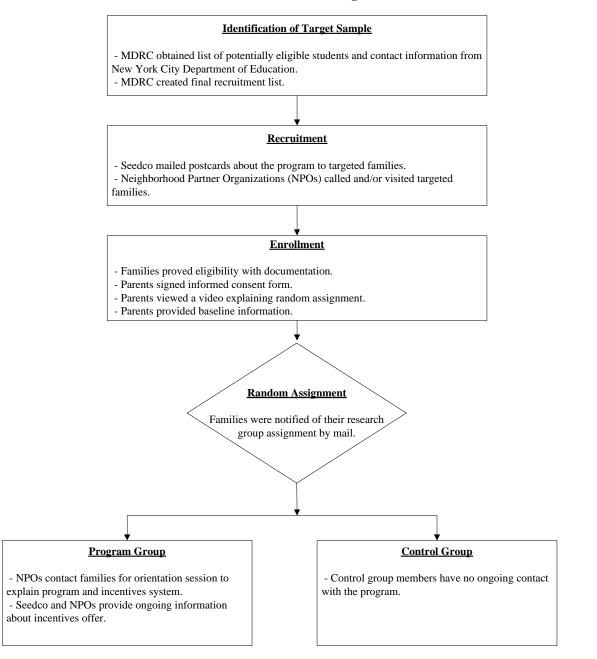
<sup>&</sup>lt;sup>8</sup>Since language was a potential problem during the initial outreach phone call, some NPO staff and managers developed creative ways to address these potential barriers to recruitment before contacting a family. For example, instead of calling an individual, finding that the individual spoke only Spanish, and then giving the contact information to a Spanish-speaking outreach worker, staff at some NPOs divided batch lists by last name, giving families with Spanish-sounding surnames to bilingual outreach staff, and others to monolingual staff.

<sup>&</sup>lt;sup>9</sup>MDRC monitored the number enrolled for each site through data submitted during enrollment.

<sup>&</sup>lt;sup>10</sup>Almost every NPO reported encountering some families who spoke languages other than English and Spanish. For example, some could only communicate in Bengali, Chinese, or French, making it difficult for such families to enroll. In some cases, outreach workers were able to communicate through family members or friends who acted as translators, but some families may not have enrolled because of the language barrier.

## Figure 2.1

#### **Recruitment and the Random Assignment Process**



In addition to planning different types of outreach strategies, some NPOs used incentives to keep staff engaged and motivated throughout the recruitment period.<sup>11</sup> These included incentives for the staff member with the highest number of enrollments each week, paying staff a bonus for each enrollment, and rewarding the whole recruitment team for meeting weekly targets.

#### Contending with Obsolete Contact Information

Although the recruitment list provided phone numbers and addresses for potentially eligible families, NPO staff estimated that 30 percent to 50 percent of these phone numbers were out of service or had been disconnected since parents had given them to their children's schools. In these cases, NPOs often sent follow-up letters or tried calling numbers at different times of the month to determine whether out-of-service numbers might be reinstated after bills were paid. As a result of obsolete numbers, NPOs had to spend a good deal of time conducting home visits. This process was much less efficient than phone-based outreach. Outreach workers were able to contact between two and three homes an hour, depending on the accuracy of addresses, whether public housing development security prevented staff from entering, and how long travel time was between the targeted homes. In contrast, a worker might be able to reach 12 to 18 families an hour by phone.<sup>12</sup>

## Avoiding the Appearance of a "Scam"

Before the start of recruitment, Seedco and MDRC developed a marketing pitch that stressed how much money families might be able to receive in reward payments if they were selected for the program. For example, a script prepared for outreach workers stated: "I'm [INSERT NAME] calling with good news from the City of New York! Your family may be eligible to earn up to \$4,000 or more in cash every year as part of a new program sponsored by the City." However, outreach workers quickly encountered skeptical responses from many participants, who doubted the offer was real or feared that the caller was involved in a "scam." These experiences were shared in weekly meetings between Seedco and the NPOs, and the organizations adopted a more flexible marketing approach.

Some outreach workers found it effective to stress the program's link to Mayor Bloomberg to give the program credibility; others spoke about cash rewards only at the end of the conversation, focusing instead on how the program helped children. (An example of this

<sup>&</sup>lt;sup>11</sup>Each NPO had six to nine outreach staff.

<sup>&</sup>lt;sup>12</sup>In another effort to help the NPOs reach targeted families with bad contact information, CEO solicited selected city agencies to try to obtain contact information on families in the sample who were enrolled in other city programs. MDRC and Seedco then distributed the relevant information to the NPOs. Overall, outreach staff reported small returns on these efforts.

approach can be found in the outreach case study in Box 2.2.) Outreach workers sometimes varied their messages according to the race, ethnicity, or national origin of the person to whom they were speaking. In some cases, messages incorporated a cultural reference. For instance, to legitimize the program with Spanish-speaking families, some workers referenced the connection to the Mexican program Oportunidades, which received some press coverage during the recruitment period. Other NPOs emphasized how the program could contribute to improvements in the families' neighborhoods.

In order to keep recruitment efforts focused on families who were on the recruitment list, to avoid encouraging other interested but ineligible families to try to apply, and to maintain more control over the messages about the study that reached families who would eventually be assigned to the control group, the guidelines for the recruitment process precluded buying air time on a local radio or public broadcasting station or conducting outreach at schools or through teachers or parent associations. This absence of broad-based publicity may have added to the challenges of establishing the legitimacy of the program. However, as recruitment continued, NPOs reported that news coverage of the program had increased community awareness about it.<sup>13</sup> Official program postcards, distributed after the initial phone calls began, also helped the program establish credibility, as did information shared increasingly via word-of-mouth by families who had enrolled.

## Marketing a "Chance" to Be in the Program

Although the messages could vary, all staff were required to explain clearly that selection for the program was random. For example, the script that staff were expected use in recruiting families stated, "There are a limited number of spaces available in the program. So, to be fair, we're using a process that's completely random to decide who will be eligible for the payments. It's like flipping a coin: you'll have a 50 percent chance of becoming eligible for payments." Outreach workers stressed the 50/50 chance of getting into the program group and often added a reference to the lottery, reminding families that they had less chance of winning the New York Mega Millions than of getting into Family Rewards. While the chance to be part of a program like Family Rewards was often enough for a family to sign up, some families may have opted out since there was no guarantee of getting into the program even if they were eligible.

<sup>&</sup>lt;sup>13</sup>Between July and September alone, articles about the program were published in the *New York Times, USA Today, Newsweek, Gotham Gazette, Daily News, New York Post,* and *New York Sun,* and it received television coverage on the local station NY1.

## Box 2.2

## Outreach Case Study: Appealing to the Target Community

The case study below highlights an example of a home visit that MDRC researchers observed. This example demonstrates how staff changed the message to appeal to their target community.

Sharon and Ted (not their real names), two NPO staff members, started their day by spending about a half an hour in the office sorting contact sheets by street and address, and putting them in the order in which each home would be visited. The families who were included on these contact sheets were those whom staff had not been able to contact by telephone, and who were getting their first home visit.

At the home visit, Sharon and Ted introduced themselves by stating their names and explaining that they were associated with Opportunity NYC and Union Settlement Association. They then explained quickly that Opportunity NYC is a program for children, using the name of the target child in grade 4, 7, or 9; a variation on this approach was to say "I'd like to talk to you about your son/daughter." They led with the child's name quickly, in the first sentence or two, to pique the parent's curiosity. This approach also gave them an air of legitimacy or authority, although it may also have made the parent temporarily nervous if he or she thought that Sharon and Ted were conducting a home visit from the Administration for Children's Services or from the child's school. After this introduction, they asked to talk to the parent about the program. In every case that MDRC researchers observed, the potential enrollees invited staff into their homes.

When they got into the apartment, Sharon and Ted reintroduced themselves and the program, and asked whether the child whom they'd mentioned was entering one of the target grades. Then they explained that Opportunity NYC is a program that is designed to keep children in school and "doing the right thing." Ted made the point that it "pays you for being a parent." They talked about rewards for parent-teacher visits, library cards, test score rewards, and, last, employment. The amount of potential earnings was not mentioned until the end, at which point they also explained that there was "no fee to join this program" and that it didn't cost anything or interfere with the receipt of public benefits. Then, they scheduled an appointment with the parent to go to Union Settlement for enrollment. Finally, before they left, they mentioned that families would receive a gift of a \$20 Metro-Card for signing up.

## Parents' Reasons for Joining the Study

MDRC researchers conducted in-depth interviews with parents in the program group to learn about their initial perceptions of the program and their interest in joining it. They gave a variety of positive reasons for signing up. Some saw Family Rewards as an opportunity to encourage their children to do better in school and finish high school. As one parent said, "There wasn't really anything really motivating me 'cause I still have to take them to the doctor regardless. So [I signed up to] try to let them push them to do better in school." Others thought Family Rewards was worthwhile because it encouraged parents in the community to support their children, even though they did not think of themselves as needing this type of encouragement. One parent commented:

> I really do think it's a great idea...like taking the kids for physicals and taking kids for the dentist and stuff like that. Not every parent does it. And especially there's a lot of young girls nowadays giving birth, something that you used to not see before. So I think it's real good that they really, you know, really want the parents to be on time for their kids' stuff.

Some of these parents thought Family Rewards would help other parents become more engaged in their children's schooling. While most of these parents did not describe themselves as needing this type of guidance, the program was appealing because of its potential to improve the habits of parents for the greater good.

Some of these parents also wanted to be part of finding a solution to long-standing community problems. As one said:

When they approached me with it I said, "Well, it's an opportunity. Even if they don't put me as part of the program where I get paid, I'll still participate" because it's a pilot program and it's something that's gonna help the community, for parents to be more responsible and accountable for what they're supposed to be doing. So either way, I was gonna participate.

For some other participants, the program spoke directly to their pressing financial needs. These participants saw the program's potential for help with household expenses after a recent job loss, or as a way to buy clothes for their children, save money, and become financially independent from other family members.

Finally, friends, family, or community members who had enrolled encouraged some families to sign up. These participants often first ignored outreach and then reached out to the NPOs in response to this encouragement.

While most participants who were interviewed described the goals of the program in positive terms, some were initially skeptical about Family Rewards. To these individuals, it seemed farfetched that they would be paid to take their child to the doctor or to school. As one parent put it, "Now, let's be for real. In this day and age, who's gonna give away free money?" Some of this skepticism stemmed from a fear of fraud or identity theft, since Social Security numbers were required for enrollment. However, contact with the program made them more comfortable, especially repeated contact by outreach staff and visits to an NPO. Other parents sought out additional information to confirm the program's legitimacy through researching media coverage or calling 311, the New York City government telephone number through which callers can be connected to nonemergency government services or agencies. One parent described her experience of verifying the program's existence:

They called me, and, you know, they left a message on my phone, on the answering machine. And I said to myself, you know, telemarketer. I'm not gonna deal with that. So they called again. And I happened to answer the phone. So the lady was saying, you know, you can get rewards. I said, "Listen, I don't know who's playing games." She said, "Listen now, if it was me and somebody's offering me free money, are you gonna turn it down?... I'm telling you, I'm for real."...She said, "I'm gonna prove it to you, just come in and — you know, you can think I'm crazy." She said, "But if you don't believe me, go, you know, online and find out about Groundwork." So you know what happened, I called 311...The lady was cracking up. She said, "You know, you're like the tenth person who called." I said, "Well, you know, I mean come on, this sounds crazy." She said, "Ma'am, I'm not — this is not a joke." She said, "I know it sounds crazy, 'cause if I was you I would be the same way."

A number of the interviewees who were initially skeptical also spoke about the stigma of being part of a program for low-income people that pays parents for doing what they are "supposed to do." As one parent said, "I was first appalled at the fact that somebody — things were so bad where you had to be paid to do things that you should normally do for your children anyway. So I just — I tore the paper up and put it in the garbage later." In these types of statements, interviewees sometimes noted that the program was for "poor" or "low-income" families and made clear distinctions between themselves and that target group.

Despite their skepticism, these interviewees signed up for Family Rewards. As one parent described, it was worth taking a chance: "Sometimes opportunities do arise, and you should take advantage of them and see what happens with the outcome...what harm could come from it, or what good can come from it. Sometimes you have to go out and test the waters." After deciding to "take the plunge," these participants went to an NPO to enroll through the process described in the following section.

## The Enrollment and Random Assignment Process

As shown in Figure 2.1, the enrollment process at the NPO required parents to provide eligibility documentation, view a video that explained random assignment, sign an "agreement to participate" (or "informed consent") form, and provide background information. The program required that families have at least one child in fourth, seventh, or ninth grade in order to be eligible for Family Rewards. As long as one child met that criterion, with proper documentation the whole family could enroll in the program, including siblings under the age of 18 and both parents, if they were married or in a legal domestic partnership.

While the data provided by the DOE proved income and location eligibility, the program required that all parents prove age, identity, and citizenship; marital status; and custody of enrolling children. In addition, enrolling families who were not on the recruitment list had to provide proof of address and income. Documentation requirements are described in Box 2.3.

Once NPO staff approved the documentation, parents viewed a short video describing the program, read the "agreement to participate" form, and then participated in a question-andanswer session. Each parent who chose to enroll in the program was required to sign the "agreement to participate" form. Enrollment workers then collected background information about the family and each family member for whom the parent(s) provided documentation.

The random assignment process itself happened after the family left the NPO, off-site at MDRC.<sup>14</sup> MDRC used batch random assignment for this process, which ensures that program and control group status is assigned randomly within the group of processed enrollees. As shown in Figure 2.1, families were selected by random assignment for either the program group, which is eligible for reward payments, or the control group, which does not have any contact with the Family Rewards program. About half of the families were assigned to the program group and the other half to the control group. Seedco notified families who

<sup>&</sup>lt;sup>14</sup>The NPOs submitted background information electronically to MDRC through a secure, Web-based system, which MDRC staff then reviewed to make sure it was complete. If all key indicators were provided, MDRC staff compared the enrolling parents and children with the parents and children who had previously been randomly assigned, using name, Social Security number, and date of birth (to preclude duplicate random assignments), and then completed the random assignment.

## Box 2.3

## **Documentation Requirements**

To prove eligibility for the program, families were asked to bring documentation when enrolling. This included documentation to prove age, identity, and citizenship; marital status; and custody of enrolling children. Any families who were not on the recruitment list were also asked to provide proof of income and address.

- Age, identity, and citizenship: Adults were asked their age and citizenship status during outreach telephone calls and were told what kind of documentation they would need to prove that. All adults enrolling in Family Rewards had to be 18 years of age or older and U.S. citizens by birth or naturalization or legal permanent residents. To prove this, adults were asked to provide a U.S. birth certificate, U.S. passport, or legal permanent resident or green card. Adults who presented a U.S. birth certificate to prove citizenship were also required to provide a photo identification card to prove their identity, which did not have to be government-issued.
- **Marital status:** Both parents in a family could sign up for the program if they were legally married or were in a legal domestic partnership. To prove this, adults were asked to provide a marriage license or a certificate of domestic partnership registration.
- **Custody of enrolling children:** Parents were asked to provide proof that the children who were enrolling were legally in their custody, which was usually done with a birth certificate. Parents who had adopted children were asked to provide their adoption records. Foster children were not eligible to be enrolled in the program since their legal guardian is the State of New York.

**Income and proof of address:** Families who were not on the recruitment list were asked to bring documentation to prove their income and address. Most families provided proof of receipt of food stamps or public health insurance like Medicaid to prove income at or below 130 percent of the federal poverty level. They also had to submit a bill or a piece of mail to prove that they lived in one of the target community districts.

were assigned to the program group, and MDRC notified families who were assigned to the control group, both via mail.<sup>15</sup>

<sup>&</sup>lt;sup>15</sup>Although random assignment could have been completed at the NPO and families notified immediately, using batch random assignment ensured that there were no attempts to "game the system" by looking for a pattern in the random assignment and trying to circumvent it. With such a large amount of money at stake, the program designers were concerned that NPO staff and enrolling families might be tempted to try to get certain families assigned to the program group, thus undermining the randomness of the allocation process. Physically removing random assignment from the location of enrollment allowed enrollment to take place in a neutral (continued)

## Sample Build-Up

As shown in Table 2.1, the NPOs enrolled and randomly assigned nearly 51 percent of the total sample in the first two months of outreach before the program began, another 36 percent in September and October 2007, and the remaining 14 percent after October. Enrollment was finally closed on December 31, 2007, with a sample of 4,803 families.<sup>16</sup> (The actual random assignment process was completed for the last few families after December.) Although recruiting such a large sample over six months is an impressive accomplishment,<sup>17</sup> the fact that recruitment continued past the start of the program in September had important implications for program operations, placing strains on the NPOs as well as on Seedco. The NPOs had to begin conducting Family Rewards orientation sessions with program group families, teaching them about the rewards that are available, the rules and regulations of the program, and how to apply for payments, while Seedco had to begin implementing the verification and payment processes. At the same time, the NPOs and Seedco needed to continue to strive to reach the sample recruitment goals, so that neither goal could receive the organizations' full attention as the program got under way, making the first few months in the life of the new program especially challenging.

## Characteristics of the Study Sample

During the intake process and prior to random assignment, NPO staff collected background information on the families. Tables 2.2 through 2.5 show the background characteristics of all families, parents, and children in the entire study sample, combining program and control group members from all the NPOs. Appendix A includes supplementary tables that compare the characteristics of the program and control groups. There are no statistically significant differences between the two groups in the measured background characteristics, providing assurance that the random assignment process worked well. Appendix A also includes tables that compare the characteristics of families across each of the NPOs.

environment. The remote random assignment also provided distance and time between the NPO staff and families who may have been upset about their random assignment to the control group.

<sup>&</sup>lt;sup>16</sup>This number includes families that have since withdrawn from the program or were excluded from this analysis.

<sup>&</sup>lt;sup>17</sup>Some other random assignment studies with a voluntary study sample have taken closer to two years to reach targets of 2,000 or fewer. For example, one site in MDRC's Work Advancement and Support Center demonstration, a voluntary program focused on retention and advancement in work, took about two years to recruit about 1,200 people (Miller, Tessler, and Van Dok, 2009).

## **Table 2.1**

Number		Cumulative		
Month of Random Assignment	Enrolled	Percentage	Number	Percentage
July 2007	869	18.3	869	18.3
August 2007	1,530	32.2	2,399	50.5
September 2007	961	20.2	3,360	70.7
October 2007	733	15.4	4,093	86.2
November 2007	369	7.8	4,462	93.9
December 2007	259	5.5	4,721	99.4
January 2008	28	0.6	4,749	100.0
March 2008 <sup>a</sup>	1	0.0	4,750	100.0

## **Enrollment of Sample Members, by Month of Random Assignment**

SOURCE: MDRC calculations using data from Background Information Forms.

NOTES: Rounding may cause slight discrepancies in calculating sums.

<sup>a</sup>Random assignment officially ended in January 2008, but one family was added to the sample in March due to a communication error during the enrollment process.

## **Family and Parent Characteristics**

As shown in Table 2.2, most parents who enrolled in Family Rewards were unmarried (81 percent) and spoke English at home (77 percent).<sup>18</sup> Fifty-three percent were receiving housing assistance in the form of either public housing (30 percent) or Section 8 vouchers (23 percent). While the target family income was 130 percent of the federal poverty level or below, 15 percent of the families had earnings above that level. Since parents completed the free lunch application that provided data for the Family Rewards recruitment one to three years prior to enrollment, families' incomes may have changed between the time they first became eligible for free school lunch and when they enrolled. Sample members with income higher than the targeted level may also have been included because children attending universal feeding schools are all eligible for free lunch regardless of family income.<sup>19</sup> Such higher-income families may

<sup>&</sup>lt;sup>18</sup>"Unmarried" includes both one- and two-parent families. That is, the unmarried category includes those who responded "single, but living with boy/girlfriend," which is shown as "one-parent family" in Table 2.2.

<sup>&</sup>lt;sup>19</sup>Families with children in universal feeding schools are only required to complete free lunch applications every four years.

# Table 2.2

## Characteristics of Families at the Time of Random Assignment

Characteristic	Total
One-parent family <sup>a</sup> (%)	80.9
Two-parent family with both parents enrolled in Family Rewards <sup>b</sup> (%)	5.7
Average number of children in household	2.5
Number of children in household (%) 1 child 2 children 3 children 4 children or more	22.8 34.3 25.1 17.8
Primary language spoken at home is English (%)	76.9
Housing status (%) Own home or apartment Rent apartment or home Other housing arrangement	5.9 87.1 7.1
Living in public housing (%)	30.4
Receiving Section 8 rental assistance (%)	23.0
Receiving TANF or Safety Net Assistance <sup>c</sup> (%)	24.0
Receiving food stamps (%)	59.4
Not receiving any public benefits or housing assistance (%)	13.1
At least one adult covered by public health insurance (%)	70.9
Earnings above 130% of federal poverty level <sup>d</sup> (%)	14.9
Sample size	4,750

SOURCE: MDRC calculations using data from Baseline Information Forms.

NOTES: Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

Public health insurance measures in this table exclude child information.

<sup>a</sup>This measure includes families with parents who reported their marital status as single, single but living with a boyfriend or girlfriend, separated, divorced, or widowed.

<sup>b</sup>This measure refers to sample members who enrolled in Family Rewards with their spouse or legal domestic partner.

°This measure includes families with child-only cases.

<sup>d</sup>Income information is not available.

also have been included in the sample as a result of the free lunch program application process, which relies on families' self-attestation of income without any required proof of income.

Table 2.3 shows the background characteristics of the parents in the study sample. On average, parents were 40 years old. Nearly all were either black, non-Hispanic/Latino (51 percent) or Hispanic/Latino (47 percent). Educationally, they were a diverse group. While 50 percent did not have a GED certificate or a high school diploma, 18 percent had either an associate's or bachelor's degree. Their attachment to the labor force also varied widely, with slightly more than half (53 percent) holding a job. Overall, 37 percent of parents were working full time (at least 30 hours per week), and 16 percent were working part time (not shown in Table 2.3).

In deciding on the target population for the demonstration, the program's designers sought to include low-income families who were not attached to the public benefits system, as well as those who were receiving some existing form of assistance. They hypothesized that families who were not receiving public benefits may have been more disadvantaged than those who were receiving benefits, speculating that they would be people who "fell through the cracks" in the safety net system or faced obstacles applying for assistance. As shown in Table 2.2, 13 percent of parents enrolled in Family Rewards reported at the time of random assignment that they were not receiving any public benefits or housing assistance. As it turned out, these families were generally less, not more, disadvantaged than those receiving benefits. Table 2.4 illustrates this by comparing parents' employment and educational status across the two categories of families. It shows, for example, that parents without benefits were much more likely to be working (87 percent versus 48 percent), and more likely to be working full time (72 percent versus 32 percent). They were also more likely to have earned at least a high school diploma or received a GED certificate (83 percent versus 56 percent) and more likely to have an associate's or bachelor's degree (30 percent versus 12 percent).

## **Children's Characteristics**

Table 2.5 shows that 94 percent of enrolled children were born in the United States. The vast majority of children were attending public schools (98 percent), with 52 percent entering the targeted grades (17 percent were entering fourth grade, 16 percent were entering seventh grade, and 19 percent were entering ninth grade). Only 1 percent of the children were not enrolled in school.<sup>20</sup> In the previous school year, 15 percent had been enrolled in special

<sup>&</sup>lt;sup>20</sup>This category captures both children under 18 years of age who were no longer attending school, as well as those who graduated before they reached their eighteenth birthday.

# Table 2.3

# Characteristics of Parents at the Time of Random Assignment

Characteristic	Total
Female (%)	94.3
Age (%)	
18-24 years	0.3
25-34 years	28.9
35-44 years	45.1
45-59 years	22.8
60 years or more	2.9
Average age (years)	39.9
U.S. citizen <sup>a</sup> (%)	83.1
By birth	67.4
By naturalization	15.7
Legal Permanent Resident	16.9
Race/ethnicity (%)	
Hispanic/Latino	46.7
White, non-Hispanic/Latino	0.7
Black, non-Hispanic/Latino	51.2
Other	1.4
Education (highest degree or diploma earned) (%)	
GED certificate	11.1
High school diploma	21.3
Associate's degree/2-year college 4-year college or beyond	8.9 8.7
None of the above	50.1
	50.1
Marital status (%) Single	62.4
Cohabitating	2.3
Separated, widowed, or divorced	16.1
Married or in a legal domestic partnership	19.1
Has an account at bank or credit union (%)	47.0
Employment measures	
Currently working (%)	53.1
Working full time <sup>b</sup> (%)	37.1
Average weekly earnings, among those currently working	393
During past year, average number of months worked (%)	10
	(continued)

52

Characteristic	Total
<u>Health measures (%)</u>	
Health insurance coverage	
Public health insurance	70.5
Employer health insurance	20.6
Other health insurance	3.0
Not covered	6.0
Had annual medical checkup when not sick	
Within the past year	82.1
1-2 years ago	14.3
More than 2 years ago	3.4
Never	0.2
Last medical checkup was at own (regular) doctor's	
office or clinic	93.5
Had preventive dental checkup	
Within the past year	64.9
1-2 years ago	23.5
More than 2 years ago	10.9
Never	0.7
0.16	
Self-rated health Excellent or very good	43.0
Good	45.0
Fair or poor	20.1
•	20.1
Over the past 2 weeks, had little or no interest	
in doing things	22.4
Over the past 2 weeks, had been feeling down,	
depressed, or hopeless	21.9
Sample size	4,750

## Table 2.3 (continued)

SOURCE: MDRC calculations using data from Baseline Information Forms.

NOTES: Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

This table excludes information for enrolled second parents in two-parent households (N = 247). <sup>a</sup>This measure refers to U.S. citizens both by birth and by naturalization.

<sup>b</sup>This measure refers to 30 hours a week or more.

## Table 2.4

## Selected Baseline Characteristics of Parents in Families Receiving and in Families Not Receiving Government Transfer Benefits at the Time of Random Assignment

Characteristic (%)	Receiving Benefits <sup>a</sup>	Not Receiving Benefits
Working	47.6	86.6
Working full time	31.8	71.5
Earning more than \$400 per week	11.3	59.5
Education (highest grade completed or degree or		
diploma obtained)		
Grade 9 or less	11.9	4.0
Grade 10 or 11	22.6	7.9
Completed grade 12 with no diploma or GED certificate	9.2	5.4
GED certificate	9.2	6.7
High school diploma	16.9	18.5
Some college	18.5	27.2
Associate's degree or 2-year degree	6.4	12.6
4-year college degree or higher	5.2	17.6
Sample size (total = 4,688)	4,073	615

SOURCE: MDRC calculations using data from Baseline Information Forms.

NOTES: Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

<sup>a</sup>Benefit receipt includes receipt of food stamps, public health insurance, and housing assistance.

education and 13 percent in the English Language Learner (ELL) program. The children were spread across 407 elementary schools, 358 middle schools, and 390 high schools throughout the city (not shown).

Most of the children's parents reported attending a parent-teacher conference in the last year. Only 5 percent of children had a parent who reported never attending a parent-teacher conference. An additional 35 percent of children had a parent who reported attending one or two parent-teacher conferences, the minimum parents are usually asked to attend over the course of the school year. Because Family Rewards includes payments for attending parent-teacher conferences, these high rates at random assignment suggested that many families might be eligible for the payment.

# Table 2.5

# Characteristics of All Children at the Time of Random Assignment

Characteristic	Total
Gender (%)	
Female	50.0
Male	50.0
Age (%)	
0-5 years	13.7
6-10 years	30.6
11-13 years	26.2
14 years or older	29.5
Average age (years)	11
Born in the United States (%)	93.5
Race/ethnicity (%)	
Hispanic/Latino	47.0
White, non-Hispanic/Latino	0.4
Black, non-Hispanic/Latino	50.4
Other	2.2
Type of school child attended in the past year (%)	
Public or charter school	97.5
Private or parochial school	2.5
Grade <sup>a</sup> (%)	
Not yet in pre-K or kindergarten	7.1
Pre-K	2.4
Kindergarten	2.8
1st grade	3.5
2nd grade	4.2
3rd grade	3.8
4th grade	16.7 3.9
5th grade 6th grade	5.9 4.3
7th grade	4.5
8th grade	3.9
9th grade	18.6
10th grade	4.1
11th grade	3.6
12th grade	3.0
College <sup>b</sup>	1.2
Not enrolled <sup>c</sup>	0.9
	(continued)

55

Characteristic	Total
Education measures (%)	
Child's parent attended parent-teacher conference	
during past year	
Never	5.0
1-2 times	35.3
3-4 times 5-6 times	35.0 11.8
More than 6 times	11.8
Child's parent spoke with teacher about	
grades, tests, or homework during past year Not at all	2.9
A little	8.2
Some	20.0
A lot	34.5
A great deal	34.5
Enrolled in special education in the past school year	14.9
Enrolled as an English Language Learner (ELL)	
in the past school year	12.9
<u>Child health outcomes (%)</u>	
Health insurance coverage	
Public health insurance	81.1
Employer health insurance	14.5
Other health insurance	1.7
Not covered	2.7
Parent's rating of child's health	
Excellent	43.5
Very good	31.1 21.8
Good Fair	21.8
Poor	0.4
ITed annual medical shealann adam act sisle	
Had annual medical checkup when not sick Within the past year	90.7
1-2 years ago	8.4
More than 2 years ago	0.8
Never	0.2
Last annual checkup was at own (regular) doctor's office or clinic	97.7
Had preventive dental checkup	
Within the past year	74.6
1-2 years ago	17.2
More than 2 years ago	3.1 5.1
Never	5.1

# Table 2.5 (continued)

(continued)

<b>Table 2.5</b> (	continued)
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Characteristic	Total
Has a physical problem that limits activities	9.5
Has an emotional or mental health problem that limits activities	6.3
Sample size	11,331

SOURCE: MDRC calculations using data from Baseline Information Forms.

NOTES: Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

<sup>a</sup>Grades 4, 7, and 9 were "target grades" for the Family Rewards program. Therefore, all enrolled families had to have a child in grade 4, 7, or 9.

<sup>b</sup>College students who were under the age of 18 were enrolled in Family Rewards. They were not eligible for any reward payments.

<sup>c</sup>The "not enrolled" category includes school-age children who are no longer attending or have graduated before the age of 18.

## **Health Characteristics**

The responses to health-related questions were similar for parents and children (see Tables 2.3 and 2.5). Both children and parents had high rates of health insurance coverage and annual medical exams, as discussed further in Chapter 7. Only 6 percent of parents and 3 percent of children had no health insurance coverage. Public health insurance was the most common form of coverage, with 71 percent of parents and 81 percent of children having such insurance. The rates of self-reported medical checkups were high. For example, 82 percent of parents reported having an annual medical exam within the past year, and this was also the case for 91 percent of the children in the sample. As might be expected, fewer participants reported having an annual dental checkup at the time of random assignment, with 65 percent of parents reporting a dental checkup in the last year, along with 75 percent of children. Responses to these health-related questions at the time of random assignment also suggest that there will be high receipt of Family Rewards health-related payments.

# How Well Does the Study Sample Reflect the Target Population?

As described above, the NPOs used specific outreach strategies to increase the likelihood that families who were enrolled in the study would reflect the kinds of low-income families in the larger target population from which the sample was recruited. The use of home visits, persistent outreach to targeted families, and limitations on the number of families who were not on the recruitment list but who could enroll ensured that the NPOs engaged more than just the easiest-to-reach families, who were potentially less disadvantaged. To assess whether the families in the study are generally similar to the broader target population, two types of comparisons were conducted.

First, test scores from annual standardized tests in English language arts (ELA) and math exams from 2007 were used to determine whether children who were enrolled in the study had pre-program academic performance levels that were similar to the achievement levels of children on the larger recruitment list who were not in the study sample. Table 2.6 presents the results for fourth-, seventh-, and ninth-grade students, showing the percentage of students who scored at proficiency levels. The test scores are almost the same for both groups. The only differences that are statistically significant are those for fourth-graders, but the size of the differences is very small (2.3 percentage points on the ELA test and 2.2 percentage points on the math test). For seventh-graders and ninth-graders, the exam results are nearly identical. These findings suggest that the children in the study sample represent well those children who were eligible for the program but are not in the sample.

A second comparison uses data from the American Community Survey (ACS) to construct a benchmark sample for parents. (The DOE data contain little to no information about the parents' demographics.) Although it was not possible to identify parents in the ACS sample who would meet all the eligibility criteria for Family Rewards, it was possible to identify those who at least lived in the targeted community districts, had income at or below 130 percent of the federal poverty level, and had at least one school-age child. Table 2.7 presents the results. Because of the small size of the ACS sample in the targeted community districts, the table shows estimates from the ACS not only for the designated families who were living in the targeted community districts (the Bronx, Brooklyn, and Manhattan). The comparison below focuses on the community districts themselves, which is the most relevant comparison, but the data from the larger boroughs do not paint a very different picture.

As Table 2.7 shows, parents in the study are more likely than those in the ACS survey to be female (94 percent versus 79 percent) and single heads-of-household. As might be expected because of the exclusion of undocumented immigrants from the program, the Family Rewards sample includes a somewhat higher proportion of U.S. citizens (83 percent versus 75 percent) than does the ACS sample. Perhaps also linked to this requirement are the differences in race and ethnicity: the Family Rewards sample has a higher proportion of black, non-Hispanic/Latino parents and fewer Hispanic/Latino parents than the ACS sample. The sample has a similar percentage of parents with college degrees, but also a somewhat higher percentage of parents with no high school diploma or GED certificate (50 percent versus 44 percent). It also has a somewhat higher proportion of sample members who were employed (53

#### Table 2.6

## Percentage of Students Scoring at Proficiency Levels on Prior Year (2007) English Language Arts (ELA) and Math Tests, by Grade Level

	Non-Family Rewards	Family Rewards	Difference	
Grade Level and Outcome (%)	Sample <sup>a</sup>	Sample	(Impact)	P-Value
4th-graders at random assignment				
Proficient on ELA test	44.1	46.4	-2.3 *	0.095
Proficient on math test	75.1	77.4	-2.2 *	0.055
Sample size (total = 9,295)	7,569	1,726		
7th-graders at random assignment				
Proficient on ELA test	37.2	37.7	-0.6	0.681
Proficient on math test	53.5	52.9	0.5	0.694
Sample size (total = 8,761)	7,090	1,671		
9th-graders at random assignment				
Proficient on ELA test	30.3	31.0	-0.7	0.568
Proficient on math test	32.5	33.8	-1.4	0.275
Sample size (total = 10,095)	8,116	1,979		

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

NOTES: "The non-Family Rewards sample members are students from the recruitment list whose families did not enroll in the program. Recruitment data provided by the Department of Education indicate that these students were in the third, sixth, and eighth grades when ELA and math tests were taken in the year prior to random assignment. However, grade levels at the time of random assignment are not known for this sample.

In New York State, students who score at a level of 3 or higher on a 4-point scale are deemed "proficient." Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

Differences across groups were assessed using chi-square tests.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

percent versus 44 percent), though it has a similar proportion working full time (37 percent versus 34 percent).

Although the ACS sample is not a perfect comparison for the parents in the Family Rewards sample, comparing the two samples does suggest that, despite the voluntary nature of the program, the Family Rewards sample does not include parents who, on the whole, are distinctively more advantaged than those in the larger target population. In fact, on many indicators, the study sample appears to be somewhat more disadvantaged.

# Table 2.7

# Characteristics of Parents in Family Rewards and Similar Parents in the American Community Survey

		American Community Su	rvey Sample <sup>b</sup>
	Family Rewards	Targeted	Targeted
Characteristic	Adult Sample <sup>a</sup>	Community Districts	Boroughs
Female (%)	94.3	78.9	72.6
U.S. citizen <sup>c</sup> (%)	83.1	75.3	66.9
Race/ethnicity (%)			
Hispanic/Latino	46.7	56.6	48.0
White, non-Hispanic/Latino	0.7	1.4	12.1
Black, non-Hispanic/Latino	51.2	38.0	26.6
Other	1.4	4.0	13.4
Education (highest degree or diploma earned) (%)			
High school diploma or GED certificate	32.4	43.9	45.7
Associate's degree/2-year college	8.9	6.0	5.5
4-year college or beyond	8.7	5.7	7.6
None of the above	50.1	44.3	41.1
Marital status (%)			
Single, never married	62.4	35.0	25.3
Cohabitating	2.3	8.3	7.4
Separated, widowed, or divorced	16.1	29.1	23.8
Married or in a legal domestic partnership <sup>d</sup>	19.1	27.6	43.4
Currently working (%)	53.1	43.5	47.1
Working full time <sup>e</sup> (%)	37.1	33.6	34.1
One-parent family (%)	80.9	69.6	53.6
Average number of children in household	2.5	1.9	1.9
Primary language spoken at home is English (%)	76.9	38.3	31.0
Housing status (%)			
Own home or apartment	5.9	3.2	9.2
Rent apartment or home	87.1	96.8	90.8
Family is receiving TANF or Safety Net Assistance <sup>f</sup> (%)	24.0	30.3	21.5
Family is receiving food stamps (%)	59.4	56.8	48.6
Sample size (total = 8,920)	4,750	765	3,405
• • • • • • •	*		(continued)

#### Table 2.7 (continued)

SOURCES: MDRC calculations using data from Baseline Information Forms and the 2007 American Community Survey (ACS) data.

NOTES: The Family Rewards housing categories do not add up to 100 percent because the "other housing arrangements" category is not shown.

ACS data were obtained from New York City's Human Resources Administration.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

<sup>a</sup>This table excludes information for second parents in two-parent households (N = 247).

<sup>b</sup>The ACS data were selected for individuals with a family income of 130 percent of the federal poverty

level, with at least one child between the ages of 5 and 17, and who lived in the target community districts in the Bronx, Brooklyn, and Manhattan in 2007.

<sup>c</sup>This measure includes U.S. citizens both by birth and by naturalization.

<sup>d</sup>ACS data do not measure legal domestic partnerships.

eThis measure refers to 30 hours a week or more.

<sup>f</sup>This measure includes families with child-only cases.

# Conclusion

Despite the many hurdles they faced, and the fact that the sample enrollment had to continue past the program's start date, the NPOs largely met the recruitment goals for the study within an extremely tight time frame. Moreover, the characteristics of the families who enrolled in the study appear to mirror the characteristics of the intended target population reasonably well. The evidence presented in this chapter thus suggests that the sample that is enrolled in the study is a good one for evaluation purposes, allowing the findings from the impact analysis, discussed later in this report, to be generalized beyond those of the immediate sample with a reasonable degree of confidence.

# Chapter 3 Operating Family Rewards

As a conditional cash transfer (CCT) program, Family Rewards needed systems and procedures to market, document, verify, and pay rewards to low-income families. The program's implementing agencies had to teach families about the rewards being offered and how to claim them, pay rewards accurately and efficiently, provide "customer service" to resolve payment questions and disputes, and offer guidance on where to find other services in the community that could help them succeed in the program. This chapter — the first of two focused on implementation — describes the agencies' efforts to accomplish these operational goals and the challenges they encountered along the way. Three critical implications of these operations — participants' understanding of incentives, their receipt of rewards, and their confidence in receiving payments that they earned over time — are introduced here but are covered in much more detail in Chapter 4. This chapter focuses on the evolution of operational experiences through the first two years of the program, drawing on the perspective of practitioners and participants. The analysis is based primarily on qualitative data obtained from program observations and in-depth interviews with families and program staff, on reviews of program documents, and on quantitative data collected from the 18-month Family Rewards parent survey.<sup>1</sup>

The chapter shows that Family Rewards agencies implemented all the major program systems and procedures required by the model. The extraordinarily rapid launch of the program, which, as indicated in Chapter 1, had to begin without the benefit of a pilot phase, meant that the early months of the program were difficult ones. Some aspects of program delivery suffered as a result, especially in initial efforts to orient families to the program. In addition, although payments were made successfully during every payment period, unanticipated problems delivering cash to families' bank accounts generated some strain in the program and distress

<sup>&</sup>lt;sup>1</sup>The Family Rewards implementation research used data from a variety of sources. Structured observations (that is, observations based on predefined points for recording information) by MDRC staff provided information on outreach and orientation activities at each of the six Neighborhood Partner Organizations (NPOs), payment processing and helpline operations within Seedco, and NPO workshops for program participants. "In-depth" interviews with participants refer to qualitative interviews lasting 45 minutes to an hour and a half with 75 heads-of-household, drawn from a randomly selected list of participants that was stratified by the grade level of the "index" or focal child, focusing on those entering the fourth, seventh, or ninth grades. The interviews occurred between spring of 2008 and summer of 2009 and were conducted mostly in the homes of participants. These interviews were coded in NVivo 7 by three coders, using a predefined codebook and employing initial and periodic inter-rater reliability checks, which showed that differences between coders were minimal. Additional data sources include program documents, correspondence, Seedco's management information system, and a special module on participants' experiences that was part of the 18-month Family Rewards parent survey described in Chapter 1.

among families. As the program matured and staff developed more experience in operating it, many of these early difficulties were overcome, and, overall, participants rated the services they received from the program very highly. By the second year of implementation, program operations were much improved and the model was being operated in a way that was generally consistent with its designers' vision. By the end of the second year, nearly \$14.7 million in rewards had been paid to families. Further improvements in operating procedures were being planned as the program entered its third and final year.

## The Organizational Structure of Family Rewards

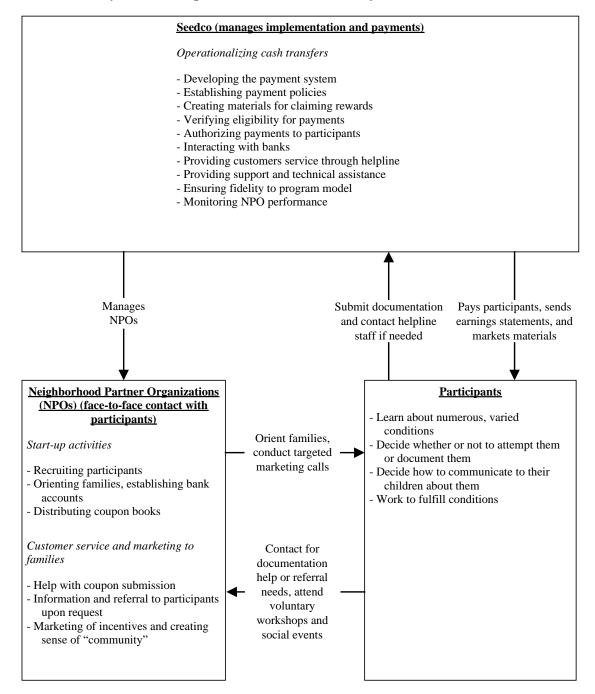
Two major groups were responsible for implementing Family Rewards: Seedco, which manages the initiative and provides payments to families, and community organizations known as Neighborhood Partner Organizations, or NPOs, which play a variety of face-to-face roles with participants, from orientation to marketing and customer service. Seedco is a national nonprofit organization with program areas that include workforce development, asset building, business assistance, and community finance. In New York City and elsewhere, Seedco is known for designing, launching, and operating model programs in partnership with networks of community organizations and serving as an intermediary that provides funding, management support, fiscal management, performance analysis, and technical assistance to community partners, who in turn provide direct services to clients.

For Family Rewards, as shown in Figure 3.1, Seedco was responsible for operationalizing cash transfers, which includes developing the payment system, establishing payment policies, creating materials for submitting reward claims, verifying eligibility for payments, authorizing payments to participants, interacting with banks, and providing customer service through its telephone helpline. Seedco also provided support and technical assistance to NPOs and ensured fidelity to the program model, defined in concert with New York City's Center for Economic Opportunity (CEO) and MDRC, while also managing and monitoring NPO performance and accountability. Although Seedco is known as a national intermediary for community organizations, and although it has in the past managed complex performance contracting and verification systems, it had to create a new set of procedures to handle processes for verifying payment eligibility and authorizing payments required by Family Rewards. For these tasks, Seedco assigned approximately five managerial staff, four helpline operators, and 20 backoffice staff, in addition to information technology (IT) and marketing subcontractors.

NPOs were envisioned as the "front line" of Family Rewards and participants' initial point of contact with the program. Each NPO devoted approximately two full-time staff positions for these functions. During the first year, these staff members were heavily involved in the program's start-up activities, including recruiting participants, orienting families, and helping parents and teens establish new bank accounts or provide other account information in

#### Figure 3.1

#### Family Rewards: Operational Structure and Major Points of Interaction



order to receive their incentive payments. They also distributed annual "coupon books" to families — personalized binders containing coupons and other forms that families must submit every two months to verify and claim rewards — during sessions that reacquainted participants with payment conditions, while reminding them of important activities or other services they might wish to pursue in order to be eligible for rewards. On an ongoing basis, NPOs were deeply involved in customer service and marketing activities, which meant reminding families of the incentives that were available, helping them with coupon submission when they requested assistance, and providing them with information on and referrals to other services. Working with Seedco, the NPO staff created special workshops for families as another vehicle for educating them on how the program could help them and how they could earn and claim rewards in each of the domains. Finally, the NPOs strived to develop a sense of "community" among the families by hosting social events, such as summer barbecues and holiday parties.

To select the NPOs, Seedco released a Request for Qualifications (RFQ). A committee headed by Seedco and including representatives from MDRC, CEO, and City agencies then reviewed proposals from these organizations, conducted site visits, and approved the selection of the six NPOs listed in Table 3.1. These NPOs represent an array of community-based, not-for-profit organizations. Two groups — the Brownsville Multi-Service Family Health Center (BMS) in Brooklyn and Urban Health Plan (UHP) in the Bronx — are health organizations embedded in their communities, although both have experience conducting outreach and education programs. BronxWorks (known as Citizens Advice Bureau when the program began) is a community-based organization with services including early childhood programs, services geared toward school-age children, and family and senior citizen programs. The two Manhattan NPOs are also located within larger social service agencies: Catholic Charities Community Services is located within the Diocesan network of social services, while the Union Settlement Association is part of a settlement house established in 1895. Finally, Groundwork, Inc., is a recently founded youth development organization in East New York, which provides after-school programs, college preparation and counseling, and individual services to families.

Figure 3.1 displays the often varied capacities required of Family Rewards practitioners. As an incentives program without case management or direct services, the onus of carrying out program activities falls upon the family, as parents and children attempt to fulfill activity requirements, document them for Seedco, and claim and receive payments. However, for the implementing agencies, the tasks involved in operating a payment system, interacting with banks, and encouraging participants to take part in the program required many different types of skills. For example, Seedco needed to act both as an intermediary to build the capacity of community organizations around a new type of intervention for the United States — one that, as shown below, contained many subtleties of practice — while also functioning in some ways like an income support bureaucracy and insurance claims department. And the NPOs needed to practice successful door-to-door outreach, orient participants to the program, explain complex

Table 3.1

Borough	Name of NPO	Type of Community Organization	Regular Services Provided (Excluding Family Rewards)
Bronx	Urban Health Plan (UHP)	Health center	Primarily health services and public health outreach; serving Community District 6
Bronx	BronxWorks	Settlement house	Early childhood education, summer camp, eviction prevention, transitional housing, English as a Second Language/citizenship classes, senior and legal services; serving Community District 5
Brooklyn	Brownsville Multi-Service Center (BMC), part of the Brownsville Community Development Corporation	Health center	Primarily health services and public health outreach; serving Community District 6
Brooklyn	Groundwork, Inc. (GW)	Youth development and education	Test preparation and mentoring for high school students, elementary literacy education, legal services and One-Stop benefits for adults; serving Community District 5
Manhattan	Catholic Charities (CC) Community Services, Joseph P. Kennedy Center	Diocesan social service organization	Case management, crisis intervention, youth and recreational activities; serving Community District 10
Manhattan	Union Settlement Association (US)	Settlement house	Daycare and Head Start, senior citizen and after-school programs, home health services, community development and credit union; serving Community District 11

# **Neighborhood Partner Organizations (NPOs)**

SOURCE: MDRC field research.

rules to them, troubleshoot participants' documentation problems, and conduct uplifting and motivating workshop sessions and social events. As this chapter shows, Seedco and the NPOs developed their capacity to perform these varied tasks over time.

MDRC had no direct operational role in the project. However, as overall manager of the demonstration and the program's evaluator, its staff observed program practices at Seedco and the NPOs, and offered formative feedback to these organizations based on those observations. MDRC staff also explored ideas together with Seedco and NPO staff as they considered ways to continue improving their operation of the program. In addition, MDRC staff were involved continuously with CEO and Seedco staff in making strategy and policy decisions that affect the program, which ultimately had some bearing on what would be learned from the evaluation. These decisions ranged from levels of documentation that were acceptable to verify activities, to jointly developing a broad marketing and engagement strategy, to advising whether NPO practice was consistent with the "no case management" model envisioned by the program's designers and discussed in Chapter 1.

# **Orienting Participants**

Orientation was the first in a series of Family Rewards activities that participants experienced after random assignment, as illustrated in Figure 3.2. Orientation sessions were critical to participation in the program. Conducted by the NPOs, they offered families their "first" view of Family Rewards after they were selected for the program. Because participants cannot strive to undertake activities they do not fully understand, and because the "framing" or explanation of rewards has been shown to matter for outcomes in a number of studies on motivation,<sup>2</sup> the quality of these orientations is important to consider in assessing the strength of the program's implementation.

In these sessions, NPO staff explained the conditions of reward receipt and the schedule of payments, and what families had to do to verify their claims for payment. Also during orientations, staff guided participants on setting up a bank account or stored value card to ensure reward deposits. Seedco only paid Family Rewards payments electronically, through direct deposits to bank accounts or stored value cards. This was considered a more efficient way of getting money to families than issuing paper checks, and helped to "legitimize" the program. It was also viewed as a way of encouraging participation in mainstream banking.

To prepare for their presentations at the orientations, NPO staff were trained by Seedco and viewed detailed PowerPoint presentations to ensure consistency of messaging across sites. (NPO staff did not always follow these presentations exactly, sometimes adapting them to

<sup>&</sup>lt;sup>2</sup>Deci, Koestner, and Ryan (1999).

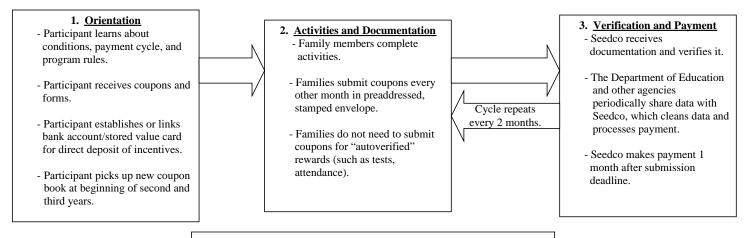
#### Figure 3.2

## **Family Rewards: Overview of Program and Procedures**

#### **Ongoing Customer Service**

- Participant may call helpline for payment information or to ask questions.

- Participant may call or visit NPOs for help with payments or documentation or for referrals.



#### Ongoing Marketing

- Reminder flyers, earnings statements, and targeted campaigns
- Topical workshops and social events (optional)
- Family Rewards Web site

69

accommodate concerns about length or a belief that messages would be stronger if framed differently.) Seedco also supplied the NPOs with large posters, to be displayed at the sessions, describing the payment cycle (see Figure 3.3) and forms for collecting bank account information. As illustrated in Figure 3.3, participants needed to send in coupons every two months in order to claim rewards, and then had to wait to receive their payments the following month. In some cases, bank representatives were on site to help participants open accounts, even though staff did not endorse any particular bank.

Orientation sessions usually began with an overview of program rules and responsibilities, including an explanation that families would be terminated from the program if they submitted fraudulent claims for rewards. The sessions continued with a description of the qualifying conditions for the rewards, which were listed on an Activity List that was included in program folders given to all participants. NPO staff explained the use of the coupon book for claiming rewards, and described which activities required coupon submission and documentation, such as visits to doctors and dentists and full-time work, and which activities were "automatically verified" — meaning that the participant did not need to submit any documentation such as children meeting the 95 percent school attendance standard and families maintaining public health insurance. High school students were a special target of these sessions, as they received rewards that went straight into their own bank accounts. However, not every eligible teenager attended these sessions, and Seedco and NPO staff had to develop special outreach efforts to inform and educate teens about the program and get their bank account information. The sessions usually concluded with the distribution of interim coupons. (The full coupon books were not yet ready during many orientations, as described below.)

#### Banking

The other critical function of orientations was to set up bank accounts or obtain existing account information. When bank representatives attended the orientation sessions, participants could open up new accounts right away. If bank representatives were not available, participants could open their accounts at a branch office of the participating banks, which sometimes required follow-up by NPOs in the event that tellers or other bank staff were unaware of the program. The new accounts, called "Opportunity NYC accounts," which were negotiated with several banks by the City's Office of Financial Empowerment, were considered "safe accounts"; that is, they were savings accounts that came with debit cards that were impossible to overdraw, to help participants avoid incurring penalties and slipping into debt. These accounts also had no minimum-balance requirements or fees and were meant to connect participants with mainstream banking services. The Office of Financial Empowerment within the Department of Consumer Affairs negotiated with a number of banks and credit unions to establish these accounts for the Family Rewards program. Seven agreed to do so: Bethex Federal Credit Union, Brooklyn Cooperative Federal Credit Union, Carver Federal Savings Bank, Lower East

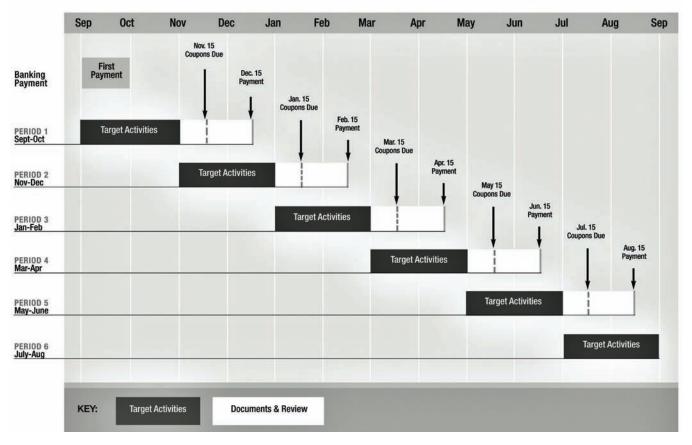
The Opportunity New York City Demonstration: Family Rewards

Figure 3.3

**Family Rewards Payment Cycle Timeline** 

Payment Cycle as of 8/14/07





Side Peoples Federal Credit Union, M&T Bank, North Fork Bank, and Union Settlement Federal Credit Union. Those who signed up for these new accounts or linked their existing accounts to the program received a one-time \$50 bonus payment. According to responses on the Family Rewards 18-month parent survey, 55 percent of parents reported opening one of the new accounts. No bonus was offered for accepting payment through stored value cards, which the program sought to discourage because of the extra fees those cards carry.

#### Racing to Orient Participants to the Program

Most participating families were oriented during the fall of 2007 as a result of intense efforts on the part of the NPOs, with assistance from Seedco, to bring participants back into their offices. The NPOs provided orientation sessions during normal business hours, evenings, and on weekends. In addition, they conducted many small, individualized orientations when a sufficient number of participants did not appear for scheduled orientations or when participants came during off-hours. However, orientation also overlapped with the end of enrollment and random assignment, and with the NPOs' extensive recruitment efforts (described in Chapter 2), to reach potential participants in their homes. One of the consequences of the overlap between outreach and orientation — and, in general, of the overall rush to get the new program up and running was that Seedco and the NPOs were not able to give orientations the type of attention and practice they had hoped devote to them. As one practitioner described the dynamic that fall:

I think it was just hard because we didn't have the programs set up. And we were running and marking performance by the number of families you brought in. So we were kind of stuck in a mode where we were just working on enrollment, which meant that all the programmatic issues were kind of getting pushed back

Another factor complicating first-year orientations was that the final version of professionally printed coupon books was not available until later in the fall. Seedco had intended to supply each family with pre-printed coupons that had the names of family members on them and rewards appropriate to their age, to clarify which rewards each family member was eligible for. The delay in providing these coupon books occurred because certain program rules and conditions for receiving rewards had not been fully established until late in the summer of 2007, and because no system had yet been developed to "personalize" coupons and forms to families in an efficient way. As a result, staff needed to create individualized books manually on the computer, based on the unique family composition of nearly 2,400 households. As it turned out, the absence of coupon books provided a challenge to initial orientations, but also a later opportunity to reorient participants who came back in to pick up their new books. This additional reorientation opportunity, while off-putting to some participants, proved to be fortuitous in many cases, allowing staff another chance to explain the program and engage participants.

#### Early Challenges in Conducting Orientations

Initial orientations varied in quality. Some NPO staff who proved to be effective recruiters for the program sometimes had difficulties presenting and explaining the program's detailed documentation requirements. During orientations, NPOs were sometimes challenged to explain detailed rules for the program's different activities while also delivering welcoming and motivating messages to participants. As suggested by the extensive list of incentives (see Chapter 1, Table 1.2), merely describing all the potential conditions — even without explaining all the details of documentation required for them — could take a good amount of time. NPOs expressed anxiety that lengthy presentations would exhaust the attention of their audience. Still, four of the six NPOs were able to deliver information in a manner that was clear and concise. These four sites enlisted interactive techniques in their presentations, asking questions of participants in an attempt to engage families and maintain their interest and attention. Presenters utilized probes such as, "How many of you have a middle-schooler?" or "How many of you have a job?" One of these more successful orientations is described in Box 3.1.

#### Box 3.1

### Introducing Family Rewards to Participants: An Example of a Successful Orientation

The orientation sessions that were presented early in the program tended to vary in quality. Orientations that made an attempt to actively engage the participants, such as the one described in this box, were generally more successful than others. The presenter used PowerPoint to lead the discussion. Her coverage of the Activity List was the most interactive section of the presentation. When she explained the payments for attendance, one participant exclaimed, "I'm going to send my child to school!" The presenter helped participants understand the difference between activities for which they would need coupons and those that would be verified automatically. She did this in an interactive fashion as well, asking the participants to point out things in one or the other category. She also explained complicated rules about rewarding either improvement or achievement in the English language arts exam. Finally, her presentation style was engaging and she encouraged everyone to take part: "I need participation from you guys so I know you get the program. Everybody understands that this is for each child, right?" There was a good deal of back-and-forth, with parents giving examples from their own lives and sharing advice about how to navigate schools. Nonetheless, even the most accomplished of sites did not initially have a way of assessing whether participants understood documentation rules, and attempts to assess knowledge in a large group were sometimes limited to pauses when presenters asked, "Does anyone have any questions?" This lack of an assessment mechanism, and the variety of literacy levels and learning styles among participants, sometimes made it difficult to gauge their comprehension. Those who may feel uncertain in their understanding are sometimes embarrassed about it; as one participant who was interviewed later about her orientation described the experience: "Yes, not all of it I understand. Sometimes you don't feel like asking questions in a group of people, that kind of a thing." Seedco, NPOs, and interviewers observed confusion early in the process about documentation requirements and the full extent of conditions for receiving payments. (Participant knowledge and understanding of the rules governing Family Rewards is discussed in greater detail in Chapter 4.)

However, two of the six NPOs were less adept than the others at communicating detailed program information. At these two NPOs, on multiple occasions, Seedco and MDRC observed challenges in communicating rules about conditions. One of these challenging orientations is summarized in Box 3.2. In both NPOs, staff were observed more than once to be disorganized in presentation and sometimes confused about the rules that they were trying to explain.

A participant described her experience at one of these orientations, bringing to mind how another function of orientation sessions was to establish credibility for a program that many participants initially thought was "too good to be true":

When I went down to their orientation, the people weren't trained that well to tell us what really the program consisted about, so I was kind of skeptical. When I went...[the NPO staff member] wasn't really sure about his words. I was really skeptical about that because, "I'm giving you my son's birth certificate and Social Security number." At first, I thought identity theft, you know? I was really concerned, and I told him. He was like, "Oh, well you shouldn't feel like that." I'm like, "Well, mister, you're not making me feel sure about this," you know? I had left; I was furious. I had left because I was like, "You don't know [what] you're talking about."

A second type of early orientation challenge occurred because very few NPOs initially encouraged participants to "stretch" to take advantage of incentives for activities they did not already fulfill, such as combining part-time work with training. Rather, presentations often directed participants to take advantage of rewards for activities they had already achieved or would be likely to achieve, such as taking their children to the doctor. This messaging strategy was consistent with what NPOs had learned about successful outreach, which avoided offending parents with the message that they needed an incentive to take care of their children. It also

#### Box 3.2

### Example of an Unsuccessful Family Rewards Orientation Session

Orientations that were unorganized, rushed, or negative in tone, or for which the presenters were unprepared or seemingly indifferent or frustrated, were generally unsuccessful. In the example that follows, although the orientation was scheduled for 10:00 a.m., it began at 10:20 in a large space that was ill-suited for the presentation and in which garbage cans rolled back and forth loudly throughout. The speakers said they needed to rush right into the presentation because the space would not be available after 11:00 a.m. There was no effort to assess how well people spoke English or to welcome participants; instead, staff read through one of the benefits information sheets very quickly, without stopping to ask if anyone had any questions until the end of the presentation. At that point, it was clear that a participant did not understand where he was supposed to send in coupons; he also appeared to believe he needed to send in all documentation for every condition within the first two months. One of the participants, who had a baby with her, asked no questions and was understandably distracted. During the presentation, staff repeatedly emphasized the restrictive aspects of the rules in a specifically negative way, making statements like "You can only get paid twice for parent-teacher visits" and "You will only receive \$50 once for the library card, so please do not photocopy them over and over again." They also noted aspects of the program that appeared to frustrate them for example, that some of the coupons were not ready.

reflected a strategy to have participants focus, initially at least, on more manageable rewards that would increase their comfort level in learning to use the program (such as obtaining a library card), before moving on to more difficult activities. These "easy wins" might lead to greater gains down the road. However, as an early orientation strategy, it may have also contributed to perceptions among many participants that Family Rewards is more like an income support program than an incentives program. (Participants' views on receiving rewards, many of which are informed by the potential stigma of reward receipt, are described in Chapter 4.) In contrast, one session where motivation was prominent in messaging is described in Box 3.3.

To an important extent, these difficulties were part of the "growing pains" of a new and ambitious program. By Year 2, the processes of distributing coupon books and conducting the orientations were substantially more accomplished. Coupon books for Year 2 were distributed in the fall of 2008, which served as a refresher and reorientation, giving participants a chance to ask additional questions about the program rules. (A sample coupon for full-time work rewards, personalized for a fictional participant, is shown in Figure 3.4.) By that point, the NPOs were much more practiced in describing conditions and framing incentives. Distribution sessions

#### Box 3.3

#### Motivational Messaging in the Family Rewards Orientations

One site explicitly encouraged participants to take on activities that they hadn't taken on before, to "stretch." These messages started with the description of the reward for opening a bank account: "We want to encourage you to build on what you have." It continued with a description of how to encourage children to take the PSATs: "Nobody's going to tell your child to sign up for the PSATs. *We're* telling you to tell your child to take the PSATs.... [Tell them to] go to the library to study for [the test].... You want them to go to college, right?" With regard to the work and training activities, presenters said, "So if you are teeter-tottering, this should encourage you to go in that direction [that is, training]. If you don't build on your skill set, you can't grow." For working toward the deadlines, they emphasized, "Write it down on your calendar in red! If you don't, you'll miss out on [getting rewards for] everything you've done."

worked much more smoothly, and there was much less variation between NPOs in the way they practiced. Some of these learning experiences are described in the following section.

### Engaging Families by Marketing the Incentives

Initial orientations with the program were not designed to be the only mechanism of contact with participants. As Figure 3.2 also shows (under "Ongoing Marketing"), Family Rewards used two main, ongoing strategies to proactively engage families. The first involved workshops, and the second involved the development of marketing materials and communication strategies to encourage families to take advantage of the incentives. As the program evolved, Family Rewards placed greater emphasis on the proactive marketing of incentives, a departure from its earlier focus on explaining payment rules and documentation requirements to families, as described above. Developing workshops was initially challenging for Seedco and the NPOs, especially while they were simultaneously trying to finish recruiting and enrolling families for the study through the end of 2007. However, over time these events were well received by participants, helping them form a connection with the program, even if not all Family Rewards families participated in the events.

#### **Creating Workshops**

Family Rewards, as an incentives program without a service component, was designed so as not to require participants to interact with the NPO, outside of picking up coupon books.

# The Opportunity New York City Demonstration: Family Rewards

# Figure 3.4

# Family Rewards Sample Coupon for Full-Time Work

Coupon ID:	100013500010606	
Last Name:	Vela \$300	
First Name:	Dora	
Client ID Number:	1350001	
Date of Birth:	8/30/1961	
Parent(s):		
Client Number(s):		
For Activity Period:	July 2008 - August 2008	
Submission Deadline:	9/15/2008	
to: Opportunity NYC P.O. Box 757	ROOF OF FULL-TIME WORK in the envelope provided by the deadline	
New York, NY 10159		

(continued)

# Figure 3.4 (continued)

vvnati	s It?		
Use this coupon to get a \$300 reward for working full-time during the 2 month period on this coupon. Full-time work is paid work that is taxable.			
	he reward, you should have worked at least 30 hours per week for 6 or more weeks over 2 months. Your urs should be at least 180. You can earn rewards of up to \$1,800 each year for full-time employment.		
What I	Else Do I Need To Know?		
How to	show PROOF OF FULL-TIME WORK (provide any one of these):		
	YOUR OFFICIAL PAY-STUB - Your pay stubs must show the number of hours worked over the two month period. Make sure to include the correct number of pay-stubs. For example, if you get paid monthly, submit 2 pay-stubs for the time period. If you get paid weekly, submit at least 6 pay-stubs.		
0	LETTER FROM EMPLOYER ON OFFICIAL LETTERHEAD - This should show the number of paid hours you worked over the 2 month period on this coupon. This letter must have the company's address, telephone number, and the employer's name and title. It must be signed by the employer.		
0	<ol> <li>If you are self-employed, you can show proof of employment by providing both of the following:</li> <li>A letter from each of your clients/employers with number of billable hours that you have worked for each. These letters should include the client's name, address, and telephone number.</li> </ol>		
	<ol> <li>Copy of your last year's IRS 1040 Tax Form. This must have Line 12 completed. You can also send a copy of your last year's Form 1099 Tax Return.</li> </ol>		
	obs that pay you TAXABLE wages can be counted as work. Some kinds of work will NOT be counted the rewards:		
0	WEP jobs for people receiving public assistance		
0	Unpaid internships or volunteer work		
0	Working "off the books" (working without paying taxes on the money you earn)		

However, program designers believed that the need for periodic reeducation and engagement on the conditions for earning rewards might require topical workshops covering work, high school rewards, or other process-related issues such as coupon submission. These sessions were not mandatory, and in fact, relatively few participants attended these workshops over time. Forty-three percent of 18-month parent survey respondents said that they had attended a workshop at some point.

Because workshops did not offer services directly, Seedco and the NPOs had to approach them differently from the way they had approached other workshops in service-oriented programs, which they were more accustomed to operating. One NPO staff member reflected on the difference and how participants sometimes responded:

I think our work-and-training workshop was a keen example of that. The workshop itself was geared toward teaching individuals how to earn the workand-training and work awards. It was geared toward giving them resources for the areas of work and training. But I think they were somewhat disappointed, a lot of them, when they came in and realized that I wasn't gonna hand them out a job, or that I wasn't sitting with them as a job developer.

Workshops were initially planned entirely by Seedco in order to minimize the burden on NPO staff, who were still working on enrollment and orientation. This strategy of central planning was also seen as a way to create uniformity in "treatment" across sites, with the assumption that NPOs would play a more active role over time, after their staff gained more practice in workshop delivery. However, NPO staff and other observers viewed some of these early workshop sessions as somewhat impersonal and unresponsive to individual participants' circumstances, which made it difficult to help participants with specific problems they were having — such as gathering required documentation — or to offer referrals to appropriate services in the community. As a result, staff at the NPOs developed the strong conviction that workshops and information sessions must be tailored more closely to families' personal circumstances, and that this was key both to motivating participants and to resolving their documentation problems. Staff also placed greater emphasis within the workshops on interaction among participants and creating a more comfortable environment for them to come together to discuss the program. Seedco emphasized this approach in later workshops, which were planned more closely with the NPOs. As shown in Box 3.4, practitioners developed engaging ways to educate the participants about the reward conditions and simultaneously to create opportunities for families to have fun while spending time together under the program's auspices.

#### Box 3.4

#### **Evolution of the Family Rewards Workshops**

*Spring 2008:* One work-and-training workshop started with seven adults and three children in attendance. All the adult attendees described themselves as employed and seeking a promotion or a better job, but their specific circumstances varied. One woman wanted to learn how to submit coupons for work and training. The other two wanted to upgrade to different jobs and were also interested in the coupon submission process. One woman had an associate's degree and wanted to get a master's degree to become a librarian. Despite these different circumstances, the presenter simply read posters in a perfunctory manner, and was not very easy to listen to or follow. In response to questions, staff were adamant about defining boundaries. One answered several questions by starting out, "We are not here to get you a job" or "We are not doing job placement," and then gave a general explanation of the services that were available at various agencies. Staff were not able to provide detailed or specific information about the range of available services or to direct individuals to the most appropriate services.

*Fall 2008:* Twenty adults and 30 children attended the evening event, which started with a dinner of pasta and salad. Two staff members were present, so that one could supervise children younger than age 6 in an adjacent room, where there was a television set. Staff were well prepared and upbeat as they went through different game-like activities. For the first, a version of the "Newlywed Game," adults and children sat on opposite sides of the room and answered questions such as, "What does your child want to be when she/he grows up?" and "What is one thing your child needs to do better in school?" Children then stated their answers and saw how they corresponded with their parents' answers. The second game involved answering — for the chance to win a prize — multiple-choice questions about the conditions attached to earning particular rewards, such as the definition of "ELA" and what a child had to do to earn the rewards that were attached to this test. Participants also had the opportunity to ask questions about what happens when coupons are submitted late, and rules for resubmission.

#### **Realizing the Need for Additional Marketing**

As described above, participants' early encounters with the program emphasized the explanation of payment rules. However, several factors helped contribute to a sense among Seedco, MDRC, and CEO staff that better marketing of the incentives was necessary. First, problems with the documentation that participants submitted suggested that not every participant understood the required conditions for all activities. Second, early implementation research suggested that many participants felt disconnected from the program and wanted more contact

with NPO staff and a greater sense of "community" within the program. Finally, lower-thanexpected receipt of certain rewards, such as those for full-time work and the combination of work and an approved training program, suggested a need for greater emphasis on certain activities, such as employment, training, and improvement on standardized tests. A Seedco staff person reflected on this evolving perspective on marketing:

We didn't really prioritize what are the rewards that we care about more than others. It was really [at first] an approach that all of the rewards are created equal. .... In the second year I think what we did was we said no, they're not all created equal. We care much more about certain things. And that's what drove us to our marketing efforts really targeting certain rewards. To say these are the ones that we think matter the most.

Marketing of incentives took several forms over time. In Year 1, workshops were publicized by mail and through outreach calls to participants, and through the production of customized earnings statements (see Appendix H for a sample earnings statement). In Year 2, in addition to continuing to offer workshops, Seedco and the NPOs launched targeted campaigns through which the staff sought to contact participants who had not earned certain rewards, reminding them about the opportunities to earn those rewards and how the NPOs could help them. The campaigns emphasized standardized tests (that is, the ELA and math tests for younger students and Regents exams for high school students) and the full-time work and training and education rewards for parents. As part of the new outreach efforts, the NPOs began calling selected lists of participants with scripted messages about the rewards. To aid with this work, DCF Advertising, a professional advertising agency, was hired to design new marketing materials and to create a Family Rewards Web site. One of the postcards that the agency generated is shown in Figure 3.5. Staff at Seedco believed that these revamped materials were more appealing and engaging to families.

### Building the Cash Transfer System

By the end of the second year of Family Rewards, Seedco had transferred approximately \$14.7 million to participating families. The capacity to deliver these payments depended on the creation of a verification and cash transfer system that involved manual as well as automated processes and that could accommodate 22 different rewards and the particular conditions and verification requirements that were attached to each of them. In some respects, this system is the core of Family Rewards. As a CCT program, paying for performance is fundamental to the model's theory of change.

Creating the verification and payment system was an extensive and complicated task; details about it are presented in Appendix B. Seedco first needed to establish (with input from

#### The Opportunity NYC Demonstration: Family Rewards

### Figure 3.5

### **Family Rewards Marketing Postcard**



MDRC and CEO) detailed rules for each activity, including what kind of documentation would be required for each of the 22 different rewards to verify that participants had met the conditions that enabled them to earn payments. Seedco then needed to create a system for receiving, on average, about 6,200 coupons and forms every two months, using approximately 20 workers to check and review the accompanying documentation. Seedco has worked hard to conduct what it calls "verification with a heart," meaning that staff attempt to find missing documentation for participants whenever possible — for example, by calling community colleges whose transcripts do not indicate the number of hours associated with each completed course. For automatically verified activities, Seedco created a data exchange with public agencies to gather information about school attendance, tests, and public health insurance, and, as part of this process, needs to clean very large data files, which sometimes contain errors.

After verification, Seedco authorizes GrantsPlus, a payment management service that is a division of the Research Foundation of the City University of New York (CUNY), to process payments directly into participants' bank accounts or stored value cards. However, payment to participants is sometimes problematic. Seedco initially believed that a direct deposit system for rewards would be most efficient, but, unexpectedly, this system made it nearly impossible to give money to the many participants whose accounts had closed or changed, or when the participant had provided incomplete information or had not opened an account in the first place (as was often the case for eighth-graders in Year 1 who became high school students in Year 2). According to analyses of Seedco's Family Rewards payment data, about 93 percent of the dollars earned by participants in Years 1 and 2 were paid into their accounts. However, there was a particular problem in paying high school students: by the end of Year 2, about 16 percent of high school students who had earned high school rewards could not be paid, mostly because of bank account problems. In fact, about 43 percent of all cases where payments could not be made were accounted for by teenagers who had not opened their own bank account. In the 18month survey, 14 percent of participants reported that they were unable to receive a payment at some point because of an issue with their bank accounts. A Seedco staff person reflected on the challenges for both Seedco and the participant in this type of situation:

They just don't go through. There's either an error in the account [or] the account's been closed, the account's been changed.... I think we initially viewed [getting account information] as a static activity.... And that's not how it happens usually. [The participant] doesn't pay child support. It gets shut down. [The participant] forgets to tell us. We put money in the account, it gets frozen.

To address these banking issues, Seedco developed extensive "account management" procedures. For example, Seedco attempts to alert the participant as well as the NPO when it has incomplete account information, and holds conference calls with banks to attempt to open closed accounts or to reactivate stored value cards when needed. However, it sometimes takes

several months to get the proper account information and documentation that are necessary for a payment to be made.

During the in-depth interviews, almost all participants reported feeling that they were not paid for an activity for which they thought they had earned a reward, even if the case was later rectified or the participant recognized that he or she was in error. The lack of payment was often related to providing insufficient documentation or to bank account issues. While these problems are understandable given the complexity of the program's verification and payment operations, they underscored the importance of good customer service, so that participants did not become discouraged and fail to engage with the program. (Chapter 4 provides some examples of the relationship between the extent of rewards received and participants' frustrations with the program.) These customer service efforts, which are described in the next section, represented some of the most successful aspects of Family Rewards implementation and an area characterized by both organizational learning and service improvement over time.

### **Providing Customer Service and Support**

Family Rewards had, by design, two major mechanisms for customer service and general support: participants could call the helpline or they could call or visit the NPOs (see Figure 3.2). These program components both encourage participants to take advantage of the opportunities to earn rewards and help them claim the rewards they have earned. The first of these mechanisms, the helpline, provides bilingual support to Family Rewards participants, primarily to answer questions about payment. As such, the helpline plays a particularly critical role within Family Rewards. However, because of technological limitations, helpline staff were the only practitioners in the program who had access to payment information and details about why some claims were rejected, which was potentially problematic when disputes or confusion arose. Consequently, when a participant with a payment question arrived at an NPO, the NPO staff needed to contact the helpline in order to understand and try to resolve the problem.

The second mechanism for customer service and general support involved the NPOs directly, each of which, as described above, had at most two staff members assigned to the task. Support from the NPOs included not just customer service to address payment questions, but help in submitting coupons, information and referral activities upon request, and the creation of social events and celebrations for families. Because Family Rewards was designed as a program without case management or services, the NPOs' roles needed to be defined over time, sometimes in ways that were new for staff whose experiences were in more traditional service roles. However, despite these role questions and some initial challenges involving orientation, NPOs were viewed over time in extremely positive terms by participants, many of whom also reported that NPOs contributed to their ability to take advantage of the program.

#### The Family Rewards Helpline

Seedco's Family Rewards helpline provides real-time customer service to participants during day and early evening hours. In any shift, three or four bilingual staff members are on duty at a time. It is used primarily for participants' questions about payments, although staff also field other types of calls. Very early in the program, Seedco had only a single staff person assigned to the helpline, which was first called a "hotline." Seedco realized early on that additional, dedicated staff were required. For example, starting in January 2008, it answered an average of over 500 calls every month. Seedco also realized that it needed to reframe participants' expectations about the service, especially when immediate support was not available because of heavy call volume or other issues. Over time, the helpline was staffed by former workers from the payment processing division, which meant that they had firsthand experience in coupon submission procedures and documentation requirements. Upon provision of a family ID, staff have access to payment histories and specific reasons for the rejection of claims, as noted above; for example, a medical coupon might be rejected for missing a license number from the physician. Staff also have access to the "nonpaid clients list," which includes participants who do not receive some payments because of problems with their bank accounts or stored value cards.

Most participants viewed the helpline positively (see Table 3.2). Among respondents to the 18-month survey, 68 percent reported calling the helpline at least once, and among those callers, 69 percent said they were "very" or "extremely" satisfied with the assistance they received. In-depth interviews indicated that "positive" experiences with the helpline were not necessarily linked with receiving the payments they initially expected, but instead linked with receiving satisfactory explanations for their problems from helpline staff. Participants who had positive interactions with the helpline found that the staff were helpful, kind, knowledgeable, and/or patient. Some participants felt that helpline staff assisted them in understanding the program, especially during the initial months. The helpline often performs these tasks under challenging circumstances. As one participant admitted, staff often face angry callers and yet responded in her case with patience: "The hotline, they are so patient. They speak to you in a form like, you know, they try to really work with you, but by the time you get to the hotline, you're just so mad. You know, because I've done threatened, 'I'm gonna sue you. I'm gonna drop out of the program." The helpline was often described as professional and encouraging, as illustrated in the following statements from a participant who described what "keeps her coming back" to the program:

> *Participant:* Well...that's what's keeping us more coming back... *Interviewer:* So, for you, it's been [helpline staff]?

# The Opportunity NYC Demonstration: Family Rewards

# Table 3.2

# Participants' Experience of Family Rewards Program Operations

Outcome (%)	Program Group
	Croup
Turned to staff from the following agencies with questions about Family Rewards <sup>a</sup>	560
Neighborhood Partner Organization (NPO) only	56.2
Family Rewards helpline only	13.1
Both NPO and Family Rewards helpline Either NPO or Family Rewards helpline	20.0 69.3
Called Family Rewards helpline to get information or help, or to ask about payments	68.1
Number of times called Family Rewards helpline in past year	
	32.1
1-2	36.6
3 or more	31.4
Very or extremely satisfied with Family Rewards helpline staff <sup>b</sup>	69.0
Number of times called NPO staff for information about Family Rewards	
0	14.8
1-2	37.4
3 or more	47.8
Said that NPO staff were extremely or very helpful <sup>c</sup>	85.9
NPO staff helped find	
Health care provider or dentist	19.0
Education or training program	25.1
Program to help find a job	23.6
Tutors, after-school activities, or programs to help children with school	28.0
Attended any Family Rewards workshop	43.4
For high school students <sup>d</sup>	31.8
On work and employment training	19.0
On financial literacy	16.7
On elementary and middle school students <sup>e</sup>	28.7
Attended other Family Rewards events <sup>f</sup>	52.4
Visited the Family Rewards Web site for information	25.5
Opened a new Opportunity NYC savings account when enrolled in Family Rewards	55.4
Unable at least once since the beginning of the program to receive a payment because	
of bank account problem	13.7
Sample size	1,037
	(continued)

(continued)

#### Table 3.2 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: This table excludes control group members because it pertains only to the Family Rewards program. A randomly selected subsample of program group members was asked these questions.

Sample sizes vary across measures because of missing values.

<sup>a</sup>Percentages do not add to 100 percent becasue some respondents did not think the Family Rewards program had staff available to help with questions or problems with the program and because other respondents usually turned to other program participants or a Web site for help or tried to figure out the problem on their own.

<sup>b</sup>This excludes respondents who did not call the Family Rewards helpline.

°This excludes respondents who did not contact NPO staff.

<sup>d</sup>This excludes respondents without a high school-age child in the household.

<sup>e</sup>This excludes respondents without an elementary or middle school-age child in the household.

<sup>f</sup>Events may include picnics, barbecues, or informational sessions.

*Participant:* Yeah, she's never raised her voice to pitch level.... She didn't never seem like she was frustrated with me asking a question. And she always said, "Anytime, just call me. You need help." That's the main thing you can have. That friendly person on the other end telling you, "Anytime."

However, for other participants, using the helpline proved more difficult, as NPOs and participants initially reported frustration with staff's ability to respond to questions and resolve problems. As described above, NPOs do not have access to participant payment and rejection information, and they, too, have often needed to call the helpline to answer participants' questions. This technological limitation placed considerable strains on the helpline and the NPOs, and sometimes resulted in conflicts between them, although procedures such as installing a separate NPO call-line were later put into place to mitigate the potential for such conflicts. During the early months of the program and before the development of a call-management system, several participants reported leaving messages and never receiving a return call. At times, the helpline was observed to have more than 45 voice-mail messages from participants, and staff reported that even more messages were left at other times. Some participants described frustration with Family Rewards in general as a result of these interactions. For example, one participant said that she expended considerable effort trying to track down a coupon packet she had mailed that was never received; a second had trouble getting through to the helpline and gave up; and a third experienced a great deal of back-and-forth with program staff after she received payment for attendance by only one of her two elementary school children, even though both children always attended together. These participants called the program "a joke" and "a headache" and said that the staff was "incompetent" and "not knowledgeable."

Those impressions notwithstanding, 69 percent of parent survey respondents described themselves as "satisfied" or "extremely satisfied" with the helpline. Given the fact that the helpline is the flashpoint for often-contentious interactions around money, it is not surprising that participants who believed they were owed payments might become frustrated. Another factor that might influence customer perceptions about the helpline is that, even though staff can explain why payments have been denied, they may not always be able to assist immediately — when, for example, the caller disputes the reason for payment denial, when documentation is ambiguous, or when additional policy decisions are required. Helpline staff reported that callers may expect a different and more immediate form of customer service, such as the type they experience with private companies, where workers with whom participants interact may be empowered to authorize payments. Finally, similar frustrations are often reported in welfare programs. However, given the nature of Family Rewards as an incentives program, negative encounters related to payments have potentially important implications for the program's ability to influence families in the ways it intends, as discussed below.

#### Limits on Case Management and Direct Service

As described in Chapter 1, Family Rewards was designed to test a model that avoids case management or intensive service provision, focusing instead on directing incentives toward participants. This model was seen as potentially easier and less costly to operate on a larger scale (if successful) than one that had to involve additional resources for case management support, in a similar way that the Earned Income Tax Credit operates without case management or direct services. Also by design, with only two staff assigned to the program from each NPO — or one per approximately every 350 families — NPOs would not have been able to provide ongoing, personalized case planning and assistance to all families. However, delineating what constituted impermissible "case management and services," as distinct from permissible marketing and motivating efforts, was a conceptual challenge for the design team (CEO, MDRC, and Seedco) and, operationally, a learning process for Seedco and the NPOs, especially during the first year of the program. Program designers recognized that given the extensive incentives schedule and often complex documentation requirements, many participants were likely to benefit from face-to-face customer service to help them fully understand the program and claim their rewards. The designers also recognized that participants should not be without guidance about how to achieve the conditions that would qualify them for rewards. Thus, the NPOs were charged not only with explaining the incentives and assisting with claims-related issues, but also with providing information about services in the community that might be helpful to participants. In addition, they were expected to offer participants referrals to reputable organizations in the community. In some cases, NPOs without these broad referral networks were asked to identify appropriate local organizations that might be of assistance to families. However, personalized, proactive case management in the normal sense of that term, and the direct provision of services, were not permitted by the program. Moreover, it would not have been feasible for the NPOs to offer such services to all families on an extensive basis given their limited staffing for Family Rewards.

The prohibition on services was easier to define. For example, it was acceptable for the NPOs to provide guidance on *where* to get job search assistance or homework help, but not to provide it directly. However, reaching agreement about what constituted case management was a more extensive process, in part because the term "case management" can be defined variously. In practice, it also proved complicated to draw the line between permissible marketing activities and impermissible case management activities. For example, NPOs were encouraged to make targeted calls to participants to call their attention to rewards that they had not received, but they were discouraged from helping families develop personalized action plans for earning those rewards.

During the first year of the program, Seedco's efforts to ensure fidelity to the "no case management" rule was interpreted by some NPOs to mean that they should not probe or ask questions of individual participants about their circumstances during one-on-one sessions. Even if the purpose was to engage participants around potential activities or help them with documentation troubles, these NPOs believed that they were prohibited from probing into those issues. Staff at NPOs reacted against these perceived limitations, finding it excessively restrictive and making individualized, personalized contact more difficult. (In doing so, a few staff members also provided limited services to participants, such as help writing résumés.)

Most NPOs believed that the complexity of documentation requirements necessitated face-to-face contact and probing about participants' family situations. For some, literacy and comprehension challenges made it especially important to establish in-person connections. Other practitioners came to believe that incentives alone were not enough to change participants' behavior, and that families needed encouragement to pursue new activities. As one program staff member said, "I don't think just the money — well, we see that the money is not doing it. Right? We see that." These staff believed that the program's model was new to participants because it made them responsible for carrying out activities on their own. As a result, the NPOs felt that they needed more contact with the families to help familiarize them with this new mindset of participating in a program that does not offer any tangible services. As one practitioner put it:

You're really changing a state of mind, a state of being that you really can't change simply by rewards. The reason I say it's a state of mind is because you kind of have to change people's thinking from the social service handholding that they're used to.... All other programs hand-hold. This program is not hand-holding and the only way that I find that we can do that is continue to say and show them that we're here [for them].

NPO staff also believe that to promote participants' engagement with Family Rewards, it is important to mitigate any potential stigma associated with participation in the program.

They are aware that participants are sensitive to the implications of being in a program that rewards what they consider to be ordinary parenting tasks. As a result, NPO staff developed strategies to help families feel more comfortable. For example, one staff member described an attempt at a workshop that involved interacting with the participants briefly on a more personal level — by, for instance, having participants talk about their summer and sharing information about their children — before moving on to discuss activities and incentives.

Starting in Year 2 and over the course of that year, Seedco, MDRC, and NPO staff agreed on guidelines for interaction with participants, presenting illustrations of what is permissible and what is not, as shown in Table 3.3. For example, NPO staff were expected to ask participants about goals in an encouraging way, but not to keep a case file on them or track their progress. Staff were directed to introduce participants to local resources in an active way — and not merely provide referral sheets — but not to coordinate the provision of additional services, such as scheduling appointments for them.

#### Participants' Reactions to NPOs

The results of these efforts to define roles were very positive: the vast majority of participants viewed NPO staff very well. Among respondents to the Family Rewards parent survey, 76 percent said that they had turned to the NPOs with questions about the program and, of those respondents, 86 percent said that NPO staff were "very" or "extremely" helpful. Many participants during in-depth interviews described NPOs as integral to Family Rewards, not only helping with coupon submission and payment problems, but also generally facilitating their engagement with the program. According to these participants, NPOs were often the first source for help or answers to questions and provided instrumental support with coupons and documentation. This was borne out in the 18-month parent survey: 56 percent of participants reported using *only* the NPOs, and not the helpline, as a source of information about the program, while 20 percent reported speaking to both NPOs and the helpline. More than just the "face" of the program, the NPOs expended a great deal of effort working with individual participants to ensure that they submitted coupons correctly and on time in order to redeem rewards, which participants said they appreciated. Participants also appreciated the quality of interactions with NPO staff, generally viewing them as personable, accessible, and patient. As one Spanishspeaking participant described her experience:

I really like that when I go . . . to the office, they treat me well. For example, if anything happens, they call me. They're always attentive, . . . they sit me down, they speak to me in Spanish, in English, and if I don't understand something, they explain it again, it doesn't matter. The person interviewing me doesn't get annoyed, upset, or anything.

#### The Opportunity NYC Demonstration: Family Rewards

#### Table 3.3

#### **Customer Service Guidelines for Neighborhood Partner Organizations (NPOs)**

Type of Assistance	NPO Staff Should:	NPO Staff Should Not:
Coupon/payment troubleshooting and assistance	Answer participants' questions about coupon submission and ask whether issues previously discussed have been resolved; help facilitate the coupon submission process.	Take responsibility for completing participants' forms or sending coupon submissions on their behalf.
Goal setting	Ask participants about the goals they have set for themselves and their children and motivate and direct them to find the services and assistance they need to achieve these goals.	Keep a record or case file on the goals set by a participant nor proactively follow up on progress toward achieving these goals.
Workshops	Provide information and resources related to rewards.	Provide direct services to participants (such as giving tips for résumé writing).
Field trips	Take a small group of participants to the local library, for example, to introduce them to resources and services.	Collaborate with outside organizations to jointly provide direct services (such as working with the library to provide study sessions for participants).

SOURCE: MDRC field research.

Many participants took advantage of this personal attention and accessibility, and they described getting help from these in-person sessions in different ways: for example, fixing errors resulting from an incorrect zip code, straightening out a situation where two brothers had the same name, enrolling a new baby, and enrolling a woman who was raising her deceased sister's daughter. Many participants appreciated the fact that NPO staff were willing to call the helpline, rather than asking participants to call on their own. Other practical support that NPOs provide includes sending reminders about deadlines, calling and sending flyers about workshops, and making strategic suggestions like putting notes in one's purse the night before appointments.

As has been described throughout this report, one important aspect of participants' experience in the program is the potential for a stigma being associated with getting paid for what is often considered normal parenting activities. NPOs helped many participants feel comfortable with this aspect of the program as well. As one mother said, "I was really contemplating whether I should be in this program or not because I thought it was like labeling people. So I was like, you know — I didn't really understand. But then she was explaining to me what it

does and how it helps people out a lot." In a similar vein, many participants saw the NPO's role as supporting and validating their own parenting efforts. For example, one staff member talked about the need for responsibility to children who came to NPO social events in a way that echoed the language parents used themselves with their children about responsibility.

Not only did NPO activities appear to alleviate the potential for stigma, but the NPO staff also helped create a sense of positive community around the program. One way they did this was by sponsoring social events — especially barbecues during the summer and holiday parties in December. Participants' responses to social events appear to have been very positive, and these events attracted somewhat more participants than the workshops had. Among respondents to the 18-month parent survey, 43 percent said that they had attended a workshop, while 52 percent said that they had attended events other than workshops. Parents who were interviewed appeared to value these occasions to come together, and sometimes saw them as ways to engage their children in the program as a whole. Speaking of her child's awareness of the program, one mother commented, "They have this little Christmas play…Halloween parties, all kind of holidays…and I think that's really good for the children."

Nonetheless, these positive experiences were not universal. A downside to the importance of NPOs within Family Rewards is that negative experiences with NPOs can be associated with disengagement from the program. Despite the generally positive experiences, some participants said in interviews that they had had early experiences with their NPOs that raised their doubts about Family Rewards, noting, for example, that the NPO office was too crowded or too deserted, or that the staff were unprepared or brusque. At the same time, it is important to note that participants did not appear to make use of the full panoply of resources that the NPOs offered. In addition to low workshop attendance, described above, not many participants reported using NPOs for referrals. As Table 3.2 shows, roughly one-fourth or less of respondents to the parent survey indicated that they had received help from NPO staff finding a particular service, such as a health care provider or dentist, programs for help finding a job, or tutoring or after-school programs. This low usage may reflect participants' views of NPOs primarily as sources of help with coupon submission and to answer questions about payments.

### Potential Implications of Operational Challenges and Successes

This chapter has described implementation accomplishments and challenges, as well as implementation improvements as the initiative matured. Although the association among challenges, successes, and program outcomes is not clear, several aspects of participants' experiences in Family Rewards may be important, according to the literature about incentives and motivation. First, a basic tenet of learning theory emphasizes the need for rewards to be closely linked to behavior in time.<sup>3</sup> Despite Seedco's successful efforts to create a system for cash transfers, there were inevitable delays between successfully meeting certain conditions and reward receipt, even beyond the regular two-month program payment cycle modeled on *Oportunidades*. For example, as noted in Chapter 1, the results of the annual standardized ELA and math tests were not available until months after the tests were taken because of the time required by New York State to grade the exams and for New York City to process the results and feed them back to Seedco. Delays such as these may make it more difficult for families to feel a connection between performance on the tests and the rewards offered by the program.

Second, psychological studies on behavior associated with earning rewards suggest that it is important that incentives be understood and translatable into specific action by the potential reward recipients.<sup>4</sup> On a basic level, if participants misunderstand the terms and conditions of reward receipt, they will be hindered from earning it. As described above, there is some evidence of early confusion about the full spectrum of program rules and documentation requirements (see Chapter 4 for a full examination of this issue). In addition, the fact that the program staff did not initially push parents to attempt more challenging activities, but, instead, to concentrate on obtaining rewards for the things they were already doing, may have influenced some parents to avoid focusing — at least earlier in the program — on certain activities, such as work and test-taking, which they may have felt were out of their control.<sup>5</sup>

Third, trust between the reward giver and the reward seeker has been identified as a potential factor influencing motivation. As described in Chapter 1, a major theme in social psychology around incentives is the potential that they can reduce intrinsic motivation after the incentive is no longer associated with the activity. These potential effects are seen to be exacerbated when the person receiving the reward does not trust the actor who provides it. That is, resentment about reward receipt may reduce participants' inner drive, whereas trusting the actor who gives the reward is associated with greater internal motivation.<sup>6</sup> This factor makes participants' experience of payments potentially important. Although the types of frustrations experienced by some Family Rewards participants are not unusual for cash transfer programs, according to the literature this frustration may diminish participants' internal drive to achieve difficult goals, despite the promised reward. On the other hand, NPOs and the helpline appear to have created a good degree of trust for the program — through dedicated customer service, community-building social events, clear explanations of rules for payment and their legitimacy, and effective ways of understanding participation in a potentially stigmatizing program. For

<sup>&</sup>lt;sup>3</sup>Skinner (1974).

<sup>&</sup>lt;sup>4</sup>Eisinberger, Pierce, and Cameron (1999).

<sup>&</sup>lt;sup>5</sup>This may also be significant, as autonomy and competence are seen to be critical factors that influence the way in which rewards affect motivation. See, for example, Deci, Koestner, and Ryan (1999).

<sup>&</sup>lt;sup>6</sup>Benabou and Tirole (2003).

example, one participant contrasted the experience of participating in Family Rewards with other types of income support programs:

*Participant:* Because they don't treat people — like for example, we both worked and then my husband got sick, we didn't have money to pay rent and I had to go get help and they treat you like if you were asking them — they talk in a bad way and you have to put up with all that because you need.

Interviewer: And this program has not made you feel bad.

Participant: No. This program makes you feel useful.

### Conclusion

This chapter described the operational challenges and accomplishments of Family Rewards in its first two years. Because Year 1 involved both intense enrollment efforts and the creation of payment systems, customer service guidelines, and marketing strategies, the early operation of the program was problematic in many ways. Operations were much improved in Year 2 as staff resolved many initial problems, refined their practices, and gained experience. Reflecting these improvements, participants generally held positive views of Family Rewards, and the program was able to deliver on its promise of payments. At the same time, early experiences may have implications for the timing and intensity of program impacts, as many participants did not begin to feel able to use the program as a tool within their families until Year 2. By that point, they may have already been oriented toward the incentives. For many participants, this orientation meant focusing on activities that were the easiest to undertake and document.

This chapter also notes some variation in practice among the NPOs. Some NPOs were more skilled at communicating payment rules, marketing incentives, and conducting more positive workshops and social events than others, especially at the beginning of the program. However, because participants' very positive views of NPOs over time were shared across sites, and because payment systems for participants were centralized with Seedco, the similarities of implementation experiences across sites were far greater than the differences. Consequently, later chapters in this report focus primarily on outcomes for the entire study population. Perhaps even more important, the focus on pooled results is appropriate because Family Rewards, as a directly marketed incentives program, does not primarily involve site-based service delivery. Instead, it requires that participants understand incentives, engage their households in attempting to achieve the goals needed to earn them, and document activities in order to be paid — the subject of the following chapter.

#### Chapter 4

# Families' Receipt and Use of Program Rewards

For any incentives program to be effective, its participants must be aware of and understand the rewards it offers and how to earn and claim them. This is a particular challenge for Family Rewards as a two-generation, comprehensive conditional cash transfer (CCT) program with 22 different rewards and a number of complex rules. As discussed in Chapter 1, the program's designers recognized that creating many different opportunities for the families to earn rewards and obtain large total cash transfers came at the price of simplicity. Consequently, it could not be taken for granted that families would truly understand what they were being offered and would earn substantial amounts of money in reward payments.

Chapter 3 described the efforts of the organizations that were operating Family Rewards to market the program to participating families and the procedures for verifying claims and making payments. This chapter focuses more closely on the families themselves, exploring how much money they actually earned in reward payments during the first two years of the program, and why some families earned more than others. The analysis devotes particular attention to the crucial issue of participants' understanding of both the incentives themselves and the process for claiming rewards.

Of course, even if families understand the program, obtaining the rewards requires that they also meet the qualifying conditions, submit coupons for the incentives that are not automatically verified, and maintain working bank accounts (or arrange for payment through stored value cards) for the duration of the program. This chapter thus examines how these and other factors, along with certain characteristics of families, were related to the amount that families earned and for which categories of activities (education, health care, and workforce) they earned rewards. As part of that analysis, the chapter explores the way families interpreted the purpose of the program and their personal goals in relation to that purpose. These experiences and perspectives provide important insights into the feasibility and challenges of operating a CCT program in a way that deeply engages families and becomes meaningful in their lives.

In the last section, this chapter looks at how the families used the extra resources they obtained through the cash transfers. An important part of that discussion is how parents allocated money to their children — that is, for what purposes and according to what preconditions.

The findings are based on both quantitative and qualitative data sources. These include data from Seedco's Family Rewards payment system, which tracks reward earnings and actual payments. The analysis also uses data from the Background Information Forms completed by

all families and the Family Rewards 18-month parent survey and in-depth interviews from two smaller subsamples.<sup>1</sup>

In brief, nearly all families earned rewards, with payments per family averaging about \$3,100 per year and more than \$6,200 for the first two program years combined. In each year, most families earned rewards in the range of \$1,000 to \$5,000, which suggests a fairly high level of engagement with the program across the board, although a small group of families was very difficult to engage. Most rewards were earned in the education and health domains, with less than half of families earning any workforce rewards. Most families earned rewards during both program years and consistently across activity periods. Patterns in reward receipt differed little across the six community districts in the study. Families who earned the most rewards tended to be larger and were more likely to have high school students, and they were more advantaged at the time of enrollment than were those with lower program earnings. High-earning families submitted far more coupons per person than did lower-earning families, and had a better overall understanding of program components. The families used the extra money they received through the program in a variety of ways. Common uses included paying for basic living expenses, school-related supplies or activities, and electronic goods and special recreational outings for the family, sometimes as a reward for school accomplishments.

### The Amount of Reward Money That Families Earned

Families were very engaged with the program, as measured by the amount of money they earned and the consistency of those earnings over time.<sup>2</sup> Table 4.1 shows that 99.6 percent of families earned at least one reward during the program's first two years. For most, this included a combination of coupon and automatically verified rewards, with only 12 percent of families relying exclusively on automatically verified rewards. Submitting coupons is an indicator of families' attention to the program and incorporation of the program into their daily

<sup>&</sup>lt;sup>1</sup>See Chapter 3, especially footnote 1, for further information on data for the evaluation's implementation research.

<sup>&</sup>lt;sup>2</sup>Most of the analysis in this section focuses on rewards earned rather than paid because of complications in making payments into bank accounts. As described in Chapter 3, sometimes families were not paid for what they earned, largely because their bank account information was incorrect or their account had been closed. Appendix Table C.2 shows, however, that most families who had earnings were eventually paid.

Also, the average amount of rewards earned that is reported in this section is an aggregate across all families. It does not take into account differences in family structure and personal circumstances that affect reward earning *potential* (for example, number of children, or having a physical disability that limits work) because it was methodologically unfeasible to create such a metric given the many factors that would have to be considered for each household. However, later analyses do demonstrate the differential impact of family size, number of high school students, and work status on reward receipt.

# The Opportunity NYC Demonstration: Family Rewards

# Table 4.1

# Summary of Rewards Earned by Families

			Years 1 and 2
Outcome	Year 1	Year 2	Combined
Family earned at least one reward (%)	99.5	98.0	99.6
Only automatically verified rewards	16.5	18.4	11.7
Any automatically verified rewards	98.7	96.7	99.0
Only coupon book rewards	0.8	1.3	0.6
Any coupon book rewards	83.1	79.6	87.9
Automatically verified and coupon book rewards	82.2	78.3	87.3
Average number of automatically verified rewards earned Distribution of number of rewards earned (%)	14.0	12.9	26.9
0	1.4	3.3	1.0
1-10	32.7	35.3	10.3
11-20	47.2	47.2	23.3
21 or more	18.7	14.2	65.5
Average number of coupon book rewards earned Distribution of number of rewards earned (%)	13.6	11.7	25.3
	17.0	20.4	12.1
1-10	27.2	31.1	15.5
11-20	31.4	27.8	19.4
21 or more	24.5	20.7	53.0
Family earned at least one reward (%)			
Education reward	96.4	91.4	97.5
Health reward	95.2	94.1	97.6
Workforce reward	42.2	41.1	48.3
Among families who earned a reward in a specified period, average reward amount earned (\$)	3,154	3,108	6,209
Average reward amount earned, by domain <sup>a</sup> (\$)			
Education	1,451	1,447	2,791
Health	1,224	1,230	2,379
Workforce	1,359	1,372	2,356
Average number of activity periods during which rewards were earned	5.6	5.5	11.0
Distribution of average reward amount earned <sup>b</sup> (%)			
\$1 - \$99	0.6	0.6	0.2
\$100 - \$499	4.7	5.3	1.3
\$500 - \$999	7.9	7.5	2.9
\$1,000 - \$2,999	39.5	39.2	18.2
\$3,000 -\$4,999	29.7	31.2	21.5
\$5,000 - \$6,999	12.1	12.2	19.1
\$7,000 or more	5.4	3.9	36.9
Sample size			2,377
			(continued)

#### Table 4.1 (continued)

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

NOTES: The first program year covers September 2007 through August 2008, and the second program year covers September 2008 through August 2009.

<sup>a</sup>Reward amounts are calculated among families who earned rewards for each domain during the specified period.

<sup>b</sup>The maximum amount earned in Year 1 was \$13,235; in Year 2, it was \$12,150.

lives. On average, families earned about the same number of coupon-based rewards (25) and automatically verified rewards (27).

The amount earned by families during the first two years of the program averaged \$6,209, which includes \$3,154 from Year 1 and \$3,108 from Year 2. Table 4.1 shows that Year 1 reward earnings were normally distributed (meaning they fell along a "bell curve"). Approximately 70 percent of families received between \$1,000 and \$5,000 from Family Rewards per year. This percentage represents a significant boost in income for families in the program, all of whom were low-income. By way of illustration, a mother with two children who had an income at the 2009 federal poverty level (\$18,310 for a family of three), and received the average Year 1 payment of \$3,154, experienced a 17 percent increase in income.<sup>3</sup>

#### Rewards Earned in the Education, Health Care, and Workforce Domains

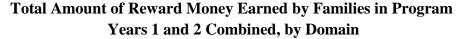
Most rewards were earned in the education domain. Figure 4.1 shows that 44 percent of the \$14.7 million that families received through the program were earned for education rewards, 38 percent were earned for health rewards, and 18 percent were earned for workforce rewards. Almost all families earned at least one reward for education or health, while less than half ever earned a reward for work or work and training. The average amounts earned in education, health, and work for families who earned at least one reward in one of those domains were \$1,451, \$1,224, and \$1,359, respectively, in Year 1 (and similar amounts in Year 2). These figures demonstrate that, while fewer families collected workforce rewards than education or health rewards, the workforce rewards provided a comparatively high level of return for those who did earn them.

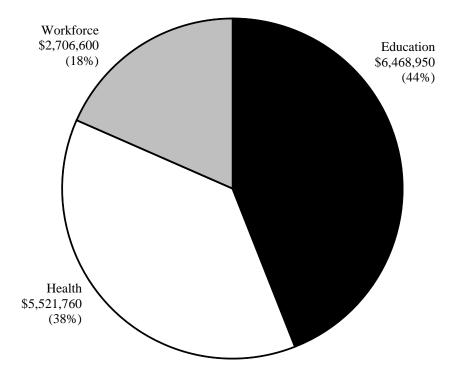
Parents expressed a particular set of beliefs about the purpose of the program that shaped their understanding and contributed to the pattern of engagement across the three domains. When parents were asked about the purpose of the program during interviews, most said it was, first and foremost, "for the kids," meaning that it was supposed to help motivate

<sup>&</sup>lt;sup>3</sup>See Chapter 5 for an analysis of the program's impacts on family income and poverty.

The Opportunity NYC Demonstration: Family Rewards

#### Figure 4.1





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

NOTE: The first year covers activities that occurred from September 2007 through August 2008, and the second year covers activities that occurred from September 2008 through August 2009.

them in school and to ensure that they are healthy. Second, they described it as a way to reward or provide a bonus for responsibilities that they were already fulfilling. Parents saw themselves as responsible and attentive to the activities that the program rewarded, but they commented that many irresponsible parents lived in their neighborhoods — for example, the parents of their children's friends — who might need the cash incentive to undertake these responsibilities consistently. The "us versus them" dichotomy was a strong theme in the interviews, as illustrated by the following example:

> I haven't really done anything out of the ordinary myself, but I know that there's people who don't go through what they're supposed to with their children.... And being that they're getting paid here, and it's not a lot of money but it does help, I'm sure it's an incentive. Even just taking your kid to school on a daily basis, it's not something people always do in this community.

Parents described the purpose of the program in ways that corresponded with the NPOs' recruitment messages, which were intended to neutralize the stigma they may have felt about joining a program that offers cash for activities that most would consider their natural duties. Chapters 2 and 3 have described how children were presented as the focus of the program from recruitment through orientation.

It is not surprising, then, that many parents who participated in the in-depth interviews disregarded aspects of the program that would require "going out of their way" or disrupting preexisting priorities, such as the decision to stay at home with a young child. One mother who was deeply engaged with the educational component of the program threw out the workforce coupons at the start, explaining, "I don't work." These parents simply did not see the program as an intervention that was designed to make significant changes in their lives.

This does not mean that parents were completely unwilling to "stretch" as part of the program. "Stretching" tended to mean going a step further in relation to practices they had already adopted. For instance, some parents appreciated the program as a "reminder" to schedule health appointments for their children. Some parents discussed ways to benefit from the program by working more hours, going to the doctor more consistently, or asking better questions during parent-teacher conferences. A parent who was working said that thinking about the incentives stopped her from taking unnecessary days off. "You want to go to work everyday instead of calling [in sick] like some people may do more often than they should. When this opportunity came to me, I'm [thinking I'm] going to work everyday just so I can pull these hours off."

#### **Continuity of Reward Receipt**

Reward receipt followed similar patterns in Years 1 and 2. Ninety-eight percent of families earned rewards in both program years (Table 4.2), and they continued to earn about even numbers of coupon and automatically verified rewards (see the distribution of number of rewards by verification method in Table 4.1). Families earned rewards in an average of 5.5 out of 6 activity periods per year, with 65 percent of families earning at least one reward every

#### The Opportunity NYC Demonstration: Family Rewards

#### Table 4.2

#### The Continuity with Which Families Earned Rewards

Outcome	Years 1 and 2 Combined
Average number of activity periods in which rewards were earned <sup>a</sup>	11.0
Family earned rewards in <sup>a</sup> (%)	
Every activity period	65.3
Year 1 but not Year 2	1.6
Year 2 but not Year 1	0.1
Year 1 and Year 2	98.3
Sample size	2,367

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

NOTES: The first program year covers September 2007 through August 2008, and the second program year covers September 2008 through August 2009.

"Sample size" refers to the number of families who earned rewards.

<sup>a</sup>Calculations are based on families who earned any rewards.

activity period (Table 4.2). Only a small number of families who participated in Year 1 did not earn any rewards in Year 2 (1.6 percent). Given that 99.5 percent of families earned at least one reward in Year 1 (Table 4.1), there was not much room for growth, and only two families began earning rewards for the first time in Year 2.

While these trends suggest generally strong and stable participation over time, accounts shared during the in-depth interviews reveal that the connection to the program fluctuated with program and life events. Parents reported that high school students became much more interested in the program after they claimed the first large payments for Regents exams and other academic outcomes at the end of the summer of 2008, after a full year into the program. Changes in the other direction occurred as well. A number of parents described experiencing personal and family shocks, such as deaths; struggles with their own mental health and substance abuse problems; and a child's illness, injury, or rebellious behavior that caused them to take a break from the program. A single mother of two young children described how her recurrent, untreated depression affected her participation in the program:

I didn't get my things together. Well, I was depressed for a couple of months. And what happens to me, when I get depressed, I basically shut down. So I lost about five months of getting things together. I've just been back on track. I sent my papers out this month and I'm doing it again before the fifteenth. So for the first, like, five or six months, I didn't do anything, and when I realized how much money I was losing, it was, like, "Oh, God, we got to get this together." But when I get depressed, I basically just shut down. And that's what happened.

These kinds of interruptions may not be reflected in the above discussion of earnings continuity because families may still be receiving automatically verified rewards, but they are meaningful because during these periods families effectively stop thinking about and pursuing the incentives, which may limit their ability to renew participation and complete more challenging activities later. This issue points to the difficulty of keeping up with the demands of the program for families who face multiple personal challenges, often with only one parent in the home to manage these trials. A mother who was a victim of domestic violence after starting the program, and then stopped participating, found herself wishing the program offered more individual support to people like her: "It's like nobody didn't care what problems I was really having as person, that I was going through physically. So, if I'm not together physically and I'm the breadwinner of this house, my kids are not gonna get nothing."

#### Variation in Reward Receipt by Community District

It might have been expected that earnings would vary systematically by community district because the types of families that enrolled at different NPO sites differed substantially in terms of characteristics such as ethnicity, full-time working status, benefits receipt, and primary language spoken in the home (see Appendix Table A.5). There were also differences in the service environments and other community assets by location, which may have made it more difficult for some families to earn rewards. Finally, it was reported in Chapter 3 that some sites were less successful than others in delivering information and motivational messages during orientation. This might also have had an effect on participants' understanding of and interest in the program.

As it turns out, there was very little difference in the amounts, types, and continuity of rewards by community district, with each location looking very similar to the sample as a whole (Appendix Table C.1). The largest difference in average program earnings was between Brooklyn Community District 5 (served by Groundwork), at \$7,027, and Manhattan Community District 11 (served by Union Settlement Association), at \$5,662. This difference appears to have been driven by the higher proportion of the Brooklyn district's participants who collected workforce rewards (54.6 percent compared with 45 percent). However, the disparity in workforce participation between these two locations was also evident at enrollment. None of the findings suggests a meaningful difference in the performance of NPOs, although Groundwork and Catholic Charities had somewhat greater success retaining families across both years, which may reflect the quality of customer service or other factors.

### Parents' Understanding of the Incentives Offer

The scope, accuracy, and durability of parents' understanding of the incentives offer are important prerequisites for participation in the program and the achievement of its intended outcomes. If parents are focused only on one part of the offer, unclear about what would constitute achievement, or forget about rewards over time, they may not reap the full benefits of the program for themselves or their families. Since parents play an important role in Family Rewards as the primary communicators of the program to children, their knowledge of the program structure influences the whole family's engagement in the program.

#### Understanding the Offer

The 18-month survey contained a series of questions that asked parents to distinguish between activities and achievements that actually qualified for rewards and others that did not. This was done as part of the evaluation's effort to assess parents' awareness of the rewards in the three domains. The pattern of responses to these questions across all domains, shown in Table 4.3, reveals that parents possessed good knowledge of the incentives in general, but their understanding was overgeneralized and fuzzy in places. Parents did best at perceiving the real incentives, correctly identifying them 87 percent of the time. However, they had trouble distinguishing activities that did not qualify for reward payments, correctly identifying those activities only 39 percent of the time. This confusion may indicate that participants internalized a belief that positive behavior in general would be rewarded. Such a misperception may have positive effects on families, but it shows that knowledge of the program offer was imprecise. The survey found, for example, that although 93 percent of parents knew that the program rewarded children's good attendance in school, only 27 percent of parents knew that the highly advertised reward for attendance required that children be present for 95 percent of school days.

It is highly likely that the children and youth who were enrolled in the program had a poorer understanding of the specifics of the offer than their parents did. Very few young people actually attended orientations, so they heard about the program from their guardian. During indepth interviews, parents were asked to describe the conversation they had introducing their children to Family Rewards. One parent used the following language to explain the program: "Mommy has participated in a program… it's called Opportunity NYC, and what they do is that they reward you for going to school, for Mommy taking you to appointments, and those sort of . . . things." Though each parent used her own words, this kind of explanation was fairly common in that it focused the child's attention on the positive values the program promotes without going into great detail about the specifics. Some parents gradually incorporated their children more into the program by showing them the coupon book and periodically discussing the rewarded activities or payments. But some parents withheld all information about the program from their elementary and middle school-age children. This range of communication

# The Opportunity NYC Demonstration: Family Rewards

### Table 4.3

# Parents' Understanding of the Family Rewards Incentives and Procedures

Outcome (%)	Program Group
<u>Understanding across all domains</u> <sup>a</sup>	
Average proportion of rewarded activities that respondents	
correctly identified as eligible for rewards <sup>b,c</sup>	86.6
Average proportion of unrewarded activities that respondents	
correctly identified as not eligible for rewards <sup>d</sup>	39.0
Education <sup>a,e</sup>	
Knew that the program rewarded the following activities	
Children's good attendance in school	93.2
Children's attending 95 percent of school days Parents' attending a parent-teacher conference	27.4 95.6
Children's good performance on standardized English or math tests or Regents exams	89.3
Children's taking the PSAT exam	82.3
Children's getting enough credits each school year in high school	77.2
Children's completing 11 course credits <sup>f</sup>	15.4
Children's graduating from high school	80.2
Knew that the program <i>did not</i> reward the following activities	••••
Children's good behavior in school	29.6
Children's going to an after-school program	37.3
Average proportion of rewarded education activities that respondents	
correctly identified as eligible for rewards <sup>g,b</sup>	86.3
Average proportion of unrewarded activities that respondents	
correctly identified as not eligible for rewards <sup>h</sup>	33.4
Health care <sup>e</sup>	
Knew that the program rewarded the following activities	
Having health insurance	93.1
Getting medical checkups when not sick	83.1
Going to the dentist for cleaning and checkups	96.9
Knew that the program <i>did not</i> reward the following activities	
Going to the hospital for emergency care	50.0 64.1
Having child visit school nurse	04.1
Average proportion of rewarded health care activities that respondents	
correctly identified as eligible for rewards <sup>b,i</sup>	91.1
Average proportion of unrewarded health care activities that respondents	
correctly identified as not eligible for rewards <sup>j</sup>	56.9
	(continued)

<b>Table 4.3 (c</b>	continued)
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	Program
Outcome (%)	Group
Work and training <sup>a</sup>	
Knew that the program rewarded the following activities	
Keeping a full-time job	87.1
Completing training or education while working full time	73.0
Knew that the program <i>did not</i> reward the following activity	
Going to school full time while not working	13.8
Average proportion of rewarded work and training activities that respondents	
correctly identified as eligible for rewards <sup>b,k</sup>	80.1
Payment process	
Submitted a coupon	85.6
Agree or strongly agree with the following statements	
I know what I need to do to submit coupons for Opportunity NYC activities I have completed	93.3
I find the coupon book easy to understand	89.2
I have no trouble keeping track of all the coupons	62.8
Sample size	1,032

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: This table excludes control group members because it pertains only to the Family Rewards program. A randomly selected subsample of program group members was asked these questions.

Sample sizes may vary because of missing values.

<sup>a</sup>Responses of "Don't know" are considered a wrong answer.

<sup>b</sup>This measure refers to the average number of correctly identified items divided by the total number of items and multiplied by100.

<sup>c</sup>There are 11 rewarded activities that respondents could identify as eligible.

<sup>d</sup>There are 5 unrewarded activities that respondents could idenitfy as not eligible.

eThis measure excludes repondents who had no children at the time of the interview.

<sup>f</sup>Only sample members with a sample member in high school were asked this question.

<sup>g</sup>There are 6 rewarded education activities that respondents could identify as eligible.

<sup>h</sup>There are 2 unrewarded education activities that respondents could identify as not eligible.

<sup>i</sup>There are 3 rewarded health activities that respondents could identify as eligible.

<sup>j</sup>There are 2 unrewarded health activities that respondents could identify as not eligible.

<sup>k</sup>There are 2 rewarded work and training activities that respondents could identify as eligible.

strategies for younger children may be a response to the challenge that many parents described of trying to maintain the delicate balancing act of leveraging the motivational aspects of the program while avoiding the negative effects of having children become overly focused on the money as the reason for achievement.

High school students had more direct exposure to the program because they had their own bank accounts or stored value cards. However, these students needed a good initial introduction to the program to be able to connect deposits into those accounts with prior educational achievement. In other words, at some point they had to establish a clear understanding of what specific types and levels of performance would be rewarded. There is reason to doubt that high school students as a group achieved this level of understanding of rewarded activities at the orientation stage or even later. Widespread efforts to market the program directly to high school students did not start until several months into the program, and the large number of youth who did not have bank accounts in the first two program years suggests that a lot of high school students may have been unaware of reward payments they were owed.<sup>4</sup>

These knowledge gaps point to the difficulty of shoring up participants' understanding of the details of a program with many incentives and few points of contact with central staff. As described in Chapter 3, Seedco and the NPOs exerted a massive amount of effort trying to reinforce participants' understanding of the incentives. Various materials were developed over the course of the first two program years. In roughly chronological order, these included a glossy Activity List distributed at orientation that listed all the incentives and verification methods in one place (see Figure 4.2), a coupon book for each family member, bimonthly earnings statements, and regular mailings from the NPO, including a monthly calendar with deadlines and helpful hints. (A sample earnings statement for a fictional participant appears in Appendix H.) At the Year 2 orientation, NPO staff distributed a Guide to Automatically Verified Activities, and during that year, they implemented marketing campaigns in which they informed families of upcoming events, such as standardized tests, through postcards and phone calls.

#### **Remembering Specific Rewards**

Because of its comprehensiveness, the Activity List was probably the most useful tool for recalling all the incentives. Program designers may have expected parents to affix this list prominently on the kitchen refrigerator or some other central location in the home, but this advice was never given during orientations. Months later, during in-depth interviews, most families had not retained or used the Activity List, relying instead on the coupon book and their memory of the rewards discussed at orientation for an awareness of program activities. (See the description of orientation topics in Chapter 3.) Parents described pulling out the coupon book at the beginning of a payment cycle and flipping through it to plan out activities. One parent pasted folders for each child on her wall and inserted the relevant coupons in them so she would be reminded of what each child needed to do.

<sup>&</sup>lt;sup>4</sup>As noted in Chapter 3, 16 percent of high school students had earned rewards but were not paid by the end of Year 2, and about 43 percent of all cases where payments could not be made were accounted for by teenagers who had not opened their own bank account. The findings in Appendix Table C.2, which presents information on program overpayments and underpayments, indicates that about 10 percent of families were underpaid by at least \$500, which is probably largely accounted for by problems paying high school students.

Figure 4.2

# **Family Rewards Activity List for Participants**



		Education (per	child)		
	Activity	Documentation	Reward	When	Maximum Reward per year
	Child attends school 95% of scheduled days every two months	Automatically Verified	\$50	2 months	\$250
00	Parent attends Parent-Teacher Conferences	✓ Activity Coupon	\$25	Fall (once)	\$25
Sch	Parent attends Parent-Teacher Conferences	✓ Form signed by teacher	\$25	Spring (once)	\$25
Elementary School	Child gets or has a Public Library Card	<ul> <li>Activity Coupon</li> <li>Copy of official library card</li> </ul>	\$50	Once during program	\$50 during program
nen	Child progresses on tests, scores a Level		\$300	ELA Test	\$300
Elen	3 or 4 on the ELA and/or Math Standardized Tests, or improves score	Automatically Verified	\$300	Math Test	\$300
	Parent discusses annual tests with teach- ers, principal, or other school official	<ul> <li>✓ Activity Coupon</li> <li>✓ Form signed by teacher</li> </ul>	\$25	Each Test	\$50
	Child attends school 95% of scheduled days every two months	Automatically Verified	\$50	2 months	\$250
	Parent attends Parent-Teacher Conferences	✓ Activity Coupon	\$25	Fall (once)	\$25
100	Parent attends Parent-Teacher Conferences	✓ Form signed by teacher	\$25	Spring (once)	\$25
School	Child gets or has a Public Library Card	<ul> <li>✓ Activity Coupon</li> <li>✓ Copy of official library card</li> </ul>	\$50	Once during program	\$50 during program
Middle	Child progresses on tests, scores a Level		\$350	ELA Test	\$350
Mic	3 or 4 on the ELA and/or Math Standardized Tests, or improves score	Automatically Verified	\$350	Math Test	\$350
	Parent discusses annual tests with teach- ers, principal, or other school official	<ul> <li>✓ Activity Coupon</li> <li>✓ Form signed by teacher</li> </ul>	\$25	Each Test	\$50
	Student attends school 95% of scheduled days every two months*	Automatically Verified	\$100	2 months	\$500
		<ul> <li>Activity Coupon</li> </ul>	\$25	Fall (once)	\$25
	Parent attends Parent-Teacher Conferences	✓ Form signed by teacher	\$25	Spring (once)	\$25
100	Student gets or has a Public Library Card**	<ul> <li>✓ Activity Coupon</li> <li>✓ Copy of official library card</li> </ul>	\$50	Once during program	\$50 during program
High School	Student passes a Regents Exam (scoring 65 or above)**	Automatically Verified	\$600	Each Regents Exam	\$3,000 during program
High	Student takes the PSAT**	<ul> <li>✓ Activity Coupon</li> <li>✓ Copy of official ETS Record</li> </ul>	\$50	Up to 2 times	\$100 during program
	Student accumulates 11 credits in school year*	Automatically Verified	\$600	Each Year	\$600
	Student graduates and accumulates 44 credits*	Automatically Verified	\$400	Once during program	\$400 during program

\* 50% of Reward is paid to high school student, and 50% is paid to parent \*\* 100% of Reward is paid to high school student

Last printed: 9/2/2008

(continued)

Figure 4.2 (continued)

OPPORTUNITY TO activity list

		Health			
Activity	Documentation	Family Member	Reward	When	Maximum Reward per yea
Get or maintain public health insurance including Medicaid,		Each Adult	\$40 per adult	2 months	\$240
Family Health Plus, and/or Child Health Plus coverage	Automatically Verified	All Children	\$40	2 months	\$240
Cot or maintain private health	✓ Activity Coupon	Each Adult	\$100 per adult	2 months	\$600 per adult
Get or maintain private health insurance	<ul> <li>Copy of premium payment or pay stub</li> </ul>	All Children	\$100	2 months	\$600
Complete a yearly non-emergency medical check-up	<ul> <li>✓ Activity Coupon</li> <li>✓ Form</li> </ul>	Each Family Member	\$200 per family member	Once a year	\$200 per family member
Complete physician-advised follow-up	<ul><li>✓ Activity Coupon</li><li>✓ Form</li></ul>	Each Family Member	\$100 per family member	Once a year	\$100 per family member
Complete pediatrician-advised Early Intervention referral and evaluation for a child under 30 months	<ul> <li>✓ Activity Coupon</li> <li>✓ Form</li> </ul>	Each Child under 30 months old	\$200 per child	Once a year	\$200 per child
Complete two dental visits per year for family members 6 years and older	<ul><li>✓ Activity Coupon</li><li>✓ Form</li></ul>	Each Family Member 6 years and older	\$100 per family member	Twice a year	\$200 per family member
Complete one dental visit per year for family members ages 1-5	<ul> <li>✓ Activity Coupon</li> <li>✓ Form</li> </ul>	Each Family Member 1-5 years old	\$100 per child	Once a year	\$100 per child

Work							
Activity	Documentation	Family Member	Reward	When	Maximum Reward per year		
Full-Time Work Work at least 30 hours per week for <u>6 out of 8 weeks</u> during the two-month activity period	<ul> <li>✓ Activity Coupon</li> <li>✓ Copy of pay stubs or employer letter</li> </ul>	Each Parent	\$300 per adult	2 months	\$1,800 per adult per year		
Work & Education/Training Work at least 10 hours per week, each week, during the two-month activity period, while successfully completing an approved education or training course	<ul> <li>Activity Coupon</li> <li>Copy of stubs or employer letter</li> <li>Proof of successful completion of</li> </ul>	Each Parent	\$300 per 35-70 hour course	Upon successful completion of course	\$3,000 per adult during		
			<b>\$400</b> per 71-140 hour course		program		
	course		\$600 per 141 or more hour course				

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The reliance on the coupon book and memory contributed to the knowledge gaps already noted and to the more serious problem of participants completely forgetting about automatically verified rewards. As an illustration of this, only 15 percent of the parents of high school students knew about the automatically verified reward for completing 11 credits. Many of the education rewards were automatically verified. This may be why 70 percent of parents believed (incorrectly) there was a reward for good behavior in school, and 63 percent of parents believed there was a reward for going to an after-school program — very high rates of error considering that parents identified most strongly with the education domain of rewards.

In the first year of the program, parents also had some difficulty understanding the meaning of a coupon that rewarded them for reviewing their children's results on up to five New York City Department of Education (DOE) Periodic Assessments per year.<sup>5</sup> Many parents simply ignored the coupon because they did not understand it. A mother who had succeeded in submitting the coupon for one activity period described, during an interview, taking it to the school secretary, who did not know what a Periodic Assessment was. She eventually brought the coupon to her child's teacher and received the print-out of her child's results after a delay of two weeks. This reward was discontinued for Year 2 because the incentive was not well understood and because Periodic Assessments were not available at every school, as originally intended by the Department of Education.

## Parents' Efforts to Claim Rewards

Knowing about and understanding the incentives is not enough to actually receive rewards in this program. Families must possess the competence to satisfy the conditions for a reward and properly document their fulfillment of those conditions, when necessary. The NPOs and helpline staff played crucial roles in supporting participants as they worked their way toward reward receipt. Acting within the constraints of the "no case management" approach, program staff served as a resource to families, navigating their involvement with the program and, in some cases, their interactions with outside institutions like schools, health clinics, and banks. Chapter 3 has already outlined the customer service functions in detail and the generally positive reviews they received from survey respondents. This section focuses on participants' efforts to claim rewards by using the coupon book and accessing resources that would enable them to qualify for reward payments.

<sup>&</sup>lt;sup>5</sup>The DOE's Periodic Assessments provide teachers with feedback on "students' strengths and weaknesses to help guide instruction and increase student achievement. They also provide an early indicator of student performance on State tests and measure student progress toward success in high school and beyond." See http://schools.nyc.gov/Accountability/ResourcesforEducators/PeriodicAssessments/default.htm.

#### Submitting Coupons

As noted in Chapter 3, most participants contacted the NPOs or helpline at some point in the first two program years. Parents explained their rationale for using these resources during in-depth interviews. They relied heavily on NPO staff at the beginning of Year 1 because many left the initial orientation doubting their comprehension of program requirements, especially since official coupon books were frequently not available at that time. Participants described calling and visiting their local NPO during the first couple of activity periods, with documents and coupons in hand, to ensure they were filled out correctly. Once families started to experience coupon rejections, they called the helpline for assistance with resubmission and to have program policies explained. It took several months for parents to feel a sense of competence about managing the verification requirements on their own. However, by the time of the Family Rewards 18-month parent survey, the overwhelming majority of respondents (93 percent) affirmed that they knew what they needed to do to submit coupons for completed activities, and a similar percentage found the coupon book easy to understand (Table 4.2). This suggests that participants received effective help and training on this aspect of the program from NPO and helpline staff.

#### Accessing Resources to Qualify for Rewards

It was expected that families who were not already engaged in rewarded activities would need some additional guidance to satisfy the conditions for receiving rewards. NPOs offered workshops on topics related to the three domains of activities as part of their efforts to educate families on what they had to do to earn and claim rewards within each domain and to offer advice on other social services in the community that could help families who were struggling with unemployment, mental or physical health problems, and poor school performance meet the conditions for claiming rewards. These workshops were completely voluntary, but they were strongly promoted by NPO staff. About 43 percent of parents responding to the 18-month survey said that they had attended at least one workshop, but NPO staff have noted that attendance at any given workshop was generally fairly low. In addition, only about onefourth of families sought a referral from the NPOs (either at workshops or through other contacts) for workforce development or educational services, and even fewer for health care. This low rate of utilization may reflect a number of situations: participants could have been unaware that the NPOs were offering this type of assistance, they might have been unable to take advantage of it because of time and child care constraints, they may have lacked the motivation to seek it because of their orientation to the program, or the offerings did not seem adequate to meet their needs.

#### Why Some Families Earned More Rewards Than Others

As described above, families earned an average of about \$3,000 per year from Family Rewards, and most families had reward earnings within \$2,000 of that amount each year. Although high overall, the amounts varied widely. This section explores why some families earned more money or less money than others. It begins by taking a closer look at the small proportion of families who seemed generally disengaged from the program based on their low levels of reward receipt overall.

#### **Disengaged Families**

Families whose reward earnings were in the bottom 10 percent of the distribution of reward earnings were defined as disengaged for the purposes of this analysis. Given the structure of Family Rewards, in which every family member is enrolled individually and is eligible for rewards with different dollar values, reward receipt was partially determined by the independent factors of family size and composition, especially the number of high school students. Although family characteristics play a role in explaining below-average earnings, disengaged families are characterized this way because they used the program very infrequently. About 60 percent of disengaged families never submitted a coupon in the first two program years (Table 4.4). Also, these families earned an average of two coupon rewards each, compared with 24 for families in the middle of the distribution of reward earnings, and 59 for families who earned the most rewards. These low numbers are not surprising because additional analyses (not shown) indicate that 39 percent of disengaged families did not pick up a coupon book in Year 1. A greater proportion — 55 percent — did not pick up the Year 2 coupon book, and only a third of those families picked up a coupon book in both program years.

Table 4.4 paints a broad picture of disengaged families and shows that relative disadvantage, family size, and experiences with the program contributed to overall low program earnings. It shows that, as a group, families in the bottom 10 percent of reward earners were more disadvantaged at the start of the program. In particular, the parents had generally lower levels of education and were less likely to be employed full time.

Consistent with their low rates of reward earnings, the head of the household of a disengaged family was the least knowledgeable about which activities were eligible for rewards and which were ineligible. They did not seek much help from the customer service agents within the program, contacting the NPO and helpline less often than more highly engaged adults, and were less likely to attend workshops. They were also much less likely to report that they had "no trouble keeping track of coupons."

In-depth interviews suggest some potential reasons these parents were disconnected from the program. Some parents tried to participate in the program but were turned off when

## Table 4.4

# Comparison of Families Who Earned Reward Amounts in the Top, Middle, or Bottom Range of Earnings During Years 1 and 2 Combined

Characteristic	Top 10 Percent \$11,521 - \$24,880	Middle 80 Percent \$1,741 - \$11,520	Bottom 10 Percent \$0 - \$1,740
<u>Characteristics of families at</u> <u>random assignment</u>			
Average number in household	5	3	3
Average number of children in household	3	2	2
Average number of high school students in household	1	1	0
Primary language spoken at home is Spanish (%)	22.5	21.7	23.3
Family was receiving no government transfer benefits (%)	44.4	19.1	18.0
<u>Characteristics of parents at</u> <u>random assignment<sup>a</sup></u>			
Age (%) 18-24 25-34 35-44 45-59 60 or older	0.0 22.0 60.2 17.8 0.0	0.3 30.0 43.3 23.2 3.3	0.4 27.1 39.4 28.4 4.7
Race/ethnicity (%) Hispanic/Latino Black, non-Hispanic/Latino	41.3 56.6	47.8 50.4	48.3 50.9
No high school diploma or GED certificate (%)	27.2	41.3	59.7
Foreign-born (%)	40.7	31.4	27.5
Married or in a legal domestic partnership (%)	41.5	17.2	16.1
Working full time (%)	62.3	35.9	27.1
Average weekly earnings, among those currently working (\$)	495	383	319
Physical or mental health problem (%)	9.2	25.2	27.9

(continued)

	Top 10 Percent	Middle 80 Percent	Bottom 10 Percent
Characteristic	\$11,521 - \$24,880	\$1,741 - \$11,520	\$0 - \$1,740
Pattern of reward receipt and			
submissions <sup>b</sup>			
Average number of automatically verified rewards earned	41	27	13
Average number of coupon book rewards earned	59	24	2
Never submitted a coupon (%)	0.0	7.3	59.8
Average number of activity periods family earned rewards	12	11	8
Sample size (total = $2,378$ )	236	1,905	236
Parents' understanding of incentives		1,,, 00	
and experiences with program <sup>c</sup> (%)			
Average proportion of reward activities			
correctly identified as eligible			
for rewards <sup>d,e</sup>	93.5	86.0	81.1
Average proportion of unrewarded activity	ties		
that respondents correctly identified as			
not eligible for rewards <sup>f</sup>	45.6	38.6	32.2
Knew how to submit coupons	96.6	93.8	81.8
Had no trouble keeping track of coupons	75.0	63.3	35.8
Number of times family contacted Neight	oorhood		
Partner Organization	20.1	20.4	20.1
1-2 times 3 or more times	29.1 64.1	38.4 46.8	39.1 33.3
		40.8	55.5
Number of times family contacted helplin 1-2 times	ie 38.6	37.4	23.2
3 or more times	43.9	37.4	25.2
	64.6		28.4
Ever attended any workshop	04.0	41.8	28.4
Ever received referral for services from Neighborhood Partner Organization	52.2	57.1	51.6
Sample size (total = $1,037$ )	117	849	71

## Table 4.4 (continued)

(continued)

#### Table 4.4 (continued)

SOURCES: MDRC calculations using data from the Family Rewards 18-Month Survey, Seedco's Family Rewards program data, and Baseline Information Forms.

NOTES: The first program year covers activities that occurred from September 2007 through August 2008, and the second program year covers activities that occurred from September 2008 through August 2009.

<sup>a</sup>This section excludes information for enrolled second parents in two-parent households.

<sup>b</sup>Calculations are based on Seedco's Family Rewards program data.

<sup>c</sup>Data derive from the Family Rewards 18-Month Survey.

<sup>d</sup>There are 11 rewarded activities that respondents could identify as eligible.

<sup>e</sup>This measure refers to the average number of correctly identified items divided by the total number of items and mulitplied by 100.

<sup>f</sup>There are 5 unrewarded activities that respondents could identify as not eligible.

they had bad customer service experiences or were not paid because of banking problems in the early part of the program. Negative interactions with customer service and nonpayment reinforced these participants' early skepticism about the program. Some families were deterred by the deadlines for mailing in coupons. They saw these deadlines as rigid, sometimes because of misinformation from NPO staff, and got discouraged when they could not seem to send coupons in on time.

Parents with very different levels of personal competence cited disorganization or hectic schedules as reasons for low levels of involvement. A single mother with three children who had not turned in any coupons at the time of her interview and faced multiple personal challenges explained, "My brain be somewhere else. ... 'cause I just took my kids to the doctor last month, but me rushing to get them to the doctor, I forgot to bring those coupons. So half the time I be forgetting to bring it. It's not that I don't want to bring it; I be forgetting 'cause I be busy." By contrast, a single mother who was employed and pursuing an additional certification also described being too busy to attend to the program, given the time it takes to document activities. She said:

What was a difficulty for me is making time 'cause I have such a busy schedule. I have to manage those four lives plus my own. So I have five schedules to manage every day and basically keeping my head. So it was just the time management and choosing what I wanted to do....What happened with me is I don't have time to go back to the doctor and go to the doctor, fill out this, fill out four forms and wait for everyone, then come back next week. Do you know — 'cause now, you don't have a private doctor. You have a clinic. That's crazy.

This parent essentially conducted a cost-benefit analysis that indicated that involvement in the program was not worth it.

A final factor that contributed to low engagement was low expectations for earnings from the program. Some parents were content to earn the occasional reward to pay a bill or cover a cost that had been a burden. This could be achieved without investing a lot of time in submitting coupons.

#### Factors Related to the Overall Variation in Earnings

The discussion of disengaged families should not obscure the achievement of the vast majority of families who participated at a level that enabled them to obtain significant additional resources from Family Rewards. Several factors account for the variation seen among these families.

Family size and composition were clearly important factors contributing to reward receipt. Table 4.5 shows how the average amount of rewards that families earned increased with each additional child in a household. Families with two children earned an average of \$5,760 compared with three-children families, who earned an average of \$7,357. The number of high school students in a family was also correlated with the overall amount of reward earnings. Families with no high school students had overall reward earnings, on average, of \$1,989 less than families with at least one high school student. Having two adults enrolled in the program was another important factor, but few families overall had two adults.<sup>6</sup>

Table 4.4 illustrates the relationship between household size and the total amount of rewards earned. The top 10 percent of families were generally larger than other families, with more elementary, middle, and high school students. These families averaged five members, with three children in elementary or middle school and one child in high school. In comparison, families in the middle of the distribution averaged three members, with two elementary or middle school-age children and one high school student.

Other factors that were related to reward earnings concerned what families were able to do and the ways they engaged with program components. Families who earned more rewards were less disadvantaged at the time of enrollment than families who earned fewer rewards. Sometimes the differences were marginal, but the trend was consistent. Table 4.4 shows that the top 10 percent of earners had, on average, higher levels of education, employment, earnings from employment, marriage, and self-reported mental and physical health than did other families. They were also less likely to be receiving other public benefits.

<sup>&</sup>lt;sup>6</sup>Additional analyses showed that families with two adults who were enrolled in Family Rewards earned an average of \$333 more than families with one enrolled adult. Families with two adults who were enrolled in the program constituted 6 percent of families at the time of enrollment (shown in Table 2.2).

# Table 4.5Variation in Average Amount of Reward Money Earned,<br/>by Family Size and Composition

	Years 1 and 2
Outcome (\$) and Family Composition <sup>a</sup>	Combined
Average earnings among familes with	
1 child	4,284
2 children	5,760
3 children	7,357
4 children or more	7,893
Average earnings among families with no high school students	5,206
Average earnings among families with at least 1 high school student	7,195
Sample size	2,367

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

NOTES: The first program year covers September 2007 through August 2008, and the second program year covers September 2008 through August 2009.

"Sample size" refers to the number of families who earned rewards.

<sup>a</sup>Calculations are based on families who earned any rewards.

Language and nationality did not affect earnings; in fact, most foreign-born families were in the top half of earners. Families who spoke Spanish were no less likely to be top earners than were English speakers. There was also little difference in earnings patterns between black and Hispanic families.

Table 4.4 shows that of the parents who responded to the survey, top earners had the best knowledge of actual rewards and were able to distinguish them from unrewarded activities with the greatest accuracy. They also had the most contact with customer service. Sixty-four percent of them contacted the NPO three or more times, and 44 percent contacted the helpline three or more times. They attended the greatest number of workshops, and slightly more than half received referrals.

This pattern of results from the first two years indicates that, among low-income families who were enrolled in the program, those with relatively better circumstances and who were most determined were best able to take advantage of what the program had to offer.

## How Families Spent Their Reward Payments

Families could spend their reward money any way they wished. As one participant put it, the program "put the money directly in your pocket and don't ask no questions," in contrast with her experience in other low-income programs that provide in-kind support (for example, food stamps). The program's designers believed that the appeal and incentive value of the program would be greater without any restrictions on how the money could be spent. They hoped that families would use the extra money in ways that align with program goals, such as reducing immediate material hardship or investing in family members' human capital development through services that enhance children's academic performance or parents' workforce skills. In addition, the designers anticipated that parents would administer the program in the home in a way that mirrored the incentives structure of Family Rewards as a whole, meaning that younger children's access to rewards would be tied to achievement, to the extent appropriate.

The two most common uses of the extra money, cited by about 70 percent of survey respondents (Table 4.6), were regular expenses (such as rent, food, and utilities) and consumer goods or special treats for the family (like eating out). This pattern speaks to the internalization by parents of the language of "reward" that pervades the program. Parents tried to balance their responsibility to provide for the basic needs of their family with a desire to celebrate their achievements. For many families, celebration took the form of doing things together like going on a trip or to a movie that would otherwise be prohibitively expensive, especially for a large family with limited means. Parents also used the money for allowances, which tended to be higher in the program group. A little extra pocket money was certainly another way parents combined provision and celebration.

Specific transfers of program money from parent to child occur for complicated reasons that involve the parents' own feelings about being able to provide for their children and the general style of rule-setting and child management in the home. Some parents who were included in the in-depth interviews expressed a great deal of relief that the first program payment was received right before Christmas because they might not have been able to give gifts to their children otherwise. In general, it seemed to enhance parents' self-esteem to be able to provide their children with visible signs of stability, like a stocked food pantry, and extras, like a nice pair of shoes, since they often have to go without such items. Some parents did not tell younger children that they were in the program, so that the extra money would seem to come from the parent; other parents combined their earnings with their children's whenever large purchases needed to be made to, again, enhance parental responsibility for the gift.

A few parents expressed a belief that expenditures on clothing or grooming for children were related to educational goals, because children feel more confident at school and experience less harassment when they look good. But many parents did not create clear and consistent expectations in this respect, satisfying children's requests for various items or money without meaningful behavioral preconditions. One mother whose high school-age son had shown no interest in the program, and whose grades and attendance were slipping, described his liberal access to "rewards" nonetheless from her program earnings and other sources:

No, he don't have a job. He don't get allowance. I do for him. His sister do for him. His godfather do for him. His cousins do for him. His family do for him. All he does is pick up the phone and say, "I want such and such and such," and it'll come through out of the Amazon.com, come to the house.

The reward money does not serve as a targeted incentive for the child's investments in academic achievement in this context.

One-third of parents who responded to the 18-month survey reported that they had used reward money to pay off debt or for education-related services, like tutoring (Table 4.6). The following passage describes a negotiation between a mother and child over investing his reward earnings in private tutoring:

He was upset at first. But we made an agreement. He was getting \$100 for dentist, \$200 for doctor. So he saved up over, I think, \$1,000. So the agreement was if I let him take guitar lessons and buy a guitar, I could place him in a program at Sylvan Learning for tutoring. Because he wanted one-on-one. He don't want any of those free tutoring programs. Because it's in a group, and he didn't want to be embarrassed. He's already a teenager. So I said, "Okay. We're gonna put you in one of the best tutoring programs. It's one-on-one. It's called Sylvan Learning. Because I did my research. But you have to pay like \$62 an hour a teacher." So he came on, and he agreed. I said, "Okay. I'll give you — after that, you get guitar lessons. And I'll buy you a guitar. This is your money. But you also have to pay for your reading program." So it helped.

Her son's reading level went up as a result of the tutoring, and she congratulated him: "This is what you should be proud of, and this is what your money helped us do!" There did not appear to be widespread investments in tutoring services with Family Rewards earnings, according to the survey and interview data. This family interaction exemplifies the kind of skillful bargaining that might have been necessary to get children's buy-in for using program money for educational services.

About half of those surveyed indicated that they were saving the extra money for a future need. Some parents expressed a shift in goals as they headed into the last year of the program, intending to save more money or to make investments in workforce training in order to maintain the family's standard of living once the program ends.

#### Table 4.6

#### Parents' Reports on Family's Use of Rewards Received

Outcome (%)	Program Group
	Group
Use Family Rewards payments to	
Help pay for regular expenses, such as rent, utilities, or food	69.9
Pay off bills, such as credit cards or medical bills	32.4
Make a major purchase, such as a house, major appliance, or car	11.6
Save for some future need, such as college tuition or retirement	46.0
Pay for health or dental care or health insurance	15.2
Pay for things to help children in school, such as special lessons or private schools	34.6
Pay for a few luxuries, such as eating out, going to a movie, buying electronics or clothes	72.3
Help other family members or friends with expenses	11.7
Other	18.7
Sample size	1,032

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: This table excludes control group members because it pertains only to the Family Rewards program. A randomly selected subsample of program group members was asked these questions.

Sample sizes vary across measures because of missing values.

## Conclusion

This chapter explored patterns in families' receipt of rewards during the first two years of the Family Rewards program. It showed that the overwhelming majority of families collected rewards consistently, no doubt helped by the marketing efforts and customer service of Seedco and the NPO staff, which, as explained in Chapter 3, improved considerably over time. Although families received a substantial amount of cash transfers, the amount of money they earned varied widely, in part because of variation in family size and composition of the families but also according to factors such as parents' level of disadvantage at the time they entered the program, their understanding of the program's rewards, and persistence in claiming rewards. At the same time, there was little difference in reward receipt across the six community districts, between black and Hispanic families, and between families that varied in their facility with the English language. The next chapter examines how the extra resources from Family Rewards affected families' overall levels of poverty and material hardship relative to families in the control group.

#### Chapter 5

# **Income and Material Well-Being**

As discussed in Chapter 1, the long-term goal of Family Rewards is to reduce poverty by promoting human capital development among low-income children and their parents. But the program also aims to reduce current poverty and material hardship through its direct cash reward payments — or conditional cash transfers (CCTs) — and through any immediate increases it can generate in parents' earnings from employment, which can also boost Earned Income Tax Credit (EITC) payments.

Overall, as already shown, nearly all of the families participating in Family Rewards earned at least one reward payment during the observation period for this report. In each of the first two years, most families earned rewards in the range of \$1,000 to \$5,000, averaging approximately \$3,100 per year. Family Rewards did not limit the ways in which families could spend their reward payments, and there is some evidence that a large proportion of program participants used the extra money to meet regular expenses such as rent, utilities, and food. With these cash payments serving as substantial income supplements, an important question is how much they, along with any program effects on income from other sources, have begun to affect families' overall household income, poverty, and hardship.

This chapter examines the program's effects on those outcomes, incorporating information about the reward payments, impacts on earnings from work, and impacts on other cash transfers, including cash aid from Temporary Assistance for Needy Families (TANF) and food stamp payments. In addition, it explores changes in families' overall material well-being and perceptions of their financial security, such as whether they are able to "make ends meet."

The analyses draw heavily on the Family Rewards 18-month parent survey, as well as administrative records data on TANF and food stamp receipt provided by the New York City Human Resources Administration (HRA). The 18-month survey was administered to a random subset of the full study sample, and provides extensive information on household income and material well-being.<sup>1</sup> Most of these survey interviews were conducted by phone, between December 2008 and July 2009, part of the way through the second year of the program.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>The Family Rewards 18-Month Survey provides information about Family Rewards sample members on a broad set of topics such as participation in employment and education activities, health care, employment and job characteristics, household composition, and child outcomes. Overall, 3,082 sample members completed the survey interview, resulting in a response rate of 82.2 percent. Appendix D provides additional details on the survey effort and analyzes response patterns.

<sup>&</sup>lt;sup>2</sup>About 92 percent of these interviews were completed between 15 and 20 months after random assignment.

Box 5.1 explains how to interpret the tables that show estimated program impacts that are presented throughout the remainder of this report. These tables cover a large number of impact estimates that are relevant to family poverty, hardship, and economic security and in the three domains in which rewards are provided: children's education, health care, and parent's work and training. The estimates of program impacts were calculated controlling for a range of pre-random assignment background characteristics, such as the parent's race/ethnicity, education level, marital status, and employment status. As the number of outcomes that are examined increases, the probability of finding "false positives," or differences that are statistically significant simply by chance, also increases.<sup>3</sup> Although the impact analysis does not formally account for "multiple hypothesis testing," caution is used when interpreting impacts that do not appear to be part of a larger pattern of impacts within a given set of measures.

Overall, the results presented here suggest that the program achieved some of its shortterm goals: it reduced the proportion of families who were living in poverty (and in severe poverty), reduced some material hardships, increased family savings, and improved parents' sense of their family's financial well-being. It also reduced their reliance on alternative financial institutions, such as neighborhood check-cashing outlets. In addition, some evidence suggests that Family Rewards may have had small effects on marital status, increasing to a small degree the likelihood of both marriage and divorce.

## Income and Poverty

Survey respondents were asked to list their income sources and total household income for the calendar month prior to the month in which their survey interview took place.<sup>4</sup> Using this monthly snapshot, one estimate of average total household income was calculated excluding any cash reward payments that program participants earned. A second measure of family income counting those rewards (for the program group) was also constructed and is presented separately. As Table 5.1 shows, the estimated average monthly household income at the time of the interviews was \$1,658 for the program group (excluding Family Rewards payments) and

<sup>&</sup>lt;sup>3</sup>Statistical significance indicates the extent to which the difference between the program and control group outcomes — or the "impact" of the program — is likely to have been a true result of the program.

<sup>&</sup>lt;sup>4</sup>Respondents were instructed to exclude tax refunds, EITC payments, and program cash rewards, and to include income from all other sources such as their job(s), jobs of other household members, food stamps, child support, TANF, Supplemental Security Income (SSI), and unemployment insurance, among other sources, for everyone living together in the household. This estimate of income is used to calculate household poverty and income relative to the federal poverty threshold, using the 2008 and 2009 poverty guidelines, depending on when a respondent was interviewed. (In 2009, the federal poverty level for a family of three was \$18,310.) Because of its particular definition, readers should be cautious comparing the poverty estimates presented in this report with estimates from other published sources.

#### Box 5.1

# How to Read Impact Tables in this Report

In the context of this evaluation, an "impact" is a measure of how much Family Rewards changed outcomes for program participants. All the tables in this report that show impacts use a similar format, illustrated in the table excerpt below, which presents data on two material hardship and well-being outcomes that were obtained from parents' reports on the Family Rewards 18-month survey. The top row, for example, shows that 39 percent of respondents in the program group had not paid their rent in full or made a full mortgage payment in the 12 months prior to the time of the survey interview, compared with 41.5 percent of control group respondents.

Because families were assigned randomly either to the program group or to the control group, the effects of the program can be estimated by the difference in outcomes between the two groups. The "Difference" column in the table shows the differences between the two research groups' outcomes — that is, the program's estimated *impacts* on the outcomes. For example, the estimated program impact on paying full rent or mortgage can be calculated by subtracting 39 percent from 41.5 percent, yielding a reduction, or estimated impact, of -2.5 percentage points.

The p-value shows the probability that this difference, or impact, arose by chance. In the table below, the difference between the program and control groups in paying the full rent or mortgage has a 24 percent probability of arising as a result of chance rather than as a result of the Family Rewards program. In contrast, the difference on the measure of financial well-being (bottom row) has less than a 1 percent probability of having arisen by chance. For this evaluation, only differences that have a 10 percent probability or less of arising by chance are considered "statistically significant" and therefore represent true program effects. The number of asterisks indicates whether the impact is statistically significant at the 1 percent (\*\*\*), 5 percent (\*\*), or 10 percent (\*) level.

The final column shows the effect size, which is presented for selected impacts. The effect size is the difference between the program and control group outcomes divided by the "standard deviation" of the outcome (a measure of its variability). Expressing an impact in standard deviation units helps to interpret its size, particularly when the outcome is in nonstandard units, such as scale scores, as in the second row. In contrast, effect sizes are not shown for impacts that are easier to interpret, such as impacts on dollar amounts or percentages.

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Did not pay full rent or	Group	Group	(impact)	i vulue	DILC
mortgage	39.0	41.5	-2.5	0.245	
Financial well-being scale					
(4 = low; 16 = high)	9.2	8.7	0.5 ***	0.000	0.199

#### Impacts on Two Material Hardship and Well-being Outcomes, from the 18-Month Survey

# Table 5.1

## **Impacts on Income and Income Sources**

	Program	Control	Difference	
Outcome	Group	Group	(Impact)	P-Value
Income				
Average total household income in prior month excluding Family Rewards payments <sup>a</sup> (\$)	1,658	1,573	85 *	0.086
Average monthly Family Rewards incentive payments received during Year $2^{b}(\$)$	287	0		
Average total household income in prior month including Family Rewards payments <sup>b,c</sup> (\$)	1,940	1,573	366 ***	0.000
Percentage of families with household income at or below the federal poverty level <sup>b,c</sup>	58.9	70.0	-11.1 ***	0.000
Total household income in prior year as a percentage of the federal poverty $evel^{b,c}$				
Less than 50%	16.7	30.0	-13.2 ***	0.000
50% - 100% 101% -129%	42.2 14.5	40.1 11.7	2.2 2.8 *	0.358 0.079
130% or more	26.6	18.3	8.3 ***	0.000
Income sources				
Household income source in prior month <sup>d</sup> (%)				
Respondent's earnings	63.4	57.7	5.7 ***	0.001
Other household members' earnings	23.5	20.7	2.9	0.104
Food stamps	62.4	62.3	0.2	0.934
Child support	18.1	18.9	-0.8	0.639
Temporary Assistance for Needy Families (TANF) or other cash assistance	13.1	14.6	-1.5	0.289
Supplemental Security Income or Disability	27.5	29.1	-1.5	0.289
Unemployment insurance (UI)	6.8	6.6	0.2	0.864
Special Supplemental Nutrition Program for Women, Infants,				
and Children (WIC)	14.4	14.2	0.1	0.928
Heating or cooling assistance	7.7	5.6	2.1 *	0.052
Free or reduced-price school lunch	71.6	66.5	5.1 **	0.012
Other	6.7	5.8	0.9	0.397
Taxes				
Heard of the Earned Income Tax Credit (EITC)	74.2	72.8	1.4	0.442
Filed taxes in prior year and applied for EITC	44.1	41.6	2.5	0.226
Filed taxes in prior year and used tax				
preparation service <sup>e</sup>	65.3	62.0	3.3 *	0.089

(continued)

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Filed taxes in prior year and received a refund- anticipation loan	15.3	16.3	-0.9	0.565
Employed at time of random assignment (%)				
Heard of EITC	79.8	76.7		
Filed taxes in prior year and applied for EITC	53.9	52.3		
Filed taxes in prior year and used tax preparation service <sup>e</sup>	77.3	75.1		
Filed taxes in prior year and received a refund- anticipation loan	19.1	20.8		
Sample size (total = 2,060)	1,051	1,009		

#### Table 5.1 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: The items in this section of the survey were administered to a random subsample (N = 2,060) of the survey respondents.

Italic type indicates comparisons that are nonexperimental. Statistical tests were not performed.

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 families or sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

<sup>a</sup>About 15 percent of the sample are excluded from this calculation because they either did not respond to the income question or reported a monthly amount of \$10,000 or higher.

<sup>b</sup>Family Rewards payments are based on Seedco's Family Rewards data from program Year 2, which include activities completed in September 2008 through August 2009. The monthly Family Rewards payment amount is calculated by dividing the annual reward amount by 12. The payment data do not include bonus payments that some families received for opening new bank accounts.

<sup>c</sup>Annual household income is calculated by multiplying by 12 the respondent's income in the month prior to the survey interview. For program group members, it includes Family Rewards payments earned during program Year 1; see the preceding note. The federal poverty level was created based on annual income (monthly income multiplied by 12) and the household size at the time of the survey. The poverty threshold was measured according to the 2008 or 2009 poverty guidelines, depending on when a respondent was interviewed.

<sup>d</sup>Percentages may add up to more than 100 percent because respondents may have multiple income sources.

<sup>e</sup>This includes free tax preparation services and paid tax preparers.

\$1,573 for the control group, representing a statistically significant gain of \$85 per month (or about a 5 percent increase relative to the control group's income). On average, families who are participating in the program earned an additional \$287 each month in reward payments during the period covered by the survey.<sup>5</sup> Including those rewards in the measure of family income

<sup>&</sup>lt;sup>5</sup>Year 2 payment data, which cover August 2008 to September 2009 and overlap with the survey period, are used to estimate the average monthly incentive payment during this period.

shows that the estimated average monthly household income at the time of the interviews was \$1,940 for the program group (including Family Rewards payments) and \$1,573 for the control group, representing a statistically significant gain of \$366 per month (or about a 23 percent increase relative to the control group's income).

Next, poverty rates were calculated by estimating annual family income relative to the federal poverty level pertaining to each family's size, with reward payments added in for the program group.<sup>6</sup> Table 5.1 presents the distribution of this measure of poverty across four levels, including "severe poverty," which is defined as income below 50 percent of the poverty level. It shows that Family Rewards substantially altered the distribution of families across different levels of poverty, especially by reducing the proportion of households in severe poverty and increasing the proportion with income at or above 130 percent of the federal poverty level. For example, while 30 percent of the control group had income falling into the severe poverty category, the rate for the program group was 16.7 percent, representing a statistically significant drop of 13.2 percentage points. Similarly, 26.6 percent of the program group had income at or above 130 percent of the program group had income at or above 130 percent of the federal poverty level compared with 18.3 percent of the control group, a statistically significant gain of 8.3 percentage points.

Respondents to the 18-month survey were also asked whether they had received income or benefits in the prior month from a wide variety of sources. Table 5.1 shows that Family Rewards neither increased nor decreased the likelihood of receiving income from most of these sources. However, it did appear to have positive effects on reported earnings from employment (which are discussed more fully in Chapter 8), and small positive effects on the likelihood of receiving heating or cooling assistance (for example, help paying for air conditioning) or free or reduced-price school lunch assistance.

Administrative records data were used to estimate the program's effects on cash aid from the TANF and Safety Net Assistance (SNA) programs and food stamp benefits.<sup>7</sup> The available data covered four quarters of follow-up after the quarter of random assignment. Overall, the results, presented in Table 5.2, show that Family Rewards had no clear effect on benefits receipt — either the likelihood of receiving payments or the average dollar amount received.

<sup>&</sup>lt;sup>6</sup>Annual household income is estimated based on the one-month household income snapshot gathered at the time of the survey interview.

<sup>&</sup>lt;sup>7</sup>The SNA program provides assistance to individuals and families in New York State who do not qualify for the time-limited federal TANF program. SNA payments may take the form of direct cash aid to beneficiaries or vendor payments (for example, to landlords) made on their behalf.

# Table 5.2

# **First-Year Impacts on Temporary Assistance for Needy Families (TANF) or Safety Net Assistance (SNA) and Food Stamp Receipt and Payments**

	Program	Control	Difference	
Outcome	Group	Group	(Impact)	P-Value
Ever received TANF/SNA (%)				
Quarter of random assignment	33.1	32.4	0.7	0.373
Quarter 2	32.4	32.4	-0.1	0.942
Quarter 3	32.4	31.6	0.7	0.410
Quarter 4	31.4	30.7	0.7	0.434
Quarter 5	30.2	29.7	0.5	0.605
Quarters 2-5	35.9	36.6	-0.7	0.439
Amount of TANF/SNA received (\$)				
Quarter of random assignment	564	522	42.0 *	0.050
Quarter 2	547	528	18.7	0.396
Quarter 3	561	514	46.6 **	0.039
Quarter 4	550	514	35.9	0.125
Quarter 5	513	481	32.5	0.156
Quarters 2-5	2,170	2,036	133.7	0.106
Ever received food stamps (%)				
Quarter of random assignment	61.7	61.4	0.2	0.838
Quarter 2	61.2	61.2	0.0	0.990
Quarter 3	59.6	60.1	-0.4	0.701
Quarter 4	58.9	59.9	-1.1	0.353
Quarter 5	60.1	60.5	-0.4	0.741
Quarters 2-5	65.5	65.8	-0.3	0.796
Amount of food stamps received (\$)				
Quarter of random assignment	600	595	5.3	0.720
Quarter 2	620	620	0.0	0.999
Quarter 3	600	600	-0.2	0.989
Quarter 4	579	588	-8.7	0.585
Quarter 5	618	622	-3.5	0.831
Quarters 2-5	2,417	2,430	-12.4	0.836
Sample size (total = 4,966)	2,498	2,468		

(continued)

#### Table 5.2 (continued)

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

NOTES: Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

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

Rounding may cause slight discrepancies in calculating sums and differences.

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.

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

TANF or SNA and food stamp receipt and payment data are available for four quarters of follow-up after the quarter of random assignment. Thus, this table presents impacts for the first year of program participation.

## Banking and Financial Services

As described previously, Family Rewards made payments electronically to families who earned rewards, depositing the money into bank accounts or onto stored value cards. The program strongly urged all families to set up bank accounts if they did not already have one, or to link their existing accounts to the program's payment system. In addition, it provided all parents and high school students with a chance to use savings accounts that, with the cooperation of several banks and credit unions, were designed especially for the program. These "Opportunity NYC accounts" did not carry fees or minimum balances and could not be overdrawn.<sup>8</sup> Recognizing that families might also benefit from some guidance on how to manage the money they earned from the program, Seedco and the participating Neighborhood Partner Organizations (NPOs) provided them with some information (including a special workshop) on the basics of budgeting, money management, debt management, and asset building.

In addition to providing the program with an efficient mechanism for paying out cash rewards to qualifying participants, the use of bank accounts served as a way to encourage lowincome families to increase their connections to mainstream financial institutions. The designers of Family Rewards had hoped that, with these accounts and the extra money they earned from

<sup>&</sup>lt;sup>8</sup>See Chapter 3 for additional information on these accounts and the requirements or features associated with them.

the program, families would be more likely to save money and build their assets and less likely to rely on alternative financial institutions. Most often located in low-income neighborhoods, alternative financial institutions tend to offer such services as check cashing, bill payment, and short-term loans (or "payday loans"),<sup>9</sup> often at very high prices and in ways that many experts contend mislead and exploit the poor. Payday loans are illegal in New York, but are available through the Internet.

Local and national studies show that low-income populations are less likely to hold bank accounts and more likely to face high costs for basic financial transactions through alternative or non-mainstream financial services providers.<sup>10</sup> According to some scholars, these circumstances can make it more difficult for families to escape or stay out of poverty, and they can undermine the accomplishments of welfare-to-work programs and "make-work-pay" policies.<sup>11</sup> According to one study, nearly 25 percent of low-income families (defined as those with earnings under \$18,900) in the United States are "unbanked"; that is, they have neither a checking nor a savings account.<sup>12</sup> Among the Family Rewards sample, the proportion unbanked was more than double that rate when they entered the study: about 53 percent of that sample did not have a bank account at the time of random assignment (shown earlier in Table 2.3).<sup>13</sup>

Family Rewards changed this pattern. It increased program participants' connection to mainstream financial institutions and reduced their reliance on alternative institutions. For example, 73.3 percent of program group respondents to the 18-month survey reported having a bank account at the time of the interview, compared with 51.8 percent of the control group respondents, a statistically significant difference of 21.5 percentage points (see Table 5.3).<sup>14</sup> The

<sup>&</sup>lt;sup>9</sup>A payday loan is a loan from a check-cashing outlet or other lending institution that must be repaid by the next payday.

<sup>&</sup>lt;sup>10</sup>Barr (2004).

<sup>&</sup>lt;sup>11</sup>Barr and Blank (2009).

<sup>&</sup>lt;sup>12</sup>Bucks, Kennickell, and Moore (2006).

<sup>&</sup>lt;sup>13</sup>The Neighborhood Financial Services Study conducted by the New York City Department of Consumer Affairs' Office of Financial Empowerment (OFE) provides a useful context for interpreting findings in this domain (banking, savings, and debt, for example). The OFE study explored the availability and use of financial services in two New York communities: Jamaica (Queens) and Melrose (the Bronx). It found that about 31 percent of respondents with low income were unbanked. Respondents gave several reasons for being unbanked, including prohibitively high bank fees, discomfort interacting with financial institutions, the need to maintain a minimum balance, and hours and location, among others. See New York City Department of Consumer Affairs (2008).

<sup>&</sup>lt;sup>14</sup>The estimate for the program group, based on survey data, is lower than what might be expected given the fact that program operations data show that close to 83 percent of adults had a checking or savings account linked to the program for payment purposes (with an additional 10 percent using stored value cards). Program operators note that a number of families had bank accounts that closed from time to time, or were in the process of changing accounts, so at any given moment a substantial proportion of participants had no functional bank account.

# Table 5.3

## Impacts on Banking, Savings, and Debt

-	Program	Control	Difference	
Outcome	Group	Group	(Impact)	P-Value
Use of banking/financial services (%)				
Currently has bank account	73.3	51.8	21.5 ***	0.000
Currently has checking account	57.8	46.7	11.1 ***	0.000
Had bank account closed since random assignment	14.3	15.4	-1.1	0.504
Financial transactions at least once a month				
Cash check at check casher	29.2	36.5	-7.3 ***	0.000
Pay bill at check casher	38.3	42.9	-4.6 **	0.032
Use ATM card to access cash	60.7	55.0	5.7 ***	0.008
Take cash advance on credit card	3.6	3.0	0.7	0.413
Bounce check or overdraw checking account	5.0	5.0	0.0	0.989
Get payday loan	1.0	0.5	0.5	0.239
Family savings and debt				
Average savings <sup>a</sup> (\$)	575	354	221 **	0.015
\$0 (%)	74.3	83.7	-9.4 ***	0.000
\$1 - \$250 (%)	7.1	4.2	2.9 ***	0.006
\$251 - \$500 (%)	4.5	4.1	0.4	0.660
More than \$500 (%)	14.1	8.0	6.0 ***	0.000
Average debt <sup>b</sup> (\$)	7,062	6,399	663	0.191
\$0 (%)	16.2	19.2	-3.1 *	0.079
\$1 - \$1,000 (%)	19.2	18.8	0.3	0.858
\$1,001 - \$5,000 (%)	32.8	32.1	0.7	0.757
\$5,001 - \$15,000 (%)	19.8	18.6	1.3	0.485
More than \$15,000 (%)	12.1	11.3	0.8	0.589
Currently repaying (%)				
Any loan	22.8	19.8	3.0 *	0.095
Car loan	4.0	2.7	1.4 *	0.087
Home loan	1.3	0.7	0.6	0.150
Student loans	12.0	11.0	0.9	0.500
Hospital or medical bill	5.2	4.1	1.1	0.244
Credit card or store bill	16.2	12.1	4.1 ***	0.007
Other	4.1	2.8	1.4 *	0.094
Sample size (total $= 2,060$ )	1,051	1,009		

(continued)

#### Table 5.3 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: The items in this section of the survey were administered to a random subsample (N = 2,060) of the survey respondents.

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 families or sample members.

Rounding may cause slight discrepancies in calculating sums and differnces.

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.

<sup>a</sup>A total of 7 percent of the sample are excluded from this analysis due to missing data.

<sup>b</sup>Debt amounts equal to or greater than \$100,000 were excluded from these calculations. The survey questions on savings and debt are largely framed around family finances; thus, it is most likely that participants are reporting debt accumulated by the family. A total of 9 percent of the sample are excluded from this analysis because of missing or out-of-range values.

program group was also more likely (by 11.1 percentage points) to report having a checking account. Although similar proportions of the program and control groups were likely to close a bank account at some point following random assignment (14.3 percent and 15.4 percent, respectively), the program clearly generated a net increase in the establishment of bank accounts.

Program group members were less likely to report on the 18-month survey that they had used alternative financial services since the time of random assignment. The survey asked whether they had used these fringe financial services several times a month, about once a month, every few months, a few times during the year, or never. Table 5.3 presents the proportion of sample members reporting use of such services at least once a month. Family Rewards decreased regular use of alternative financial services: it reduced the use of check-cashing services by a statistically significant 7.3 percentage points and reduced the use of these services for the payment of regular bills by 4.6 percentage points. As expected, it increased the use of ATMs for cash withdrawal, a benefit made possible by having formal banking accounts. Very few sample members reported getting a payday loan.<sup>15</sup>

Overall, program participants were more likely to be using banks or credit unions for their financial transactions. For some, this came with a lot of pride:

Now with this program, I can afford [a savings account]. I even feel more important because I have a card; I have two bank cards. And I go, I have my money there. I withdraw it. I manage it. My girls, it's very nice when they

<sup>&</sup>lt;sup>15</sup>In comparison, the OFE survey suggests that 9 percent of the families surveyed in two New York communities (Jamaica, in Queens, and Melrose, in the Bronx) used short-term loans. However, 75 percent had used fringe financial services, such as check cashers. Moreover, 65 percent of respondents with checking accounts also reported that they used check cashers.

say "Mommy, go to the bank and get me some money to buy this," and everything. It's been a great blessing.

#### Savings and Debt

Low-income families typically have few assets and low savings, making it difficult to build financial security for the future.<sup>16</sup> By living off limited resources, they are especially vulnerable to medical or other financial emergencies, and their lack of savings affects their ability to respond to crises.

Family Rewards places no restrictions on how families can use the cash transfers they receive. This feature was included because the program designers believe that imposing restrictions (such as for education, training, or home ownership, as some asset-building programs do, or for any particular purpose) can reduce the incentive value of the rewards that are offered. At the same time, it is important to understand whether the additional income that families receive through the program has begun to help them improve their financial security. The results presented in Table 5.3 suggest that it has. Family Rewards increased the program group's average savings by \$221, a gain of 38 percent over the control group mean of \$354.<sup>17</sup> Roughly 25 percent of the program group reported having some family savings at the time of the 18-month interview, compared with 16 percent of the control group.<sup>18</sup> Family Rewards reduced the proportion of program group families with no savings by 9.4 percentage points, and it increased the proportion with greater than \$500 in savings by 6 percentage points.

These results are consistent with reports from the in-depth interviews that engaged participants in discussions about their savings strategies. While several families were unable to save for a variety of reasons, others tried to "save for a rainy day." Talking about how Family Rewards "taught" her to save and manage her finances, one participant said:

Yeah, I still save like \$200, \$300. I leave it in the bank. The rest I pay my rent and my bills, and [take care of] five children — their clothing and the basic necessities that we need to survive throughout the day and night. Yeah, so it's good for me.

<sup>&</sup>lt;sup>16</sup>Barr and Blank (2009).

<sup>&</sup>lt;sup>17</sup>The survey respondents were asked to report how much they (and their spouse or partner) had in savings. The reported savings could include any money or savings kept at home or elsewhere, such as money in a savings account, money market fund, credit union, pension fund, stocks or bonds, or certificates of deposit. The calculation shown in the table includes those with zero savings, so for those with any savings, the amount could be substantially higher.

<sup>&</sup>lt;sup>18</sup>At enrollment, a majority of the participants (80.9 percent) were in one-parent families.

... I didn't know how to save money like — because I needed it, because I was only getting a little bit a month, and now my whole family is incorporated into the program, so it's like helping me out more so I'm able to leave it and not touch the money, and I'm able to still take care of daily things, like some of the stuff that I get — the finances.

The same respondent also reflected on the way these savings eased her financial strain:

As far as mentally, like I feel more secure knowing that if an emergency happens I'm able to do something because I know I have the funds to do it. So it's given me some self-esteem on that part.

Findings related to debt are also presented in Table 5.3. At the start of the program, it was unclear whether Family Rewards would encourage participating families to manage their finances better — and to clear their debt, for example — or whether it would encourage them to incur additional debt. To explore this potential effect, survey respondents were asked to report whether they had accumulated any debt and, if they had, the amount they owed.<sup>19</sup> As shown, 16.2 percent of the program group families reported having no debt at the time of the survey interview, compared with 19.2 percent of the control group, a statistically significant 3.1 percentage point reduction in the proportion reporting no debt. In terms of the average amount of debt, both groups reported relatively high amounts of family debt, but the difference is not statistically significant (\$7,062 for the program group versus \$6,399 for the control group). This calculation of average debt excludes extremely high levels of debt (over \$100,000) that some respondents reported. The survey did not ask respondents to break down their overall debt amount by broad categories (for example, student loans, medical bills, and credit card bills), so it is unclear from these data what might be driving these relatively high levels of debt among Family Rewards sample members. However, looking at the types of loans being repaid (also discussed below), it appears that those who were reporting higher levels of debt (over \$5,000) were repaying multiple types of loans or bills, including credit card payments, student loans, or medical bills.

Table 5.3 also presents estimates of the program's impacts on the extent to which families were repaying different types of debt. As discussed in Chapter 4, the in-depth interviews with program participants revealed that some were able to use their cash rewards for such purposes. Respondents to the 18-month survey were asked whether they were currently paying back any loans and, if so, which types of loans they were paying. The most noteworthy effects pertain to credit card or store bills: 16.2 percent of the program group members said they were

<sup>&</sup>lt;sup>19</sup>The survey questions on savings and debt are largely framed around family finances, and it is most likely that participants are reporting debt that was accumulated by the family rather than simply the respondents' personal debt.

paying off such bills, compared with 12.1 percent of the control group, a statistically significant increase of 4.1 percentage points.

# Material Hardship

Many welfare-to-work and other types of employment programs for low-income populations have been premised on the expectation that work will increase families' income over the longer term and, ultimately, reduce their material hardship. However, many rigorous evaluations of programs that have had positive effects on work and earnings have not found them to have much effect on commonly used hardship indicators. In mandatory welfare-to-work programs tested in the 1980s and 1990s, for example, earnings gains were substantially offset by losses in other transfer benefits, such as welfare, with little effect on poverty or, consequently, material hardship. However, most programs that have included special financial work incentives that did reduce poverty have been found to show some short-term effects on various dimensions of material hardship.<sup>20</sup> This section examines whether there is any evidence that the Family Rewards program, in the short run, is beginning to affect families' overall material well-being.

Researchers use various indicators to measure material hardship.<sup>21</sup> Unfortunately, a *common definition of this concept does not exist*, nor is there a standard approach to its measurement.<sup>22</sup> Some people experience primarily one kind of hardship, but others may experience multiple and varied kinds of hardships. As a result, most efforts to measure material hardships

<sup>&</sup>lt;sup>20</sup>The studies referenced here do not always use the same items to measure material hardship, making comparisons somewhat complicated. However, relying on the measures used, these studies suggest somewhat mixed effects in this domain, with some demonstrating positive impacts for selected samples and others demonstrating short-term reductions that were not sustained beyond the program. For example, the Minnesota Family Investment Program (MFIP), which aimed at encouraging work and reducing poverty by allowing parents to keep more of their public assistance benefits, increased income, reduced poverty, and reduced financial strain and material hardship for single-parent applicants, but showed few similar effects for twoparent applicant families (see Miller et al., 2000). In New Hope, a demonstration project in Milwaukee that provided full-time workers with an earnings supplement to raise their income above the poverty threshold, program group members were less stressed, reported fewer worries, and experienced less material hardship (particularly that associated with lack of health insurance and unmet medical or dental needs). These short-term effects did not last beyond the three years that New Hope operated (see Bos et al., 1999, and Huston et al., 2003). The Self-Sufficiency Project, which tested the effectiveness of making work pay for Canada's Income Assistance recipients, helped working-poor families meet their basic needs. At the 18-month point, it increased income and increased spending on three basic necessities: food, children's clothing, and housing. The percentage of families using food banks was also reduced. Families also appeared to be saving some of their additional income. By 36 months, members of the program group were spending \$49 more per month than were members of the control group on food, clothing, rent, and child care. See Lin et al. (1998) and Michalopoulos et al. (2000).

<sup>&</sup>lt;sup>21</sup>Material hardship scales were pioneered by Mayer and Jencks (1989).

<sup>&</sup>lt;sup>22</sup>Ouellette, Burstein, Long, and Beecroft (2004).

include measures that capture dimensions of need across domains such as food adequacy, shelter, financial strain, and the like.

The present study includes the following measures:

- A multi-item material hardship index, based on responses to five commonly asked questions that assess whether families have experienced the following difficulties with housing or utilities in the past 12 months: not paid full rent or made a full mortgage payment, evicted for not paying rent or mortgage, unable to pay full utility bill, been without utilities, or had phone service disconnected.
- 2. A mean score on a financial strain scale, ranging from 4 to 16, with a lower score indicating greater perceptions of financial strain. The scale includes such items as "My financial situation is better than it's been in a long time" and "I worry about having enough money in the future."
- 3. An overall financial well-being measure that is assessed by asking respondents how their family finances usually work out at the end of the month, whether they have some money left over, just enough to make ends meet, or not enough money to make ends meet.
- 4. A common self-reported measure of food insufficiency to assess the adequacy of food for the family.<sup>23</sup>
- 5. Measures of whether families ever had to forgo medical care or medicine because of costs.

The findings under the first panel of Table 5.4 show that on the housing-and-utilities hardship indicator, Family Rewards had little effect on the summary measure ("Any hous-ing/utilities material hardship in the past 12 months"). However, it did cause small but statistically significant reductions in particular types of hardships in this domain, such as being evicted for not paying rent or making mortgage payments or having utilities turned off or phone service disconnected.

Results for an indicator of financial strain also reveal positive effects. For example, the program group was more likely to be able to "make ends meet" with the resources they had available (third panel in Table 5.4). Roughly 34 percent of the program group reported that they did not have enough to make ends meet at the end of the month, compared with 41.8

<sup>&</sup>lt;sup>23</sup>The food sufficiency question has been used in United States Department of Agriculture surveys since the mid-1970s to measure food deprivation, and has been validated against other measures of hunger and nutritional adequacy (Rose and Oliveira, 1997).

#### Table 5.4

#### Impacts on Material Hardship and Financial Strain

	Program	Control	Difference	
Outcome	Group	Group	(Impact)	P-Value
Any housing/utilities material hardship in the				
past 12 months (%)	55.1	57.3	-2.2	0.316
Did not pay full rent or mortgage	39.0	41.5	-2.5	0.245
Was evicted from home for not paying rent or mortgage	2.7	4.3	-1.6 **	0.043
Did not pay full utility bill <sup>a</sup>	29.3	28.2	1.1	0.571
Utility was turned off <sup>a</sup>	5.6	8.7	-3.1 ***	0.007
Phone service was disconnected <sup>b</sup>	20.0	25.4	-5.4 ***	0.003
Financial well-being <sup>c</sup> ( $4 = low; 16 = high$ )	9.2	8.7	0.5 ***	0.000
Strongly or somewhat agree with the following (%)				
Financial situation is better than last year	62.7	44.5	18.3 ***	0.000
Don't worry about having enough money in future	19.0	20.3	-1.4	0.443
Can generally afford to buy needed things	69.7	63.7	6.0 ***	0.004
Sometimes have enough money to buy something or go somewhere just for fun	29.2	27.3	1.9	0.353
Family finances usually work out to have the following at end of month (%)				
Some money left over	12.3	12.2	0.1	0.941
Just enough to make ends meet	53.7	46.0	7.6 ***	0.001
Not enough to make ends meet	34.1	41.8	-7.8 ***	0.000
Food security <sup>d</sup> $(1 = low; 4 = high)$	3.4	3.2	0.2 ***	0.000
Insufficient food <sup>e</sup> (%)	14.8	22.1	-7.3 ***	0.000
Did not get needed medical care because of cost in				
past 12 months <sup>f</sup> (%)	6.5	10.4	-3.9 ***	0.000
Did not fill prescription because of cost in past 12 months (%)	13.6	15.8	-2.1 *	0.096
Sample size (total = 2,060)	1,051	1,009		
			(c	ontinued)

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: The items in this section of the survey were administered to a random subsample (N = 2,060) of the survey respondents.

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 families or sample members.

Rounding may cause slight discrepancies in calculating sums and differnces.

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.

#### Table 5.4 (continued)

<sup>a</sup>Utilities include gas, oil, and electricity.

<sup>b</sup>This includes cellular or land service.

<sup>c</sup>Components of the financial well-being scale have been coded such that a lower score implies being worse-off and a higher score implies being better-off. The scale is calculated by summing responses to the four component questions. Thus, the financial well-being scale presented here ranges from 4 to 16 points.

<sup>d</sup>The food security question describes food eaten by the family in the prior month: 1 = O ften not enough to eat; 2 = S ometimes not enough to eat; 3 = E nough to eat but not always the kinds of food desired; 4 = E nough to eat of the kinds of food desired.

<sup>e</sup>Insufficient food is defined as "sometimes" or "often times" not having enough food to eat. <sup>f</sup>This excludes prescriptions.

percent of the control group, a statistically significant reduction of 7.8 percentage points on this measure of hardship.

The program also reduced food insufficiency, which is measured with a question that asks respondents to describe the food they and their families have eaten in the prior month: (1) often not enough to eat, (2) sometimes not enough to eat, (3) enough to eat, but not always the kinds of food desired, and (4) enough to eat of the kinds of food desired. Overall scores close to 1 indicate families often do not have enough to eat. Values close to 4 indicate families have enough of the kinds of food desired. Households reporting that they sometimes or often do not get enough to eat are termed "food-insufficient." The average food sufficiency score for the program group was 3.4, compared with 3.2 for the control group, a 0.2 percentage point difference (or a gain of 6 percent) that is statistically significant. Program group members were less likely than the control group members to report food insufficiency — in other words, report that they sometimes or often did not get enough to eat (14.8 percent versus 22.1 percent, respectively, a statistically significant drop of 7.3 percentage points).

Also reflecting hardship, the survey asked respondents whether they were unable to get needed medical care because of costs in the prior year, and whether they were unable to fill prescriptions for the same reason. Although only 10 percent to 16 percent of control group members indicated that they had incurred these hardships, the rates for the program group were even lower as a result of Family Rewards.

Assessing respondents' circumstances more broadly, the survey contained questions that asked them to compare their current financial situation with what it had been a year before, and the impact of Family Rewards on this measure was large. Close to 63 percent of the program group reported that their current financial situation was better than it had been the year before, compared with 44.5 percent of the control group, a statistically significant increase of 18.3 percentage points. Observations from the in-depth qualitative interviews with parents support this finding. For example, many participants in those interviews said that they used some or all of the rewards to meet immediate needs, such as paying for groceries, rent, and utilities. As one participant noted:

That little \$40 put my lights back on. The payments that I get, I'm comfortable [with], 'cause it helps me put food on my table instead of me pawning my jewelry every month —'cause I do that.

Overall, the pattern of findings across the range of measures in this section provides strong evidence that Family Rewards has, during its initial period of operations, begun to improve families' financial security and material well-being.

# **Housing Stability**

Some participants in the in-depth interviews discussed the strides they made in improving their housing circumstances. One participant used the payments to move to a bigger apartment, and another was able to pay off debt that was preventing her from getting credit to purchase a house. The 18-month survey provides broader evidence on the topic of housing, focusing particularly on housing status and residential stability (that is, whether people stay in or move from their neighborhood of origin). The Family Rewards sample members, who live in high-poverty neighborhoods, may be vulnerable to housing instability and residential turmoil, which, in turn, may have consequences for child and family well-being. Some studies report an association between high mobility and poor school outcomes for children in low-income families.<sup>24</sup>

Respondents were asked to report on their housing status — whether they owned a home or rented, or received some form of housing assistance (Section 8, public housing, or other form of housing subsidy). They were also asked whether they had moved since random assignment and, if they had, to describe the reasons they moved. Residential mobility is high among low-income populations, and families move for a variety of reasons, including a desire for safety, a better neighborhood, a bigger place, and proximity to good schools and jobs, or because they are unable to pay the rent at their current residence.

Table 5.5 shows that program group respondents were less likely to report that they had moved during the 18 months since random assignment. Although this is not a long period over which to be assessing residential stability, it is noteworthy that the proportion of program group members who moved (10.7 percent) was about 4 percentage points lower than the mobility rate for the control group (14.9 percent). More analysis is necessary to understand how Family Rewards affects housing stability and the reasons families moved during the study period. This issue will be addressed in future reports.

<sup>&</sup>lt;sup>24</sup>Simpson and Fowler (1994); Crowley (2003); Burkam, Lee, and Dwyer (2009).

#### Table 5.5

#### **Impacts on Housing and Family Composition**

	Program	Control	Difference	
Outcome (%)	Group	Group	(Impact)	P-Value
Housing status <sup>a</sup>				
Current housing arrangement				
Owns home or apartment	4.3	4.8	-0.5	0.557
Rents home or apartment	90.1	89.0	1.0	0.432
Lives with family or friends and contributes to rent	3.2	3.0	0.2	0.787
Lives with family or friends and does not contribute to rent	1.3	1.4	-0.1	0.806
Other	1.1	1.7	-0.6	0.239
Currently lives in public or subsidized housing	69.8	72.6	-2.7	0.142
Currently lives in New York City	99.3	98.7	0.6	0.187
Moved since time of random assignment	10.7	14.9	-4.3 ***	0.004
Family composition				
Current marital status				
Single, never married	45.5	50.1	-4.6 ***	0.004
Married and living with spouse	19.0	15.6	3.5 ***	0.000
Separated or living apart from spouse	16.6	17.9	-1.3	0.353
Divorced	15.2	12.3	2.9 **	0.017
Widowed	3.7	4.2	-0.6	0.409
Living with partner	10.6	9.2	1.5	0.175
Number of children <sup>b</sup>				
0	2.7	3.7	-1.0	0.108
1	24.5	25.2	-0.7	0.649
2	32.4	33.5	-1.1	0.537
3 or more	40.4	37.7	2.8	0.105
Had or fathered a child since random assignment	6.9	6.2	0.7	0.448
Sample size (total = 3,082)	1,574	1,508		

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: Sample sizes vary because of missing values.

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 families or sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

<sup>a</sup>The items in this section of the survey were administered to a random subsample (N = 2,060) of the survey respondents.

<sup>b</sup>This measure only includes children 18 years of age or younger.

## Marriage and Family Composition

The data in Table 5.5 suggest that Family Rewards may have had small effects on family composition, including marital status. According to the 18-month survey, 19 percent of the program group was married at the time of the interview, compared with 15.6 percent of the control group, a statistically significant increase of 3.5 percentage points. Yet, program group members were also more likely to report that they were divorced (15.2 percent versus 12.3 percent, a statistically significant increase of 2.9 percentage points). What might explain these program effects?

A few insights are suggested by data from interviews with some NPO staff. They commented that some participants were making a rational economic choice to marry people whom they had already been living with or coparenting with, given the financial advantages of having two adults enrolled in the program.<sup>25</sup> One NPO staff person said she had explained how to formalize a domestic partnership to a number of participants who asked about it. This suggests that at least for some participants, Family Rewards was a factor of consideration as they thought about their marital status. The same staff member said that she had also attended one participant's wedding and that the participant was getting married in part because she was trying to protect the financial stability she had achieved over the prior two years, to which the program had contributed. Perhaps the extra resources that were earned through the program gave them a sense of greater financial stability that might have influenced their decision to marry.

It is also possible (although only speculative) that the increased financial stability that some participants experienced (as reflected in self-reported savings, income, and earnings) led them to feel better positioned to divorce. It should be underscored that the overall effects on marriage and divorce are small, and the mechanisms through which this program might have influenced those results are not understood. The evaluation's longer-term data will show whether these effects are sustained over time and, if possible, what factors may be contributing to them.<sup>26</sup>

<sup>&</sup>lt;sup>25</sup>The second adult could enroll only if he or she were married to or in a legal domestic partnership with the main program applicant. However, the second adult is not included in the research sample if enrolled after random assignment.

<sup>&</sup>lt;sup>26</sup>Other studies have explored the relationship between marital status and programs that offer income supports. Michalopoulos et al. (2000) report that Canada's Self-Sufficiency Project, which offered an income supplement, had no effect on marriage in the three years of follow-up. Investigating the effects of the Minnesota Family Investment Program on marriage and divorce among the program's nearly 2,500 welfare recipients and applicants who were married or cohabiting at study entry, Gennetian (2003) reports that for two-parent recipient families who were married at study entry, MFIP increased marital stability by decreasing divorce. Among cohabiting couples, the cumulative rate of ever marrying during the seven-year follow-up period was similar for the MFIP and control groups. MFIP had no cumulative effect on divorce during the follow-up (continued)

Table 5.5 also shows that Family Rewards did not have effects on other measured aspects of family composition. For example, there were no effects on cohabitation or childbearing.

# Effects for Key Subgroups

Because overall impacts can mask program effects for some groups of study participants, the income and material well-being impacts of Family Rewards are analyzed for two subgroups defined by baseline measures of education and employment. These two subgroups were pre-selected, based on the literature demonstrating that quality-of-life and indicators of well-being vary greatly across groups defined by socioeconomic characteristics.<sup>27</sup> In addition, it might be expected that the more "advantaged" participants — those who are employed or those with higher levels of education at study entry — may be more likely to respond to the Family Rewards incentives and thus experience greater short-term improvements in income, poverty, and material hardship. Descriptive analysis of the top and bottom 10 percent of reward earners (shown earlier in Table 4.4) also reveals significant variations across these groups in terms of their baseline education and employment characteristics. Among other distinguishing characteristics, the top-earning families were more likely to have been employed at baseline and to earn a high school diploma or a General Educational Development (GED) certificate.

To examine program impacts for these subgroups, the effects of Family Rewards were analyzed separately for parents who had less than a high school diploma or GED certificate at the time of random assignment, and for those with at least a high school diploma or GED certificate. Similarly, program impacts were examined separately for parents who were employed at the time of random assignment and for those who were not employed. In general, impacts are expected to vary to some extent across subgroups, simply as a result of natural variation around the average impact for the full sample. This section examines whether that variation in impacts across subgroups is statistically significant, or

period among two-parent families who were new welfare applicants, but it did somewhat increase the incidence of divorce late in the follow-up period. This and other research will be considered to better understand the impact of Family Rewards on marriage.

<sup>&</sup>lt;sup>27</sup>In addition to education and employment, variation in impacts was examined across a range of dimensions including race/ethnicity, housing status, and poverty status at random assignment. These explorations suggest no noteworthy effects.

beyond what would be expected to occur naturally. For this reason, the focus is not on whether a given impact for the less educated subgroup is statistically significant, for example, but whether the difference between that impact and the impact for the more educated subgroup is statistically significant (which is indicated by daggers in the rightmost column of the tables). If the difference between these two impacts is not statistically significant, the results suggest that the effects observed for the full sample generally hold across both more and less educated individuals.

Table 5.6 presents the results for subgroups defined by parent's educational status at random assignment. It shows that the program's positive impacts on income and financial well-being were largely comparable for both subgroups. On most measures, the small differences in impacts across the subgroups were not statistically significant. Although there are some exceptions to this pattern on the housing-and-utilities hardship measures, the overall pattern points to no meaningful variation in effects in this domain by parent's education level.

A similar analysis was conducted comparing subgroups defined by parent's employment status at the time of random assignment. The results shown in Appendix Table E.1 suggest the same conclusion: Family Rewards had similar effects on the income and financial well-being measures whether or not the parent was working upon entry into the study.

Next, the analysis examines the variation of program impacts on marital status and housing status across subgroups. The data in Table 5.7 (see page 146) reveal that the positive estimated effects of Family Rewards on marital status are concentrated primarily among parents who have more education (those who have at least a high school diploma or GED certificate). The reduction in residential mobility caused by the program is also similarly concentrated in that better-educated subgroup. In contrast, there are no noteworthy differences in these measures by the parent's employment status at the time of random assignment (see Appendix Table E.2).

Finally, program impacts on TANF and food stamp receipt for both the parent's employment subgroup and the parent's education subgroup were also considered. As shown in Appendix Table E.3, the results indicate that Family Rewards had virtually no impact on these outcomes, regardless of a parent's education or employment status.

#### Table 5.6

## Impacts on Income and Material Well-Being, by Parent's Education Level at the Time of Random Assignment

	Program		Difference		
Subgroup and Outcome	Group	Group	(Impact)	P-Value	Sig.
High school diploma/GED certificate at random assignment	<u>nt</u>				
Income					
Average total household income in prior month excluding Family Rewards payments <sup>a</sup> (\$)	1,824	1,795	29	0.673	
Average total household income in prior month					
including Family Rewards payments <sup>b,c</sup> (\$)	2,122	1,799	323 ***	0.000	
Percentage of families with household income at or below					
the federal poverty level <sup>b,c</sup>	50.5	60.2	-9.7 ***	0.001	
Total household income in prior year as a percentage					
of the federal poverty level <sup>b,c</sup> (%)					
Less than 50%	10.3	22.6	-12.3 ***	0.000	
50% - 100%	40.3	37.6	2.7	0.371	
101% - 129% 130% or more	15.1	14.1 25.8	1.1 8.6 ***	0.628 0.001	
	34.3	23.8	8.0	0.001	
<b>Family savings and debt (\$)</b> Average savings <sup>d</sup>	720	470	249 *	0.060	
Average debt <sup>e</sup>	8,964	7,764	1,201	0.112	
Material hardship and financial strain					
Any housing/utilities material hardship in past 12 months (%)	53.6	59.3	-5.7 **	0.045	††
Did not pay full rent or mortgage	39.1	44.2	-5.1 *	0.075	
Evicted from home for not paying rent or mortgage	1.7	2.8	-1.2	0.183	
Did not pay full utility bill <sup>f</sup>	28.7	32.6	-4.0	0.137	†††
Utility was turned off <sup>f</sup>	4.3	7.3	-3.0 **	0.026	
Phone service was disconnected <sup>g</sup>	21.8	25.6	-3.8	0.127	
Financial well-being <sup>h</sup> (4 = low; $16 = high$ )	9.2	8.6	0.6 ***	0.000	
Strongly or somewhat agree with the following (%)	63.4	46.1	17.3 ***	0.000	
Financial situation is better than last year Don't worry about having enough money in future	18.3	40.1 19.2	-0.9	0.000	
Can generally afford to buy needed things	70.0	64.4	5.6 **	0.038	
Sometimes have enough money to buy something or go	7010	0	010	0.020	
somewhere just for fun	28.7	26.6	2.1	0.422	
Family finances usually work out to have the following $a_{1}$ and $a_{2}$ models $b_{2}$					
at end of month (%) Some money left over	14.0	12.0	2.1	0.294	
Just enough to make ends meet	55.7	50.1	2.1 5.7 **	0.294	
Not enough to make ends meet	30.2	38.0	-7.8 ***	0.004	
Food security <sup>i</sup> $(1 = low; 4 = high)$	3.4	3.3	0.1 **	0.011	
Insufficient food <sup>j</sup> (%)	12.6	19.9	-7.3 ***	0.001	
Sample size (total = $1,820$ )	922	898			
				(conti	nued)

	Program	Control	Difference		
Subgroup and Outcome	Group	Group	(Impact)	P-Value	Sig.
No high school diploma/GED certificate at random assignment           Income           Average total household income in prior month excluding Family Rewards payments <sup>6</sup> (\$)         1,353         1,272         81         0.230           Average total household income in prior month including Family Rewards payments <sup>5,c</sup> (\$)         1,614         1,270         344 ***         0.000           Percentage of families with household income at or below the federal poverty level <sup>b,c</sup> 72.3         83.6         -11.3 ***         0.000           Total household income in prior year as a percentage of the federal poverty level <sup>b,c</sup> 26.3         39.6         -13.3 ***         0.000           Softwards         290         201         0.3 ***         0.000           Softwards         14.2         7.9         6.3 ***         0.007           Family savings and debt 9\$)         Average savings <sup>d</sup> 299         201         98         0.336           Average debt <sup>e</sup> 4,293         4,692         -399         0.534           Material hardship and financial strain         Average debt <sup>e</sup> 4,293         4,692         -399         0.534           Material hardship in past 12 months (%)         57.7         54.5         3.2         0.356         ††           Did not pay full utility bill <sup>11</sup>					
Average total household income in prior month	1,353	1,272	81	0.230	
-	1,614	1,270	344 ***	0.000	
	72.3	83.6	-11.3 ***	0.000	
of the federal poverty level <sup>b,c</sup> (%) Less than 50% 50% - 100% 101% - 129%	46.1 13.5	44.0 8.5	2.1 5.0 **	0.597 0.040	
	299	201	98	0.336	
Average debt <sup>e</sup>	4,293	4,692	-399	0.534	
Any housing/utilities material hardship in past 12 months (%) Did not pay full rent or mortgage Evicted from home for not paying rent or mortgage Did not pay full utility bill <sup>f</sup> Utility was turned off <sup>f</sup>	39.3 3.8 31.2 7.6	38.5 6.6 21.6 9.9	0.7 -2.8 * 9.6 *** -2.3	0.836 0.071 0.002 0.245	†† †††
Strongly or somewhat agree with the following (%) Financial situation is better than last year Don't worry about having enough money in future Can generally afford to buy needed things Sometimes enough money to buy something or go	62.2 19.1 69.9	40.3 22.8 62.0	21.9 *** -3.7 7.9 **	0.000 0.190 0.020	
Family finances usually work out to have the following at end of month (%) Some money left over Just enough to make ends meet Not enough to make ends meet	9.8 50.9 39.3	12.4 40.3 47.3	-2.6 10.6 *** -8.0 **	0.250 0.002 0.020	
Food security <sup>i</sup> $(1 = low; 4 = high)$	3.4	3.2	0.2 ***	0.001	
Insufficient food <sup>J</sup> (%)	17.7	24.7	-7.0 **	0.016	
Sample size (total = 1,186)	610	576			

## Table 5.6 (continued)

#### Table 5.6 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: The items in this section of the survey were administered to a random subsample (N = 2,060) of the survey respondents.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent. Differences in impacts across subgroups were tested for statistical significance. Statistical significance

levels are indicated as follows:  $\dagger \dagger \dagger = 1$  percent;  $\dagger \dagger = 5$  percent;  $\dagger = 10$  percent.

<sup>a</sup>Monthly household income amounts equal to or greater than \$10,000 were excluded from this calculation.

<sup>b</sup>Family Rewards payments are based on Seedco's Family Rewards data from program Year 2, which include activities completed in September 2008 through August 2009. The monthly Family Rewards payment amount is calculated by dividing the annual reward amount by 12. The payment data do not include bonus payments that some families received for opening new bank accounts.

<sup>c</sup>Annual household income is calculated by multiplying by 12 income in the month prior to the survey interview. For program group members, it includes Family Rewards payments received during Year 1. The federal poverty level was created based on annual income (monthly income multiplied by 12) and the houshold size at the time of the survey. The poverty threshold was measured according to the 2008 or 2009 poverty guidelines, depending on when a respondent was interviewed.

<sup>d</sup>A total of 7 percent of the sample are excluded from this analysis due to missing data.

<sup>e</sup>Debt amounts equal to or greater than \$100,000 were excluded from this calculation. The survey questions on savings and debt are largely framed around family finances; thus, it is most likely that participants are reporting debt accumulated by the family. A total of 9 percent of the sample are excluded from this analysis because of missing or out-of-range values.

<sup>f</sup>Utilities include gas, oil, and electricity.

<sup>g</sup>This includes cellular or land service.

<sup>h</sup>Components of the financial well-being scale have been coded such that a lower score implies being worse-off and a higher score implies being better-off. The scale is calculated by summing responses to the four component questions. Thus, the financial well-being scale presented here ranges from 4 to 16 points.

<sup>i</sup>The food security question describes food eaten by the family in the prior month: 1 = Often not enough to eat; 2 = Sometimes not enough to eat; 3 = Enough to eat but not always the kinds of food desired; 4 = Enough to eat of the kinds of food desired.

JInsufficient food is defined as "sometimes" or "often times" not having enough food to eat.

## Conclusion

As discussed in Chapter 1, Family Rewards was launched as a bold new intervention to address the short-term and long-term poverty goals of low-income families. Achieving those goals meant that families had to take the necessary steps to earn rewards that are conditioned on a variety of activities designed to improve their human capital and overall well-being.

The results presented in this chapter provide substantial evidence supporting the program's effectiveness in reducing short-term poverty and income-related hardships. In the short run, across a broad set of measures of income and hardship, Family Rewards produced significant gains for participating households. It reduced the proportion of families who were living in

#### Table 5.7

#### Impacts on Family Composition and Housing Status, by Parent's Education Level at the Time of Random Assignment

Subgroup and Outcome (%)	Program Group	Control Group	Difference (Impact)	P-Value	Subgroup Difference (Sig.)
High school diploma/GED certificate					
at random assignment					
Family composition					
Current marital status					
Single, never married	42.5	50.1	-7.6 ***	0.000	ţ
Married and living with spouse	21.2	16.9	4.3 ***	0.001	
Separated or living apart from spouse	16.0	17.8	-1.8	0.299	
Divorced	17.2	11.6	5.6 ***	0.001	++
Widowed	3.1	3.6	-0.5	0.565	
Housing status <sup>a</sup>					
Currently lives in public or subsidized housing	65.6	68.8	-3.2	0.204	
Moved since time of random assignment	9.6	16.1	-6.5 ***	0.001	††
Sample size (total = 1,820)	922	898			
<u>No high school diploma/GED certificate</u> at random assignment					
Family composition					
Current marital status					
Single, never married	49.7	51.1	-1.3	0.593	†
Married and living with spouse	15.7	13.2	2.5 *	0.091	
Separated or living apart from spouse	17.9	17.7	0.2	0.929	
Divorced	12.3	13.1	-0.8	0.674	††
Widowed	4.4	5.0	-0.6	0.625	
Housing status <sup>a</sup>					
Currently lives in public or subsidized housing	76.3	77.8	-1.5	0.604	
Moved since time of random assignment	12.7	13.1	-0.4	0.874	**
Sample size (total = $1,186$ )	610	576			

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: Sample sizes vary because of missing values.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent. Differences in impacts across subgroups were tested for statistical significance. Statistical significance levels are indicated as follows: †† = 1 percent; †† = 5 percent; † = 10 percent.

<sup>a</sup>The items in this section of the survey were administered to a random subsample (N = 2,060) of survey respondents.

poverty, including severe poverty. It increased the proportion of individuals with bank accounts and families' average savings. It reduced the proportion of families who were suffering from food insufficiency or financial strain, or reporting different types of housing-related material hardships. And it produced small reductions in residential mobility and small increases in marriage as well as divorce.

The next three chapters in this report examine the short-term effects of Family Rewards on program participants' human capital development. Chapter 6 focuses on Family Rewards' effects on children's education; Chapter 7 examines the program's impacts on family health care outcomes; and Chapter 8 explores the program's effects on parents' employment and training.

#### Chapter 6

## **Education Rewards and Impacts**

The achievement gap between poor children and higher-income children has been well documented. As early as kindergarten, poor children score lower than other children on a range of achievement and school-readiness measures.<sup>1</sup> These early disparities grow over time.<sup>2</sup> By high school, for example, low-income students are nearly three times more likely than high-income students to have repeated a grade and nearly six times more likely to drop out.<sup>3</sup> In its effort to break the cycle of intergenerational poverty, Family Rewards seeks to increase children's school performance. This chapter presents initial evidence of the program's effects on a range of schooling outcomes.

Other countries' conditional cash transfer (CCT) programs primarily offer rewards for school enrollment and attendance, and evaluations have documented positive effects on enrollment fairly consistently.<sup>4</sup> Family Rewards has a much broader range of incentives tied to school-related behavior, including, in addition to attendance incentives, rewards for certain types of parental engagement, student performance on tests and other indicators of achievement, and even for getting a library card. The large rewards that are tied to achievement are particularly noteworthy.

Studies show that other CCT programs have not increased achievement, at least as measured by standardized tests, but neither do those programs offer rewards for it. A central question for the Family Rewards evaluation is whether incentives for achievement can, in fact, contribute to improved school performance. Of course, any effects on performance cannot be attributed definitively or solely to the education incentives, since the additional income that the program provides to families may influence children's educational outcomes.<sup>5</sup> Any differences in performance must be attributed to the program as a whole — the extra income overall plus education-specific incentives. Nonetheless, the patterns of results may offer some insight into the possible influence of the education rewards.

An equally important question is whether it is reasonable to expect effects on student performance within two years, the length of this report's follow-up period for outcomes based

<sup>&</sup>lt;sup>1</sup>Lee and Burkham (2002).

<sup>&</sup>lt;sup>2</sup>Carneiro and Heckman (2003).

<sup>&</sup>lt;sup>3</sup>U.S. Department of Education, National Center for Education Statistics (2004).

<sup>&</sup>lt;sup>4</sup>Fiszbein and Schady (2009).

<sup>&</sup>lt;sup>5</sup>Dahl and Lochner (2008); Morris and Gennetian (2003). In addition, positive effects in the other domains, such as improved health, can also lead to better school outcomes (Romero and Lee, 2008). See, also, the Family Rewards logic model in Chapter 1, Figure 1.1.

on school records. Effects on intermediate outcomes, such as parental engagement and children's school attendance, should be observable within the first two years, even with the program's rough start (see Chapter 3). But it may take more time for changes in student performance and test scores to emerge, particularly since many families struggled to understand the program in the first year and did not fully engage with it until the second year.

The findings indicate that Family Rewards led to small increases in elementary and middle school students' participation in extracurricular activities and in the extent to which their parents were engaged with their schooling, but it had few effects on attendance or test scores. Among the older students, the program led to large and consistent gains in school progress for a subgroup of more academically prepared ninth-graders. For students in that subgroup, who may have been in a better position to take advantage of the incentives, the program increased attendance and school progression, namely promotion to the tenth grade and number of credits earned. These effects are encouraging and on a par with those found from other, more intensive, school-based interventions. Longer-term follow-up data, to be examined in future reports, will show whether positive effects for the younger students emerge over time, and whether the positive effects that were observed for the more proficient ninth-graders are sustained or grow even larger.

### The Education Rewards Offer

The Family Rewards education incentives are intended to encourage both achievement and the effort that supports achievement. As such, the program rewards a variety of behaviors. The full list of education rewards is presented in Table 6.1 and is discussed in more detail in Chapter 1. Although the program's designers (Center for Economic Opportunity, MDRC, and Seedco) had little research evidence to guide them on the size of the reward necessary to change behavior in a given area, they followed at least three key principles in setting reward amounts. First, outcomes that are more difficult to achieve should receive greater rewards. Second, the rewards should be set large enough to appeal to families and encourage them to take steps to obtain them. For example, the rewards for achievement on tests are considerably larger than those for obtaining a library card or for high attendance in a given month. Third, the rewards for test scores should not be so large as to put undue pressure on children.

Key differences between the rewards by age are that high school students can earn considerably more than can younger students, and that some or all of the rewards that high school students earn are paid directly to them, rather than to their parents. These differences reflect the fact that attendance and performance problems tend to get worse as students age and that high school students have more control over their educational effort than do younger students.

#### Table 6.1

#### **Education Rewards**

School Activity	Payment
Attendance is 95% or higher	\$25 per month for elementary/middle school students
	\$50 for high school students <sup>a</sup>
Scoring at proficiency level or improving 1 level on ELA and math tests	\$300 for each test for elementary students \$350 for each test for middle school students
Passing Regents exams	600 for each test for high school students, up to 5 tests <sup>b</sup>
Earning 11 or more credits per year	\$600 for high school students per year <sup>a</sup>
Taking the PSAT	\$50 per test, for taking the test up to 2 times $(maximum of $100 per student)^{b}$
Graduating from high school	\$400 once <sup>a</sup>
Having a library card	\$50 once during the program (all grades) <sup>b</sup>
Attending parent-teacher conferences	\$25 per conference, twice per year
Parent's attending meetings with teachers to discuss annual ELA and math test results	\$25 once per year for elementary/middle school Students

NOTES: <sup>a</sup>The student directly receives 50 percent of this payment. <sup>b</sup>The student directly receives 100 percent of this payment.

By rewarding a variety of activities, the incentives schedule ensures that most families will receive at least some payments, even if they are not able to meet every benchmark. At the same time, the program can achieve its goal of immediate poverty reduction by transferring significant resources to low-income families. For example, a single parent with one middle school student and one high school student could earn more than \$3,000 per year through the education rewards alone if she and her children met all or most of the benchmarks.

## **Data and Samples**

This chapter uses data from several sources. First, administrative payment data from the program provide information on the receipt of rewards during the first two years of program

operation. These records provide data on the number and type of rewards earned, as well as the total amount earned by families and students.

Data on key education outcomes are obtained from administrative records provided by the New York City Department of Education (DOE). These data are available for all students in the study for one year prior to study entry, or school year 2006-2007, and for two years after study entry, or school years 2007-2008 and 2008-2009. School outcomes that are available from the DOE records include attendance rates, scores on annual math and English language arts (ELA) tests, performance on Regents exams, course credits earned, and school enrollment status. These data are available for the full sample of students. Although these data do not provide information for students attending parochial schools, private schools, or schools outside of New York City, survey data shown later indicate that few students in the sample attended these other types of schools.

The various DOE data sources for students are linked together by a student ID, which is unique to each student within the New York City public school system. This ID was used to match the relevant DOE data to the Family Rewards students in the target grades. Because these students were identified and recruited using DOE data, their student IDs were known at study entry. However, parents were not required to provide a student ID when enrolling a child into the study, since few would have known it. For this reason, student IDs for siblings of the target children were obtained by matching their names, dates of birth, and other information to similar information on DOE records. Using this matching process, MDRC was able to obtain student IDs for more than 90 percent of students in the Family Rewards study.

Finally, a survey was administered approximately 18 months after study entry to a random subset of parents with children in the target grades, or grades four, seven, and nine.<sup>6</sup> The survey provides information on what might be thought of as the more intermediate outcomes, such as parental effort (parents' interaction with their children and their children's teachers), children's engagement in extracurricular activities, and parents' ratings of their children's school performance. The survey data are an important complement to the records data, offering a look into whether and how the incentives may have changed parents' and children's behavior, the key input into better school outcomes. One caveat to the survey is that all outcomes are reported by the parents. (A small survey of older students is scheduled for 2010.)

The analysis of education outcomes is conducted for three groups of students, based on the grade at which they entered the study: elementary school (kindergarten through fifth grade), middle school (sixth through eighth grades), and high school (ninth through twelfth grades).

<sup>&</sup>lt;sup>6</sup>Although the majority of respondents were interviewed between 17 and 19 months after random assignment, some were interviewed as early as month 16 or as late as month 24.

There are several reasons to expect that the program might have distinct effects across groups. First, the groups are very different developmentally, suggesting that their ability to respond to the offer, as well as the processes by which they respond may be different. Second, among low-income and disadvantaged students, school performance, in terms of attendance and test scores, tends to fall as students age, suggesting on the one hand that high school students have more room for improvement in outcomes than do younger students, but on the other hand that changes might be harder to achieve among high school students. Finally, and partly in response to these patterns in performance, the three groups faced a different incentives structure, in which high school students were eligible for much larger rewards and directly received at least part of any rewards earned.

The students in the study are spread throughout the grade distribution, from kindergarten through twelfth grade. However, as shown in Table 6.2, the sample is heavily weighted toward the three target grades. For example, seventh-graders make up 65 percent of the middle school group. For this reason, and because the target grades represent key transition periods for children and adolescents, effects are also presented for target grades separately.<sup>7</sup>

All impacts are estimated controlling for a range of background characteristics, such as the student's race/ethnicity, school district, sex, and prior year test scores, and parents' education level, marital status, and employment status.<sup>8</sup> Finally, as noted in earlier chapters, impacts are examined for multiple outcomes within each area — parental engagement, student attendance, student performance, and so on. Given that the likelihood of finding "false positives" increases as the number of outcomes increases, caution should be used when interpreting impacts that do not appear to be part of a larger pattern of impacts within a given area.

## A Brief Portrait of the Students and Their Schools

Students in the Family Rewards sample are spread across 900 schools in New York City. To help provide a context for the impact analysis in this chapter, Table 6.3 presents selected characteristics of these schools and the more than 1,600 schools citywide for the 2006-2007 school year. Data are available for 818 of the schools attended by students in the Family Rewards study: 341 elementary schools, 189 middle schools, and 288 high schools.<sup>9</sup> The first

<sup>&</sup>lt;sup>7</sup>Fourth-graders, for example, are beginning to apply their newly developed reading skills to acquire content knowledge. Without making that leap well, future schoolwork becomes more difficult. Children who fall seriously behind in educational performance by the third or fourth grade tend to have difficulty catching up later (Clotfelter, Ladd, and Vigdor, 2006).

<sup>&</sup>lt;sup>8</sup>An ordinary least squares regression model was used to control for these characteristics. Standard errors take into account clustering at the family level.

<sup>&</sup>lt;sup>9</sup>School characteristics data are not available for Opportunity NYC schools in District 75 (schools serving students with disabilities), District 79 (transfer/alternative schools), and District 84 (charter schools).

Grade	Number	Percentage
Elementary school		
Kindergarten	270	7.3
1	364	9.9
2	446	12.1
3	427	11.6
4 (target grade)	1,726	46.7
5	459	12.4
Total	3,692	100
Middle school		
6	474	18.4
7 (target grade)	1,671	64.7
8	436	16.9
Total	2,581	100
High school		
9 (target grade)	1,979	64.3
10	537	17.5
11	297	9.7
12	264	8.6
Total	3,077	100

# Table 6.2Students in the Sample, by Grade Level

three columns present data for the schools after they were ranked according to measures of student performance — proficiency rates in ELA and math for elementary and middle schools and pass rates for the English and math Regents exams for high schools. The final two columns present averages for the schools attended by students in the study and all city schools.

On average, the schools attended by the Family Rewards sample are somewhat lower performing than schools citywide, particularly for elementary and middle schools. For example, only 49.1 percent of elementary school students in the schools attended by the study sample were proficient in ELA, compared with 56.9 percent citywide. Despite these lower test scores, however, the study schools receive fairly similar progress report scores.<sup>10</sup> The schools attended by high school students in the sample, in contrast, are fairly similar to schools citywide.

<sup>&</sup>lt;sup>10</sup>The DOE calculates these scores based on ratings in three areas: school environment, student performance, and student progress. The overall scores are then used to assign a letter grade to each school. Elementary and middle schools with scores of 68 or higher, for example, receive a letter grade of A.

#### Table 6.3

#### Selected Characteristics of Schools Attended by Study Sample and of All New York City Public Schools

	Schools A	Attended by	v Study Sar	nple <sup>a</sup>	All NYC
	Bottom	Middle	Тор		Public
School Level and Outcome	Third	Third	Third	All	Schools
Elementary schools (N = 341)					
Percentage of students proficient on ELA test	35.4	45.1	66.1	49.1	56.9
Percentage of students proficient on math test	55.1	68.4	83.5	69.1	75.6
School attendance rate (%)	90.1	91.1	93.0	91.4	92.5
Total number of students enrolled	562	615	618	591	566
Overall score on school progress report (0 to 100 scale)	45	53	57	52	53
Middle schools (N = 189)					
Percentage of students proficient on ELA test	22.7	35.6	60.9	39.9	43.8
Percentage of students proficient on math test	28.8	45.3	70.3	48.3	53.1
School attendance rate (%)	87.9	90.3	93.3	90.5	91.4
Total number of students enrolled	521	511	591	541	586
Overall score on school progress report (0 to 100 scale)	49	56	59	55	55
High schools (N = 288)					
Graduation rate	52.8	59.0	74.5	61.4	59.1
Percentage of students who passed English Regents exams	65.9	80.0	93.3	79.7	79.8
Percentage of students who passed math Regents exams	66.8	77.0	89.7	77.9	78.5
School attendance rate (%)	79.9	83.4	88.6	84.2	84.8
Total number of students enrolled	805	788	1,072	829	796
Overall score on school progress report (0 to 100 scale)	42	54	62	53	54

SOURCES: MDRC calculations using data from the New York State Report Card Database and New York City School Progress Reports from the 2006-2007 school year.

NOTES: Sample sizes may vary because of missing values.

In New York State, students who score at a level of 3 or higher on a 4-point scale are deemed "proficient." <sup>a</sup>Sample sizes vary due to missing data on certain outcomes. Two measures that are missing for relatively large number of schools are the graduation rate and the progress report score; both are missing for 30 percent of the high schools. The schools are divided into thirds based on the average percentage scoring at a level of 3 or higher on a 4-point scale on ELA and math for elementary and middle schools and on the average

percentage who passed English and math Regents exams for high schools.

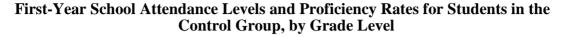
The first three columns illustrate that, although the schools attended by the Family Rewards sample are similar to or a bit lower performing, on average, than all schools, there is considerable diversity around these averages. In the bottom third of elementary schools attended by sample members, for example, only 55 percent of students scored at the proficient level or higher on the math test, compared with 84 percent of students in the top third of schools. The higher performing schools also tend to be a bit larger, and there is only a small difference in attendance rates. Differences in attendance rates across schools become more pronounced for older students. At the high school level, for example, the bottom third of high schools attended by sample members have an average attendance rate of 79.9 percent, compared with 88.6 percent for schools in the top third.

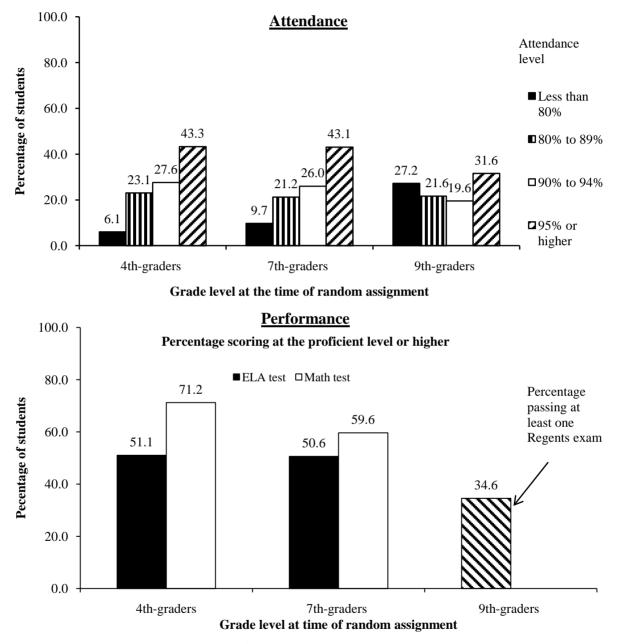
The data show that a fair number of students in the Family Rewards sample attend quite low-performing schools, where most students either do not achieve proficiency on standardized tests or do not graduate. At the same time, a fair number of students attend schools with highperforming peers. This difference in context is important to keep in mind and may influence the way in which the Family Rewards program affects students. A later section addresses this issue by examining effects for subgroups of students.

To help illustrate the benchmarks against which the effectiveness of Family Rewards will be assessed, Figure 6.1 presents data on average attendance and test scores (performance) for the students in the Family Rewards control group, regardless of the schools they attend. The top bar chart shows attendance data for students in the three target grades who were in the control group. Their attendance rates during the first year after random assignment represent the counterfactual, or what would have happened to the program students in the absence of Family Rewards. The data show the familiar pattern found for low-income students of declining attendance rates as students age. For example, more than 40 percent of fourth-graders and seventh-graders had attendance rates of 95 percent or higher, and another 27 percent or so had attendance rates of 90 percent to 94 percent. Average attendance rates for these two groups are about 91 percent. In contrast, only about 32 percent of ninth-graders had high attendance, and a very large fraction of those students (about 27 percent) attended for less than 80 percent of the time. Overall, the data show that there is ample room for improvement in attendance rates, particularly among high school students. There is also some, although less, room for improvement among the younger students.<sup>11</sup> Approximately 30 percent of elementary and middle school

<sup>&</sup>lt;sup>11</sup>Partly because of the fairly high average attendance rates for elementary and middle school students, rewards for attendance were dropped for these age groups for the third year of the program.

#### Figure 6.1





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

NOTES: Year 1 covers the 2007-2008 school year.

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

students and almost half of high school students attended for less than 90 percent of the time, which some have defined as chronic absence.<sup>12</sup>

The bottom bar chart in Figure 6.1 shows the percent of fourth- and seventh-grade students in the study who scored at the proficient level or higher on the ELA and math tests and, for ninth-graders, the percent who passed at least one Regents exam. As noted in Chapter 1, students in New York State must pass Regents exams in five core subjects as a requirement for graduation. As with the attendance data, the figure shows declining performance with grade level. For example, just over 70 percent of entering fourth-graders were deemed proficient in math in Year 1, compared with 60 percent of seventh-graders. Although students can take Regents exams at any point during high school, most students typically take at least one during their ninth-grade year. The figure shows that only about a third of ninth-graders in the control group passed at least one Regents exam during Year 1. Just over 60 percent of those students attempted at least one exam during the year, indicating a 55 percent pass rate (not shown). As with attendance, the ELA and math test scores and the Regents exam data show that there is substantial room for improvement, particularly for older students.

## Receipt of Education Rewards

As shown in Chapter 5, nearly all families received at least one reward payment, and the average family received a substantial amount of money per year. Table 6.4 presents the receipt of the education rewards in more detail, for all students in the study. The first two panels focus on elementary and middle school students. Over 95 percent of these students earned at least one reward during Year 1, and the receipt of rewards was spread fairly widely across the various activities. Although the most common award received among elementary school students was for attendance (86 percent), nearly three-fourths (74 percent) also received a reward for achieving proficiency on at least one test. Similarly, the majority of students earned rewards for having a library card (65 percent) and having a parent attend a parent-teacher conference (67 percent).

In terms of continued engagement, most students received attendance rewards fairly regularly. Among middle school students, for example, 57 percent of those who received an attendance reward did so in at least four activity periods (that is, 84.3 percent earned at least one attendance reward, and 47.7 percent of those students earned a reward in at least four activity periods). Comparing data for Year 1 and Year 2 also shows a pattern of continued engagement. Although fewer students received at least one education reward during Year 2, the total amount

<sup>&</sup>lt;sup>12</sup>Chang and Romero (2008).

## Table 6.4

## Education Rewards Earned, by School Level at the Time of Random Assignment

			Years 1 and 2
School Level and Outcome	Year 1	Year 2	Combined
Elementary school students			
Student earned any education reward (%)	96.5	92.3	98.2
Total amount earned <sup>a</sup> (\$)	494	553	1,005
Student earned at least 1 attendance reward (%) Student earned an attendance reward in <sup>a</sup> (%)	86.1	76.9	91.2
1 activity period only	16.0	22.2	
2-3 activity periods only	37.5	40.8	
4-5 activity periods	46.5	37.0	
Student earned reward for <sup>b</sup> (%)			
English Language Arts (ELA) test	50.3	65.0	75.7
Math test	68.2	74.4	84.0
ELA or math test	73.8	81.8	90.6
Student earned reward for obtaining a library card (%)	64.9	8.2	73.0
Students whose parents earned a reward			
for attending a parent-teacher conference (%)	67.3	64.5	78.5
Sample size			1,889
Middle school students			
Student earned any education reward (%)	96.8	89.3	98.9
Total amount earned <sup>a</sup> (\$)	614	688	1,222
Student earned at least 1 attendance reward (%) Student earned an attendance reward in <sup>a</sup> (%)	84.3	71.0	88.8
1 activity period only	16.0	23.4	
2-3 activity periods only	36.4	42.7	
4-5 activity periods	47.7	33.9	
Student earned reward for $b^{b}(\%)$			
English Language Arts (ELA) test	45.5	41.5	58.7
Math test	60.6	53.3	73.8
ELA or math test	69.7	59.2	81.7
Student earned reward for obtaining a library card (%)	63.8	8.4	72.2
Students whose parents earned a reward			
for attending a parent-teacher conference (%)	60.7	55.3	72.0
Sample size			1,264
			(continued)

159

			Years 1 and 2
School Level and Outcome	Year 1	Year 2	Combined
<u>High school students<sup>c</sup></u>			
Student earned any education reward (%)	87.8	75.0	90.4
Total amount earned <sup>a</sup> (\$)	1,167	1,227	2,073
Student earned at least 1 attendance reward (%)	67.5	52.2	72.0
Student earned an attendance reward in <sup>a</sup> (%)			
1 activity period only	22.0	26.7	
2-3 activity periods only	35.2	38.2	
4-5 activity periods	42.9	35.1	
Students earned at least one reward for			
Any Regents exam	40.6	48.6	60.0
Regents exam - Math A	22.6	18.4	39.4
Regents exam - Global History and Geography	7.2	23.2	28.3
Regents exam - U.S. History and Government	9.6	8.0	17.2
Regents exam - Comprehensive English	8.1	14.9	21.9
Regents exam - Science	24.5	15.2	38.2
For earning 11 or more credits (%)	51.0	41.3	56.2
For graduation <sup>d</sup> (%)	75.0	60.3	74.3
For obtaining a library card (%)	57.6	6.0	63.1
For taking the $PSAT^{e}$ (%)	15.3	10.2	12.8
Students whose parents earned a reward			
for attending a parent-teacher conference (%)	48.4	40.0	56.4
Sample size			1,538

Table 6.4 (continued)

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

NOTES: The first program year covers September 2007 through August 2008, and the second program year covers September 2008 through August 2009.

<sup>a</sup>This is calculated only for students who earned any attendance rewards.

<sup>b</sup>Receipt of test score rewards in a given year is calculated only for students who are in grades that take the tests (grades 3 to 5 among elementary school students and grades 6 to 8 among middle school students).

<sup>c</sup>Unless otherwise indicated, Year 2 reward outcomes for high school students are calculated only for students who entered the study in grade 9, 10, or 11.

<sup>d</sup>The receipt of graduation rewards for Year 1 is calculated for students who entered the study in grade 12. The rate for Year 2 is calculated for students who entered the study in grade 11. The combined-year rate is calculated for students who entered the study in grade 11 or 12.

<sup>e</sup>The receipt of PSAT rewards for Year 1 is calculated for students who entered the study in grade 10 or 11. The rate for Year 2 is calculated for students who entered the study in grade 9 or 10. The combined-year rate is calculated for students who entered the study in grade 9, 10, or 11.

of money earned in that year is somewhat higher. The differences between Year 1 and Year 2 are not large.

The final panel presents data for high school students. In order to present an accurate measure of program engagement, receipt rates for Year 2 were calculated only for students who entered the study as ninth-, tenth-, or eleventh-graders. Overall, the third panel shows that high school students were somewhat less likely than their younger counterparts to earn rewards, but they tended to earn substantially more money, about \$1,200 on average during each year. Receipt rates were fairly high across most activities. About 41 percent of high school students earned a reward for passing a Regents exam in Year 1, for example, and 60 percent earned such a reward over Years 1 and 2 combined. Just over half of the students earned rewards for earning 11 or more credits, and 75 percent of students who entered the study as twelfth-graders received a reward for graduating in Year 1. The receipt of rewards for taking the PSAT, in contrast, was fairly low, at 15 percent in Year 1 and 10 percent in Year 2.

#### Impacts on School Activities and Outcomes

This section presents the effects of the Family Rewards program on a variety of schooling outcomes. Many of the measures that are examined are determinants of school achievement, such as parental engagement with teachers and children, students' use of tutoring, or students' participation in extracurricular activities. The model underlying the Family Rewards program assumes that any effects on ultimate school outcomes will occur largely through changes in these factors, which are measured using parents' responses to the 18-month survey. Measures of school performance are obtained largely from DOE records and include attendance rates, test scores, credits earned, and grade progression.

#### **Elementary School Students**

Table 6.5 presents self-reported data from the survey on parental engagement. The data for parents in the control group indicate a high level of engagement. For example, over 97 percent of parents in the control group reported attending a parent-teacher conference since study entry. Overall, the program had few effects on parental engagement with teachers among parents of fourth-graders.

The second panel presents various measures of parents' engagement with their children, ranging from talking to children generally about school to helping them prepare for tests. The measures range from 1 (indicating that the parent never took part in this activity in the past month) to 4 (meaning that the parent undertook this activity several times per week). Although

#### Table 6.5

#### Impacts on Parents' Engagement in Focal Child's Schooling and on Allowance Payments: Elementary School Students

	Program	Control	Difference		Effect
Outcome	Group	Group	(Impact)	P-Value	Size
Parent-teacher interactions since random assignment (%)					
Respondent attended parent-teacher conference	98.1	97.3	0.8	0.441	
Respondent talked with teacher about grades, tests, or homework $^{a}$	95.0	93.8	1.3	0.419	
School contacted respondent because of a problem	37.5	39.5	-2.0	0.541	
Parent-child interactions in past month					
Respondent has done the following (1 = never; 4 = several times per week) Talked with child about school Helped child with homework Checked to see child's homework was complete Helped child prepare for test	3.9 3.6 3.9 3.3	3.9 3.6 3.9 3.1	0.0 0.1 0.0 * 0.2 ***	0.211 0.341 0.098 0.001	0.084 0.064 0.112 0.230
Allowance payments					
Child receives an allowance (%)	64.6	57.4	7.1 **	0.022	
Child does something to earn the allowance (%)	50.2	45.5	4.7	0.148	
Average weekly allowance amount (\$)	6.57	5.58	1.00 *	0.059	
Among those who received allowance, average weekly amount (\$)	10.40	9.74			
Sample size (total = 911)	468	443			

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: This table presents outcomes only for focal children who were living in the household and were in elementary school at the time of the interview and at random assignment. Nearly all were in the fourth-grade target group.

Italic type indicates comparisons that are nonexperimental. Statistical tests were not performed.

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 families or sample members.

Rounding may cause slight discrepencies in calculating sums and differences.

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.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcome for both groups combined.

<sup>a</sup>This excludes discussions at formal parent-teacher conferences.

the responses indicate a fairly high level of parental involvement, the program did increase selfreported involvement in two areas — checking on children's homework (a modest impact, which shows up as zero in the table because of rounding) and helping children prepare for tests.

Program group parents of elementary school children were also more likely to report providing an allowance to their children, from 57.4 percent for the control group to 64.6 percent for the program group, for a statistically significant difference of 7.1 percentage points. On average, the children in the control group received \$5.58 per week, although this average includes zeroes for children who did not receive any allowance. Among those who received an allowance, the average payment was about \$10 per week. Children in the program group received more, on average (\$6.57), than did children in the control group, partly because they were more likely to get any allowance and partly because those who did get an allowance received slightly higher amounts. See Box 6.1 for a discussion of the ways in which parents shared the reward money with their children.

#### Box 6.1

#### Sharing Reward Money with Children

The in-depth interviews that were conducted for the evaluation revealed that parents who were enrolled in Family Rewards used different strategies for giving their children access to money, and they may have considered many of these strategies to be types of allowances when responding to the 18-month survey. At one end of the spectrum, some parents did not let their younger children know they were part of Family Rewards, fearing it would put too much pressure on them, but gave them money for special occasions. Others tied cash specifically to the children's achievement; for example, one mother took her son and daughter to Busch Gardens as a reward for doing well on tests. Finally, some parents used the extra income coming from the program to provide a more regular "allowance," independent of rewards. As one parent explained, "So when that money did come in, I was like, 'Okay, you got the money — some money from the program, you know. We can go — if you wanna go shopping, get some sneakers or whatever, whatever,' and they get their money also to do whatever they have to do. You know...to buy little things that they [want]...."

Table 6.6 presents data from the survey on parents' reports of their children's school performance and activities. Parents in the study report that their children are doing fairly well in school. Over 65 percent of parents in the control group, for example, report that their children are doing well or very well in school. The program had no effect on parents' ratings of their children's performance.

## Table 6.6

## Impacts on Focal Child's Educational Outcomes and Activities: Elementary School Students

	Program		Difference		Effect
Outcome	Group	Group	(Impact)	P-Value	Size
School status					
Child currently attends school (%)	100.0	100.0	0.0	1.000	
NYC public school	97.1	96.5	0.7	0.574	
Parochial or other private school in NYC	2.3	2.1	0.2	0.860	
Public or private school outside NYC	0.4	1.4	-0.9	0.136	
Other	0.2	0.1	0.1	0.650	
Child's school performance $(1 = not well at all; 5 = very well)$	4.0	4.0	0.0	0.967	-0.003
Very well (%)	41.1	42.7	-1.6	0.594	
Well (%)	25.0	24.2	0.8	0.784	
Average (%)	25.3	23.0	2.3	0.407	
Below average (%)	6.5	7.2	-0.7	0.658	
Not well at all (%)	2.2	2.9	-0.8	0.477	
Child has done the following since random assignment (%)					
Received an academic award	69.5	68.9	0.6	0.846	
Participated in educational programs,					
such as extra classes or tutoring	77.8	73.5	4.3	0.137	
Received special education	25.7	25.2	0.5	0.824	
Internet/library use (%)					
Child has access to Internet from home	79.7	78.4	1.3	0.624	
Child has public library card	97.5	89.1	8.3 ***	· 0.000	
Number of times child went to public library in past 6 months					
0	7.9	15.0	-7.2 ***	· 0.001	
1-2	23.2	19.8	3.5	0.216	
3-5	31.0	27.6	3.4	0.267	
6 or more	37.9	37.6	0.3	0.938	
Activities since random assignment (%)					
Child participated in any extracurricular activity	94.1	91.7	2.4	0.154	
Before- or after-school program	36.3	32.3	4.0	0.208	
Program to help with schoolwork or homework	51.9	46.2	5.7 *	0.086	
School clubs or organizations	19.3	16.2	3.1	0.234	
Sports	54.6	52.5	2.0	0.535	
Band, choir, orchestra, or chorus	27.5	26.7	0.8	0.790	
Lessons such as dance, music, or arts and crafts <sup>a</sup>	64.1	61.0	3.1	0.341	
Club or youth group	30.1	30.5	-0.4	0.891	
Recreation or community center activities	26.0	29.2	-3.3	0.275	
Sample size (total = 911)	468	443			
Sampre Sille (10tmi - )11)	-100	5		(	ntinued)

#### Table 6.6 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: This table presents outcomes only for focal children who were living in the household and were in elementary school at the time of the interview and at random assignment. Nearly all were in the fourth-grade target group.

Sample sizes vary because of missing values.

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 families or sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcome for both groups combined.

<sup>a</sup>This measure includes all lessons except those that involve sports.

In terms of children's activities, the program increased the number of children with a public library card and their use of the library. Fewer parents in the program group reported that their children had never been to the public library in the past six months. Although the program had no effect on Internet access, almost 80 percent of parents reported that their children have access to the Internet from home. The final set of rows ("Activities since random assignment") presents data on extracurricular activities. Almost all children in the control group participated in at least some type of activity, with the most common activities being lessons and sports. The program did not increase the overall rate of participation. The statistically significant impact on participation in programs to help with schoolwork should be interpreted with some caution, given that it is only one statistically significant effect among the many outcomes that were examined.

Table 6.7 presents effects on enrollment status, attendance, and test scores based on DOE administrative records. The top panel includes only entering fourth-graders, and the bottom panel includes all entering elementary school students (kindergarten through fifth grade). More than 90 percent of students who entered the study as fourth-graders were enrolled in the fifth grade during their second year in the program. Most of the remaining students transferred out of the school system, and few students were retained in the fourth grade. The program had no effects on enrollment status.

Attendance rates for fourth-graders are fairly high, at 91 percent on average for control group students. However, as shown earlier, there is room for improvement in terms of achieving very high attendance — only 43.3 percent of control group students attended for 95 percent or

## Table 6.7

## Impacts on Attendance and Test Scores: Elementary School Students

	Program	Control	Difference		Effect
Grade Level and Outcome	Group	Group	(Impact)	P-Value	Size
4th-graders at random assignment					
Enrollment status, Year 2 (%)					
Enrolled in 5th grade	91.9	93.2	-1.3	0.300	
Remained in 4th grade	1.5	0.8	0.7	0.173	
Not enrolled in NYC public schools <sup>a</sup>	6.4	5.7	0.7	0.547	
Attendance					
Attendance rate, Year 1	91.5	91.0	0.5	0.414	0.040
Attendance rate, Year 2	87.9	88.3	-0.4	0.689	-0.019
Attendance rate is 95% or higher, Year 1	43.2	43.3	-0.1	0.973	
Attendance rate is 95% or higher, Year 2	44.5	41.6	2.9	0.225	
Test scores					
English Language Arts (ELA) scale score, Year 1	646.9	647.0	-0.1	0.914	-0.004
ELA scale score, Year 2	661.5	661.4	0.1	0.943	0.003
Percentage proficient on ELA test, Year 1	50.7	51.1	-0.4	0.859	
Percentage proficient on ELA test, Year 2	67.6	68.1	-0.4	0.828	
Math scale score, Year 1	669.4	668.9	0.5	0.672	0.014
Math scale score, Year 2	674.0	673.5	0.5	0.683	0.015
Percentage proficient on math test, Year 1	73.4	71.2	2.1	0.238	
Percentage proficient on math test, Year 2	80.3	78.6	1.7	0.345	
Among students enrolled					
Attendance rate, Year 1	92.4	92.3			
Attendance rate, Year 2	92.4	92.4			
Sample size (total = $1,726$ )	862	864			
Kindergarten to 5th-graders at random assignmen	ıt				
Attendance					
Attendance rate, Year 1	91.5	91.0	0.5	0.173	0.049
Attendance rate, Year 2	88.8	88.7	0.2	0.823	0.008
Attendance rate is 95% or higher, Year 1	43.7	41.1	2.7	0.142	
Attendance rate is 95% or higher, Year 2	42.6	39.4	3.2 *	0.076	
Test scores <sup>b</sup>					
ELA scale score, Year 1	647.5	646.6	0.9	0.383	0.026
ELA scale score, Year 2	658.1	657.4	0.9	0.383	0.020
,					
Percentage proficient on ELA test, Year 1 Percentage proficient on ELA test, Year 2	49.5 63.1	49.9	-0.5 1.2	$0.790 \\ 0.461$	
Percentage proficient on ELA test, Year 2	03.1	61.9	1.2	0.401	

Grade Level and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Math scale score, Year 1	668.4	667.6	0.9	0.399	0.025
Math scale score, Year 2	673.5	672.9	0.6	0.568	0.018
Percentage proficient on math test, Year 1	73.0	71.3	1.7	0.270	
Percentage proficient on math test, Year 2	79.0	76.2	2.9 **	0.039	
Sample size (total = $3,692$ )	1,889	1,803			

Table 6.7 (continued)

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

NOTES: 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 family or sample members. Standard errors were adjusted to account for multiple observations per family.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

Italic type indicates comparisons that are nonexperimental. Statistical tests were not performed.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcome for both groups combined.

In New York State, students who score at a level of 3 or higher on a 4-point scale are deemed "proficient." Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively.

<sup>a</sup>Nonenrolled students may be attending private schools in New York City or any schools outside New York City or may have dropped out of school.

<sup>b</sup>Year 1 test scores and proficiency are shown for grades 3 through 5 at random assignment. Year 2 test scores are shown for grades 2 through 5 at random assignment.

more of the time during Year 1. Attendance rates fall somewhat from Year 1 to Year 2, although this is largely because of the inclusion of nonenrolled students in the attendance measures.<sup>13</sup> The bottom rows present attendance for enrolled students and show similar rates for both years. The program had no effects on attendance.

In contrast to the attendance measures, only students who took the ELA and math tests were used as the denominator when calculating average test scores and proficiency rates in each year. Few students were missing test score data in either year and there were no differences between the program and control groups in the percentage who were missing data. In Year 1, about half of the control group students scored at the proficient level or higher on the ELA test and 71 percent were proficient in math. Proficiency rates, particularly for math,

<sup>&</sup>lt;sup>13</sup>In order to keep the analysis experimental, attendance impacts are calculated using the full program group and the full control group, even though some fraction of these students was no longer enrolled in New York City public schools during the second year.

increased from the first to the second year. The program had no effect on average test scores or proficiency rates.<sup>14</sup>

Results for the full group of elementary school students, shown in the bottom panel of Table 6.7, are similar to those shown in the top panel, in part because entering fourth-graders account for a large fraction of the sample.<sup>15</sup> However, for this larger sample the data show small but statistically significant increases in high attendance and math proficiency in Year 2. These increases should be viewed with some caution, however, given that one or two significant effects are likely to emerge by chance when examining a large number of outcomes.

#### Middle School Students

Table 6.8 presents measures of parental engagement for parents of entering seventhgraders. Looking first at outcomes for the control group, parental engagement is still quite high, although somewhat lower than for the parents of younger children. On most measures of parentchild interactions, for example, parents of seventh-graders reported less frequent interaction than did parents of fourth-graders. The program led to a small increase in reported attendance at parent-teacher conferences (3.3 percentage points) and to a moderate increase in the frequency with which parents helped their children with homework.

As for the younger children, the most notable effects in this area were on allowance. Parents in the program group were more likely to report giving their children an allowance than were parents in the control group (73.3 percent versus 65.2 percent), and they were more likely to report that this allowance was conditional upon certain behaviors or activities. Children in the program group received a larger allowance on average than did their control group counterparts, but largely because they were more likely to receive any allowance. Among children in both research groups who received an allowance, the average amount received was about \$16 per week.

Table 6.9 presents data on school performance and activities among middle school students (mostly seventh-graders). The most notable difference in these measures between this group of students and the elementary school students (mostly fourth-graders) shown in Table 6.6 is parents' reports of their children's school performance. The average scale rating

<sup>&</sup>lt;sup>14</sup>Comparing the proficiency rates for the program group with the receipt of education rewards (Table 6.4) suggests that nearly all the students who scored at the proficient level or higher on these tests received a test score reward. For example, 73.0 percent of program group elementary school students were proficient in math during Year 1 (Table 6.7), and 68.2 percent received the math test reward (Table 6.4).

<sup>&</sup>lt;sup>15</sup>The sample changes from Year 1 to Year 2 for the test score outcomes. In Year 1, the group of test takers includes entering third- through fifth-graders. In Year 2, the group includes this sample plus students who entered the study as second-graders.

Table 6.8

#### Impacts on Parents' Engagement in Focal Child's Schooling and on Allowance Payments: Middle School Students

	Program		Difference		Effect
Outcome	Group	Group	(Impact)	P-Value	Size
<u>Parent-teacher interactions since</u> random assignment (%)					
Respondent attended parent-teacher conference	96.9	93.6	3.3 **	0.019	
Respondent talked with teacher about grades, tests, or					
homework <sup>a</sup>	94.6	93.0	1.6	0.329	
School contacted respondent because of a problem	47.5	48.2	-0.7	0.840	
Parent-child interactions in past month					
Respondent has done the following					
(1 = never; 4 = several times per week)					
Talked with child about school	3.9	3.9	0.0	0.738	0.022
Helped child with homework	3.1	2.9	0.2 **	0.034	0.141
Checked to see child's homework was complete	3.7	3.7	0.0	0.767	0.020
Helped child prepare for test	2.8	2.7	0.1	0.199	0.087
Allowance payments					
Child receives an allowance (%)	73.3	65.2	8.1 ***	0.008	
Child does something to earn the allowance (%)	60.1	52.3	7.9 **	0.017	
Average weekly allowance amount (\$)	11.74	10.36	1.38 *	0.092	
Among those who received allowance,					
average weekly amount (\$)	16.42	16.06			
Sample size $(total = 911)$	485	426			

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: This table presents outcomes only for focal children who were living in the household and were in middle school at the time of the interview and at random assignment. Nearly all were in the seventh-grade target group.

Italic type indicates comparisons that are nonexperimental. Statistical tests were not performed. Sample sizes vary because of missing values.

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 families or sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standared deviation of the outcomes for both groups combined.

<sup>a</sup>This excludes discussions at formal parent-teacher conferences.

## Table 6.9

#### Impacts on Focal Child's Educational Outcomes and Activities: Middle School Students

	Program	Control	Difference		Effect
Outcome	Group	Group	(Impact)	P-Value	Size
<u>School status</u>					
Child currently attends school (%)	99.6	99.8	-0.3	0.495	
NYC public school	95.7	97.0	-1.3	0.310	
Parochial or other private school in NYC	1.8	1.7	0.1	0.934	
Public or private school outside NYC	1.6	0.7	0.9	0.208	
Other	0.5	0.4	0.0	0.935	
Child's school performance (1 = not well at all; 5 = very well)	3.7	3.7	0.0	0.757	0.020
Very well (%)	34.8	36.8	-2.0	0.514	
Well (%)	20.1	21.0	-0.9	0.748	
Average (%)	32.4	25.0	7.4 **	0.014	
Below average (%)	9.8	11.8	-2.0	0.327	
Not well at all (%)	2.9	5.5	-2.6 *	0.053	
Child has done the following since random assignment (%)					
Received an academic award	61.1	61.4	-0.3	0.921	
Participated in educational programs,					
such as extra classes or tutoring	75.9	68.7	7.2 **	0.017	
Received special education	21.8	20.0	1.9	0.323	
Internet/library use (%)					
Child has access to Internet from home	84.2	81.5	2.7	0.283	
Child has public library card	96.7	92.0	4.6 ***	0.002	
Number of times child went to public library in past 6 months					
0	11.2	15.9	-4.7 **	0.042	
1-2	19.5	25.1	-5.5 *	0.053	
3-5	25.4	24.7	0.8	0.800	
6 or more	43.8	34.3	9.5 ***	0.004	
Activities since random assignment (%)					
Child participated in any extracurricular activity	91.1	89.7	1.4	0.475	
Before- or after-school program	19.9	16.7	3.2	0.219	
Program to help with schoolwork or homework	48.6	42.7	5.9 *	0.076	
School clubs or organizations	31.3	25.3	6.0 **	0.043	
Sports	56.0	55.4	0.6	0.847	
Band, choir, orchestra, or chorus	28.6	22.5	6.0 **	0.041	
Lessons such as dance, music, or arts and crafts <sup>a</sup>	56.2	48.9	7.3 **	0.029	
Club or youth group	36.3	29.9	6.5 **	0.041	
Recreation or community center activities	32.8	30.0	2.8	0.363	
Sample size (total = 911)	485	426			
		.20		(con	tinued)

#### Table 6.9 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: This table presents outcomes only for focal children who were living in the household and were in middle school at the time of the interview and at random assignment. Nearly all were in the seventh-grade target group.

Sample sizes vary because of missing values.

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 families or sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculationg sums and differences.

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 program and control groups arose by chance.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcome for both groups combined.

<sup>a</sup>This measure includes all lessons except those that involve sports.

is lower for seventh-graders (3.7) than for fourth-graders (4.0), and fewer parents of seventhgraders report that their children are performing "very well" in school. This change in parents' perceptions matches a real decline in performance. As shown in an earlier section, seventh-graders do perform at somewhat lower levels than do fourth-graders, at least on standardized math tests. Overall, the program did not increase parents' rating of their children's school performance, although it did increase the proportion of parents who described their children's performance as "average."

The primary effect of the program for middle school students was on their participation in school-related activities. For example, 75.9 percent of program group parents reported that their children had participated in education programs, such as tutoring or extra classes, since study entry, compared with 68.7 percent of control group parents. The program also increased participation in a range of extracurricular activities, including lessons (such as dance or music lessons), band or orchestra, and youth groups. Note, however, that there is no increase in the rate of students who participated in "any extracurricular activity." This pattern of effects suggests that the program encouraged students who would have already participated in at least one activity to take up additional ones. Although student participation in extracurricular activities is not a rewarded activity, parents may have used the additional income provided by the program to cover the cost of these types of activities for their children.<sup>16</sup>

<sup>&</sup>lt;sup>16</sup>The Milwaukee New Hope program also led to an increase in children's participation in after-school, structured activities, and it is hypothesized that this effect was in part a result of increased family income (Bos et al., 1999).

Table 6.10 presents effects on enrollment, attendance, and test scores based on DOE administrative records. The first item in the top panel shows that more than 90 percent of entering seventh-graders were enrolled as eighth-graders in Year 2. Attendance rates for seventh-graders in the control group are on a par with those for fourth-graders during Year 1. The program had no effect on attendance rates in either year. Similarly, the program had no effect on test scores.<sup>17</sup> Results were similar when estimated using the full sample of entering middle school students.

#### **High School Students**

Table 6.11 (page 175) presents measures of parental engagement for parents of entering ninth-graders. Comparing this table with the tables for the younger students shows that parental engagement, at least as measured by the survey data, continues to fall as children age. Control group parents of ninth-graders were less likely than parents of younger children to report having attended a parent-teacher conference since study entry, and they scored lower on all the measures of parent-child interaction. The program had no effects on these measures of parent engagement. Parents in the program group did tend to give their children more in allowance, about \$2 more per week compared with control group parents. Children in the program group who received allowance received, on average, \$23 per week.

Table 6.12 (page 176) presents measures of ninth-graders' school performance and activities. Overall, there were few program effects on these outcomes. One exception is a large increase in students' use of the public library — only 14.9 percent of program group students had never been to the library in the six months preceding the survey, compared with 27.8 percent of control group students, for an impact of 12.8 percentage points. Unlike the impact for the younger children, this impact on library use was not accompanied by an increase in the percentage of students who had a library card. In addition, the program led to a small increase in participation in extracurricular activities.

Table 6.13 (page 178) presents effects on enrollment, attendance, and credits earned based on DOE administrative records. The top panel, for entering ninth-graders, illustrates the increasing problems with attendance and progression for older students. Only about 70 percent of entering ninth-graders were enrolled in tenth grade in Year 2, with most of the remaining students retained in ninth grade. The program had no effect on enrollment status but did increase the likelihood of very high attendance in Year 2. About 29 percent of program group students

<sup>&</sup>lt;sup>17</sup>There was a small but statistically significant difference between the program and control groups in the percentage of students missing a Year 2 ELA test score. Because this difference was small, at 2 percentage points, students with no test data were still excluded from the test score comparisons.

## **Table 6.10**

#### Impacts on Attendance and Test Scores: Middle School Students

	Program	Control	Difference		Effect
Grade Level and Outcome	Group	Group	(Impact)	P-Value	Size
7th-graders at random assignment					
Enrollment status, Year 2 (%)					
Enrolled in 8th grade	92.9	94.2	-1.3	0.308	
Remained in 7th grade	1.3	1.4	-0.1	0.866	
Not enrolled in NYC public schools <sup>a</sup>	5.6	4.0	1.6	0.137	
Attendance					
Attendance rate, Year 1	91.1	90.8	0.3	0.551	0.029
Attendance rate, Year 2	86.4	87.6	-1.2	0.182	-0.065
Attendance rate is 95% or higher, Year 1	43.5	43.1	0.4	0.876	
Attendance rate is 95% or higher, Year 2	36.6	34.9	1.6	0.472	
Test scores					
English Language Arts (ELA) scale score, Year 1	648.7	649.2	-0.5	0.618	-0.017
ELA scale score, Year 2	646.6	646.5	0.1	0.920	0.003
Percentage proficient on ELA test, Year 1	50.6	50.6	0.0	0.983	
Percentage proficient on ELA test, Year 2	46.5	46.0	0.5	0.824	
Math scale score, Year 1	653.7	654.4	-0.6	0.548	-0.019
Math scale score, Year 2	658.0	659.8	-1.9 *	0.081	-0.060
Percentage proficient on math test, Year 1	60.4	59.6	0.8	0.690	
Percentage proficient on math test, Year 2	61.9	63.5	-1.6	0.414	
Amono students ennelled.					
Among students enrolled: Attendance rate, Year 1	91.7	91.2			
Attendance rate, Year 2	89.9	89.6			
·	823	848			
Sample size (total = 1,671)	823	848			
6th- to 8th-graders at random assignment					
Attendance (%)					
Attendance rate, Year 1	90.8	90.1	0.7	0.126	0.062
Attendance rate, Year 2	86.0	86.3	-0.3	0.743	-0.013
Attendance rate is 95% or higher, Year 1	42.0	39.8	2.1	0.281	
Attendance rate is 95% or higher, Year 2	36.0	32.3	3.7 *	0.052	
Test scores <sup>b</sup>					
ELA scale score, Year 1	644.9	646.0	-1.1	0.162	-0.039
ELA scale score, Year 2	647.6	648.0	-0.3	0.693	-0.013
Percentage proficient on ELA test, Year 1	44.6	43.9	0.7	0.677	
Percentage proficient on ELA test, Year 2	50.5	49.0	1.4	0.432	
		- /-			ntinued)

Grade Level and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Math scale score, Year 1	653.1	653.2	-0.1	0.914	-0.003
Math scale score, Year 2	659.1	660.6	-1.5	0.111	-0.050
Percentage proficient on math test, Year 1	58.8	56.8	1.9	0.225	
Percentage proficient on math test, Year 2	64.3	65.6	-1.2	0.491	
Sample size $(total = 2,581)$	1,264	1,317			

#### Table 6.10 (continued)

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

NOTES: Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Italic type indicates comparisons that are nonexperimental. Statistical tests were not performed.

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

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcome for both groups combined.

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

Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively.

<sup>a</sup>Nonenrolled students may be attending private schools in New York City or any school outside New York City or may have dropped out of school.

attended at least 95 percent of the time, compared with only 23.7 percent of control group students, for a statistically significant difference of 5.2 percentage points.

Students in the program group were also more likely to have attempted at least 11 credits during their ninth-grade year, the minimum number considered necessary to make progress toward graduating in four years. However, they were not more likely to have *earned* 11 or more credits in either year. A good measure of progress over the two-year period is the percentage of students who had earned at least 22 credits. Only about 45 percent of the students had met this benchmark, and the program had no effect on this outcome. The bottom panel of Table 6.13 presents data for all high school students, showing roughly similar effects, with the exception of an increase in high attendance during Year 1 as well as during Year 2.

#### **Table 6.11**

#### Impacts on Parents' Engagement in Focal Child's Schooling and on Allowance Payments: High School Students

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Parent-teacher interactions since random assignment (%)					
Respondent attended parent-teacher conference	90.3	87.7	2.6	0.231	
Respondent talked with teacher about grades, tests, or homework $^{a}$	92.8	92.6	0.2	0.918	
School contacted respondent because of a problem	47.8	44.5	3.3	0.328	
Parent-child interactions in past month					
Respondent has done the following (1 = never; 4 = several times per week) Talked with child about school Helped child with homework Checked to see child's homework was complete Helped child prepare for test	3.8 2.6 3.6 2.5	3.8 2.5 3.5 2.4	$0.0 \\ 0.0 \\ 0.0 \\ 0.1$	0.470 0.875 0.520 0.416	0.049 0.011 0.044 0.056
Allowance payments					
Child receives an allowance (%)	70.6	66.6	3.9	0.212	
Child does something to earn the allowance (%)	55.8	52.1	3.7	0.278	
Average weekly allowance amount (\$)	16.18	14.19	2.0 *	0.073	
Among those who received allowance, average weekly amount (\$)	23.09	22.00			
Sample size (total = 870)	469	401			

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: This table presents outcomes only for focal children who were living in the household and were in high school at the time of the interview and at random assignment. Nearly all were in the ninth-grade target group.

Italic type indicates comparisons that are nonexperimental. Statistical tests were not performed. Sample sizes vary because of missing values.

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 families or sample members.

Rounding may cause slight discrepancies calculating sums and differences.

A two-tailed t-test was applied to differences between outcomes for program and control groups.

The p-value indicates the likelihood that the differences between the program and control groups arose by chance.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcome for both groups combined.

<sup>a</sup>This excludes discussions at formal parent-teacher conferences.

#### **Table 6.12**

## Impacts on Focal Child's Educational Outcomes and Activities: High School Students

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Outcome School Advance	Gloup	Oloup	(Impact)	r-value	5120
School status					
Child currently attends school (%)	98.2	96.9	1.3	0.204	
NYC public school	94.5	92.1	2.4	0.160	
Parochial or other private school in NYC	1.6	2.4	-0.7	0.440	
Public or private school outside NYC Other	0.6 1.5	1.3 1.1	-0.7 0.4	0.269 0.610	
Child's school performance $(1 = not well at all; 5 = very well)$	3.4	3.4	0.0	0.779	-0.018
Very well (%)	24.9	27.2	-2.2	0.446	
Well (%)	22.8	19.2	3.6	0.190	
Average (%)	30.1	31.1	-1.0	0.752	
Below average (%)	11.6	13.8	-2.2	0.331	
Not well at all (%)	10.6	8.8	1.8	0.372	
Child has done the following since random assignment (%) Received an academic award	44.2	45.9	-1.7	0.605	
Participated in educational programs,	44.2	43.9	-1.7	0.005	
such as extra classes or tutoring	68.0	63.4	4.6	0.160	
Enrolled in college exam preparation program	39.0	32.3	6.7	0.563	
Received special education	18.1	22.1	-3.9 *	0.053	
Internet/library use (%)					
Child has access to Internet from home	83.8	84.5	-0.7	0.783	
Child has public library card	93.4	91.9	1.5	0.401	
Number of times child went to public library in					
past 6 months	14.0	27.9	100 ***	0.000	
0 1-2	14.9 23.6	27.8 21.0	-12.8 *** 2.5	0.000 0.384	
3-5	25.0	18.0	2.3 9.7 ***		
6 or more	33.8	33.3	0.6	0.868	
Activities since random assignment (%)					
Child participated in any extracurricular activity	87.8	83.5	4.3 *	0.077	
Before- or after-school program	8.0	9.2	-1.2	0.545	
Program to help with schoolwork or homework	43.3	40.0	3.3	0.332	
School clubs or organizations	17.2	15.9	1.4	0.592	
Sports	51.8	49.1	2.7	0.429	
Band, choir, orchestra, or chorus	16.1	17.6	-1.5	0.554	
Lessons such as dance, music, or arts and crafts <sup>a</sup>	39.9	38.7	1.3	0.707	
Club or youth group	27.4	28.6	-1.2	0.700	
Recreation or community center activities	30.5	31.4	-0.9	0.783	
Sample size (total = 870)	469	401			

#### Table 6.12 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: This table presents outcomes only for focal children who were living in the household and were in high school at the time of the interview and at random assignment. Nearly all were in the ninth-grade target group.

Sample sizes vary because of missing values.

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 families or sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups.

<sup>a</sup>This measure includes all lessons except those that involve sports.

Tables 6.14 (page 180) and 6.15 (page 182) present data on another measure of high school progress, the taking and passing of Regents exams. For entering ninth-graders (Table 6.14), the effects are consistent with the effects on credits in that they show an increase in effort but not necessarily in achievement. More students in the program group attempted at least one Regents exam during their ninth-grade year, although they were not more likely to have passed at least one exam. There were no effects on the cumulative outcome over Years 1 and 2, suggesting that the program induced some ninth-graders to take Regents exams earlier than they would have otherwise.<sup>18</sup> Results for all high school students (Table 6.15) show a similar pattern, although there is a small positive impact on the rate of passing Regents exams during Year 1. Over the two-year period, the primary effect of the program was to increase the number of students who took Regents exams.

Finally, although eleventh and twelfth grades were not target grades, a key question for the first two years of follow-up is whether the program encouraged students to complete high school. Table 6.16 (page 184) presents data on graduation rates. For students in the control group who entered the study as twelfth-graders, only about 71 percent graduated during Year 1, and another 11 percent graduated during Year 2. The program had no effect on this group's graduation rates. Similarly, the program did not have a statistically significant effect on graduation for

<sup>&</sup>lt;sup>18</sup>For outcomes expressed as percentages, the effects for Years 1 and 2 combined will not necessarily equal the sum of effects in Year 1 and Year 2. As an extreme example, suppose that 50 percent of program group students and 25 percent of control group students take at least one exam in Year 1. During Year 2, those same 50 percent of program group students and a different 25 percent of control group students take at least one exam. Effects for Years 1 and 2 combined will be zero, since 50 percent of both the program and control group students will have taken at least one exam over the two-year period.

## **Table 6.13**

## Impacts on Attendance and Credits: High School Students

	Program	Control	Difference		Effect
Grade Level and Outcome	Group	Group	(Impact)	P-Value	Size
9th-graders at random assignment					
Enrollment status, Year 2 (%)					
Enrolled in 10th grade	70.3	68.8	1.5	0.446	
Remained in 9th grade	16.4	17.9	-1.5	0.362	
Not enrolled in NYC public schools <sup>a</sup>	11.7	11.6	0.1	0.967	
Attendance					
Attendance rate, Year 1	81.8	81.4	0.4	0.695	0.017
Attendance rate, Year 2	75.3	74.3	1.0	0.441	0.033
Attendance rate is 95% or higher, Year 1	34.0	31.6	2.5	0.226	
Attendance rate is 95% or higher, Year 2	28.8	23.7	5.2 ***	0.006	
Credits (%)					
Attempted 11 or more, Year 1	87.8	83.9	3.9 ***	0.006	
Attempted 11 or more, Year 2	80.5	77.9	2.6	0.126	
Earned 11 or more, Year 1	49.7	50.0	-0.3	0.886	
Earned 11 or more, Year 2	45.2	45.4	-0.2	0.922	
Earned 22 or more credits, Years 1 to 2	45.0	44.4	0.6	0.767	
Among students enrolled (%)					
Attendance rate, Year 1	86.0	85.5			
Attendance rate, Year 2	82.1	81.3			
Earned 22 or more credits, Years 1 to 2	50.7	50.4			
Sample size (total = 1,979)	988	991			
9th- to 12th-graders at random assignment <sup>b</sup>					
Attendance					
Attendance rate, Year 1	81.3	80.8	0.5	0.561	0.021
Attendance rate, Year 2	73.7	72.9	0.8	0.487	0.026
Attendance rate is 95% or higher, Year 1	31.4	28.0	3.4 **	0.041	
Attendance rate is 95% or higher, Year 2	26.0	22.8	3.2 **	0.048	
Credits (%)					
Attempted 11 or more, Year 1	84.5	81.6	2.9 **	0.017	
Attempted 11 or more, Year 2	76.2	73.5	2.8 *	0.073	
Earned 11 or more, Year 1	49.9	49.4	0.5	0.792	
Earned 11 or more, Year 2	45.0	45.7	-0.7	0.703	
Earned 22 or more credits, Years 1 to 2	44.7	44.7	0.0	0.999	
Sample size (total $=$ 3,077)	1,538	1,539			

#### Table 6.13 (continued)

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

NOTES: Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Italic type indicates comparisons that are nonexperimental. Statistical tests were not performed.

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

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcome for both groups combined.

Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively.

<sup>a</sup>Nonenrolled students may be attending private schools in New York City or any school outside New York City or may have dropped out of school.

<sup>b</sup>Outcomes for Year 2 and for Years 1 and 2 combined excludes students who entered the study as twelfth-graders.

entering eleventh-graders.<sup>19</sup> However, the difference between the program and control groups among entering eleventh-graders, at 9.5 percentage points, is notable and just misses statistical significance, with a p-value of 0.121.<sup>20</sup>

#### Summary of Effects on School Activities and Outcomes

In sum, considering the effects across all age groups, the program appears to have led to small increases in parental engagement among parents of children in elementary and middle school. Parents of middle school students were more likely to attend parent-teacher conferences, and parents of both groups of children had somewhat more frequent interactions with their

<sup>&</sup>lt;sup>19</sup>Entering twelfth-graders have a higher first-year graduation rate than entering eleventh-graders in part because of the way in which the sample was chosen for the study. Students were eligible for the study if, as of August or September of 2007, they were set to enroll in the next grade. Thus, the study sample of twelfth-graders represents a somewhat select group of students who had stayed in school up to that point and had plans to enroll for their senior year.

<sup>&</sup>lt;sup>20</sup>The impact analysis does not examine Family Rewards' effects on dropout rates. Although the DOE provided discharge data, students who are not officially discharged during the year as a graduate, a dropout, or a transfer (for example, to a private school or another school district) are considered to be still enrolled. If a twelfth-grader did not graduate during the year, for example, but was not officially discharged, he or she would not show up as a dropout. In fact, the fraction of twelfth-graders in the study who were coded as dropouts during Year 1 was less than less 3 percent, despite the fact that only about 70 percent had graduated. Conversations with DOE staff also indicate that these data are not comparable with published data on dropout rates.

### **Table 6.14**

# Impacts on Regents Exams Taken and Passed for Ninth-Graders at the Time of Random Assignment

Group         Group         Group         (Impact)         P-Value           Year 1         Took at least 1 Regents exam (%)         66.5         62.1         4.4 **         0.028           Took 1 Regents exam (%)         27.8         25.7         2.1         0.303           Took 2 Regents exams (%)         29.0         26.5         2.5         0.205           Took 3 or more Regents exams (%)         9.7         9.9         -0.1         0.915           Passed at least 1 Regents exam (%)         19.3         16.7         2.6         0.120           Passed 2 Regents exams (%)         13.8         13.9         -0.1         0.974           Passed 3 or more Regents exams (%)         3.7         3.9         -0.2         0.809           Number of Regents exams (%)         72.3         69.2         3.0         0.1111           Took at least 1 Regents exam (%)         12.6         1.5         1.2         0.42           Took 2 Regents exams (%)         12.6         1.5         1.2         0.426           Took 2 Regents exam (%)         12.6         1.7         1.9         0.280           Passed 1 Regents exam (%)         14.6         1.7         1.0         0.529           Passed 1 Regents exam (%)<		Program	Control	Difference	
Took at least 1 Regents exam (%)66.562.1 $4.4$ **0.028Took 1 Regents exam (%)27.825.72.10.303Took 2 Regents exams (%)9.026.52.50.205Took 3 or more Regents exam (%)9.79.9-0.10.915Passed at least 1 Regents exam (%)19.316.72.60.120Passed 2 Regents exam (%)13.813.9-0.10.974Passed 3 or more Regents exams (%)3.73.9-0.20.809Number of Regents exam (%)72.369.23.00.111Took at least 1 Regents exam (%)12.611.51.20.426Took 2 Regents exam (%)12.611.51.20.426Took 2 Regents exam (%)14.641.7-0.10.980Passed 1 Regents exam (%)19.617.71.90.280Passed 1 Regents exam (%)14.5844.21.60.417Passed 1 Regents exam (%)12.511.80.70.604Number of Regents exam (%)79.978.02.00.245Took at least 1 Regents exam (%)79.978.02.0 <t< th=""><th>Outcome</th><th>Group</th><th>Group</th><th>(Impact)</th><th>P-Value</th></t<>	Outcome	Group	Group	(Impact)	P-Value
Took 1 Regents exam (%)       27.8       25.7       2.1       0.303         Took 2 Regents exams (%)       29.0       26.5       2.5       0.205         Took 3 or more Regents exams (%)       9.7       9.9       -0.1       0.915         Passed at least 1 Regents exam (%)       19.3       16.7       2.6       0.120         Passed 2 Regents exams (%)       13.8       13.9       -0.1       0.974         Passed 3 or more Regents exams (%)       3.7       3.9       -0.2       0.809         Number of Regents exams (%)       3.7       3.9       -0.2       0.809         Number of Regents exams (%)       72.3       69.2       3.0       0.1111         Took at least 1 Regents exam (%)       72.3       69.2       3.0       0.1111         Took 1 Regents exam (%)       12.6       11.5       1.2       0.426         Took 2 Regents exams (%)       14.6       41.7       -0.1       0.980         Passed 1 Regents exam (%)       19.6       17.7       1.9       0.280         Passed 1 Regents exam (%)       19.6       17.7       1.9       0.280         Passed 2 Regents exams (%)       12.5       11.8       0.7       0.604         Number of Regents exam	Year 1				
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Took 3 or more Regents exams (%)9.79.9-0.10.915Passed at least 1 Regents exam (%)36.934.62.40.193Passed 2 Regents exams (%)13.813.9-0.10.974Passed 3 or more Regents exams (%)3.73.9-0.20.809Number of Regents exams passed0.60.60.00.614Year 2Took at least 1 Regents exam (%)72.369.23.00.111Took 1 Regents exam (%)12.611.51.20.426Took 2 Regents exams (%)14.641.7-0.10.980Passed 1 Regents exam (%)45.844.21.60.417Passed 1 Regents exam (%)14.215.1-1.00.529Passed 1 Regents exam (%)14.215.1-1.00.529Passed 3 or more Regents exams (%)14.215.1-1.00.529Passed 1 Regents exam (%)12.511.80.70.604Number of Regents exams (%)12.511.80.70.604Number of Regents exams (%)79.978.02.00.245Took at least 1 Regents exam (%)9.29.4-0.30.846Took 2 Regents exams (%)10.111.3-1.20.385Took 3 or more Regents exams (%)10.111.3-1.20.385Took at least 1 Regents exam (%)54.753.11.60.401Passed 1 least 1 Regents exam (%)38.237.60.70.719Passed 1 least 1 Regents exam (%) <td>Took 1 Regents exam (%)</td> <td>27.8</td> <td>25.7</td> <td>2.1</td> <td>0.303</td>	Took 1 Regents exam (%)	27.8	25.7	2.1	0.303
Passed at least 1 Regents exam (%)       36.9       34.6       2.4       0.193         Passed 1 Regents exam (%)       19.3       16.7       2.6       0.120         Passed 2 Regents exams (%)       13.8       13.9       -0.1       0.974         Passed 3 or more Regents exams (%)       3.7       3.9       -0.2       0.809         Number of Regents exams passed       0.6       0.6       0.0       0.614         Year 2       Took at least 1 Regents exam (%)       72.3       69.2       3.0       0.1111         Took 1 Regents exam (%)       12.6       11.5       1.2       0.426         Took 2 Regents exams (%)       18.1       16.1       1.9       0.252         Took 3 or more Regents exams (%)       41.6       41.7       -0.1       0.980         Passed 1 Regents exam (%)       19.6       17.7       1.9       0.280         Passed 2 Regents exam (%)       14.2       15.1       -1.0       0.529         Passed 3 or more Regents exams (%)       12.5       11.8       0.7       0.604         Number of Regents exams (%)       12.5       11.8       0.7       0.604         Number of Regents exam (%)       79.9       78.0       2.0       0.245	Took 2 Regents exams (%)	29.0	26.5	2.5	0.205
Passed 1 Regents exam (%)19.316.72.60.120Passed 2 Regents exams (%)13.813.9-0.10.974Passed 3 or more Regents exams (%)3.73.9-0.20.809Number of Regents exams passed0.60.60.00.614 <b>Year 2</b> Took at least 1 Regents exam (%)72.369.23.00.111Took 2 Regents exam (%)12.611.51.20.426Took 2 Regents exams (%)18.116.11.90.252Took 3 or more Regents exams (%)14.641.7-0.10.980Passed 1 Regents exam (%)45.844.21.60.417Passed 1 Regents exam (%)19.617.71.90.280Passed 2 Regents exams (%)14.215.1-1.00.529Passed 1 Regents exam (%)19.617.71.90.280Passed 2 Regents exams (%)14.215.1-1.00.529Passed 3 or more Regents exams (%)12.511.80.70.604Number of Regents exams (%)12.511.80.70.604Number of Regents exam (%)79.978.02.00.245Took at least 1 Regents exam (%)10.111.3-1.20.385Took 3 or more Regents exams (%)60.657.23.4 *0.097Passed at least 1 Regents exam (%)54.7 <td< td=""><td>Took 3 or more Regents exams (%)</td><td>9.7</td><td>9.9</td><td>-0.1</td><td>0.915</td></td<>	Took 3 or more Regents exams (%)	9.7	9.9	-0.1	0.915
Passed 2 Regents exams (%)       13.8       13.9       -0.1       0.974         Passed 3 or more Regents exams (%)       3.7       3.9       -0.2       0.809         Number of Regents exams passed       0.6       0.6       0.0       0.614         Year 2           0.611         Took at least 1 Regents exam (%)       72.3       69.2       3.0       0.111         Took 1 Regents exam (%)       12.6       11.5       1.2       0.426         Took 3 or more Regents exams (%)       18.1       16.1       1.9       0.252         Took 3 or more Regents exams (%)       45.8       44.2       1.6       0.417         Passed 1 Regents exam (%)       19.6       17.7       1.9       0.280         Passed 2 Regents exams (%)       12.5       11.8       0.7       0.604         Number of Regents exam (%)       19.6       17.7       1.9       0.280         Passed 3 or more Regents exams (%)       12.5       11.8       0.7       0.604         Number of Regents exam (%)       19.6       17.7       1.9       0.280         Passed 3 or more Regents exams (%)       12.5       11.8       0.7       0.604         Number of Regent	Passed at least 1 Regents exam (%)	36.9	34.6	2.4	0.193
Passed 3 or more Regents exams (%)       3.7       3.9       -0.2       0.809         Number of Regents exams passed       0.6       0.6       0.0       0.614         Year 2	Passed 1 Regents exam (%)	19.3	16.7	2.6	0.120
Number of Regents exams passed       0.6       0.6       0.0       0.614         Year 2       Vear 2       Vear 3       0.6       0.0       0.111         Took at least 1 Regents exam (%)       72.3       69.2       3.0       0.111         Took 1 Regents exam (%)       12.6       11.5       1.2       0.426         Took 2 Regents exams (%)       18.1       16.1       1.9       0.252         Took 3 or more Regents exams (%)       41.6       41.7       -0.1       0.980         Passed at least 1 Regents exam (%)       45.8       44.2       1.6       0.417         Passed 1 Regents exam (%)       19.6       17.7       1.9       0.280         Passed 2 Regents exams (%)       14.2       15.1       -1.0       0.529         Passed 3 or more Regents exams (%)       12.5       11.8       0.7       0.604         Number of Regents exam (%)       12.5       11.8       0.7       0.604         Number of Regents exam (%)       79.9       78.0       2.0       0.245         Took at least 1 Regents exam (%)       9.2       9.4       -0.3       0.846         Took 2 Regents exam (%)       10.1       11.3       -1.2       0.385         Took 3 or	Passed 2 Regents exams (%)	13.8	13.9	-0.1	0.974
Year 2         Took at least 1 Regents exam (%)       72.3       69.2       3.0       0.111         Took 1 Regents exam (%)       12.6       11.5       1.2       0.426         Took 2 Regents exams (%)       18.1       16.1       1.9       0.252         Took 3 or more Regents exams (%)       41.6       41.7       -0.1       0.980         Passed at least 1 Regents exam (%)       45.8       44.2       1.6       0.417         Passed 1 Regents exam (%)       19.6       17.7       1.9       0.280         Passed 2 Regents exams (%)       14.2       15.1       -1.0       0.529         Passed 3 or more Regents exams (%)       12.5       11.8       0.7       0.604         Number of Regents exams (%)       12.5       11.8       0.7       0.604         Number of Regents exam (%)       9.2       9.4       -0.3       0.846         Took at least 1 Regents exam (%)       9.2       9.4       -0.3       0.846         Took 3 or more Regents exams (%)       10.1       11.3       -1.2       0.385         Took 3 or more Regents exams (%)       60.6       57.2       3.4 *       0.097         Passed at least 1 Regents exam (%)       54.7       53.1       1.6 <td>Passed 3 or more Regents exams (%)</td> <td>3.7</td> <td>3.9</td> <td>-0.2</td> <td>0.809</td>	Passed 3 or more Regents exams (%)	3.7	3.9	-0.2	0.809
Took at least 1 Regents exam (%)72.3 $69.2$ $3.0$ $0.111$ Took 1 Regents exam (%)12.6 $11.5$ $1.2$ $0.426$ Took 2 Regents exams (%)18.1 $16.1$ $1.9$ $0.252$ Took 3 or more Regents exams (%) $41.6$ $41.7$ $-0.1$ $0.980$ Passed at least 1 Regents exam (%) $45.8$ $44.2$ $1.6$ $0.417$ Passed 1 Regents exam (%) $19.6$ $17.7$ $1.9$ $0.280$ Passed 2 Regents exams (%) $14.2$ $15.1$ $-1.0$ $0.529$ Passed 3 or more Regents exams (%) $12.5$ $11.8$ $0.7$ $0.604$ Number of Regents exams (%) $12.5$ $11.8$ $0.7$ $0.604$ Number of Regents exam (%) $9.9$ $0.9$ $0.0$ $0.532$ Vears 1 and 2 combinedTook 1 Regents exam (%) $9.2$ $9.4$ $-0.3$ $0.846$ Took 2 Regents exams (%) $10.1$ $11.3$ $-1.2$ $0.385$ Took 3 or more Regents exam (%) $54.7$ $53.1$ $1.6$ $0.401$ Passed at least 1 Regents exam (%) $38.2$ $37.6$ $0.7$ $0.719$ Passed at least 2 Regents exam (%) $16.4$ $15.5$ $0.9$ $0.579$ Passed 1 Regents exam (%) $10.3$ $11.3$ $-1.0$ $0.472$ Passed 3 or more Regents exams (%) $27.9$ $26.3$ $1.7$ $0.327$ Number of Regents exams (%) $27.9$ $26.3$ $1.7$ $0.327$ Number of Regents exams passed $1.4$ $1.4$	Number of Regents exams passed	0.6	0.6	0.0	0.614
Took 1 Regents exam (%)       12.6       11.5       1.2       0.426         Took 2 Regents exams (%)       18.1       16.1       1.9       0.252         Took 3 or more Regents exams (%)       41.6       41.7       -0.1       0.980         Passed at least 1 Regents exam (%)       45.8       44.2       1.6       0.417         Passed 1 Regents exam (%)       19.6       17.7       1.9       0.280         Passed 2 Regents exams (%)       14.2       15.1       -1.0       0.529         Passed 3 or more Regents exams (%)       12.5       11.8       0.7       0.604         Number of Regents exams passed       0.9       0.9       0.0       0.532         Vears 1 and 2 combined       79.9       78.0       2.0       0.245         Took at least 1 Regents exam (%)       9.2       9.4       -0.3       0.846         Took 2 Regents exams (%)       10.1       11.3       -1.2       0.385         Took 3 or more Regents exams (%)       60.6       57.2       3.4 *       0.097         Passed at least 1 Regents exam (%)       54.7       53.1       1.6       0.401         Passed at least 2 Regents exam (%)       38.2       37.6       0.7       0.719         <	<u>Year 2</u>				
Took 2 Regents exams (%)18.116.11.9 $0.252$ Took 3 or more Regents exams (%)41.641.7-0.1 $0.980$ Passed at least 1 Regents exam (%)45.844.21.6 $0.417$ Passed 1 Regents exam (%)19.617.71.9 $0.280$ Passed 2 Regents exams (%)14.215.1 $-1.0$ $0.529$ Passed 3 or more Regents exams (%)12.511.8 $0.7$ $0.604$ Number of Regents exams passed $0.9$ $0.9$ $0.0$ $0.532$ Years 1 and 2 combined $79.9$ $78.0$ $2.0$ $0.245$ Took at least 1 Regents exam (%) $9.2$ $9.4$ $-0.3$ $0.846$ Took 2 Regents exams (%) $10.1$ $11.3$ $-1.2$ $0.385$ Took 3 or more Regents exams (%) $60.6$ $57.2$ $3.4$ * $0.097$ Passed at least 1 Regents exam (%) $54.7$ $53.1$ $1.6$ $0.401$ Passed at least 2 Regents exam (%) $38.2$ $37.6$ $0.7$ $0.719$ Passed 1 Regents exam (%) $16.4$ $15.5$ $0.9$ $0.579$ Passed 1 Regents exam (%) $10.3$ $11.3$ $-1.0$ $0.472$ Passed 3 or more Regents exams (%) $27.9$ $26.3$ $1.7$ $0.327$ Number of Regents exams (%) $27.9$ $26.3$ $1.7$ $0.327$ Number of Regents exams passed $1.4$ $1.4$ $0.0$ $0.427$	Took at least 1 Regents exam (%)	72.3	69.2	3.0	0.111
Took 3 or more Regents exams (%) $41.6$ $41.7$ $-0.1$ $0.980$ Passed at least 1 Regents exam (%) $45.8$ $44.2$ $1.6$ $0.417$ Passed 1 Regents exam (%) $19.6$ $17.7$ $1.9$ $0.280$ Passed 2 Regents exams (%) $14.2$ $15.1$ $-1.0$ $0.529$ Passed 3 or more Regents exams (%) $12.5$ $11.8$ $0.7$ $0.604$ Number of Regents exams passed $0.9$ $0.9$ $0.0$ $0.532$ Years 1 and 2 combined $79.9$ $78.0$ $2.0$ $0.245$ Took at least 1 Regents exam (%) $9.2$ $9.4$ $-0.3$ $0.846$ Took 2 Regents exam (%) $10.1$ $11.3$ $-1.2$ $0.385$ Took 3 or more Regents exam (%) $54.7$ $53.1$ $1.6$ $0.401$ Passed at least 1 Regents exam (%) $54.7$ $53.1$ $1.6$ $0.401$ Passed at least 2 Regents exam (%) $38.2$ $37.6$ $0.7$ $0.719$ Passed 1 Regents exam (%) $10.3$ $11.3$ $-1.0$ $0.472$ Passed 2 Regents exams (%) $10.3$ $11.3$ $-1.0$ $0.472$ Passed 3 or more Regents exams (%) $27.9$ $26.3$ $1.7$ $0.327$ Number of Regents exams passed $1.4$ $1.4$ $0.0$ $0.427$ Sample size (total = $1.979$ ) $988$ $991$ $991$	Took 1 Regents exam (%)	12.6	11.5	1.2	0.426
Passed at least 1 Regents exam (%)       45.8       44.2       1.6       0.417         Passed 1 Regents exam (%)       19.6       17.7       1.9       0.280         Passed 2 Regents exams (%)       14.2       15.1       -1.0       0.529         Passed 3 or more Regents exams (%)       12.5       11.8       0.7       0.604         Number of Regents exams passed       0.9       0.9       0.0       0.532         Years 1 and 2 combined         Took at least 1 Regents exam (%)       79.9       78.0       2.0       0.245         Took 1 Regents exam (%)       9.2       9.4       -0.3       0.846         Took 2 Regents exams (%)       10.1       11.3       -1.2       0.385         Took 3 or more Regents exams (%)       60.6       57.2       3.4 *       0.097         Passed at least 1 Regents exam (%)       54.7       53.1       1.6       0.401         Passed at least 2 Regents exam (%)       38.2       37.6       0.7       0.719         Passed 1 Regents exam (%)       10.3       11.3       -1.0       0.472         Passed 3 or more Regents exams (%)       27.9       26.3       1.7       0.327         Number of Regents exams passed       1.4       <	Took 2 Regents exams (%)	18.1	16.1	1.9	0.252
Passed 1 Regents exam (%)19.617.71.90.280Passed 2 Regents exams (%)14.215.1 $-1.0$ 0.529Passed 3 or more Regents exams (%)12.511.80.70.604Number of Regents exams passed0.90.90.00.532Years 1 and 2 combinedTook at least 1 Regents exam (%)79.978.02.00.245Took 1 Regents exam (%)9.29.4-0.30.846Took 2 Regents exams (%)10.111.3 $-1.2$ 0.385Took 3 or more Regents exams (%)60.657.23.4 *0.097Passed at least 1 Regents exam (%)54.753.11.60.401Passed at least 2 Regents exam (%)38.237.60.70.719Passed 1 Regents exam (%)16.415.50.90.579Passed 2 Regents exams (%)27.926.31.70.327Number of Regents exams passed1.41.40.00.427Sample size (total = 1,979)988991991 $-1.2$	Took 3 or more Regents exams (%)	41.6	41.7	-0.1	0.980
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Number of Regents exams passed0.90.90.00.532Years 1 and 2 combined79.978.02.00.245Took at least 1 Regents exam (%)9.29.4-0.30.846Took 2 Regents exams (%)10.111.3-1.20.385Took 3 or more Regents exams (%)60.657.23.40.097Passed at least 1 Regents exam (%)54.753.11.60.401Passed at least 2 Regents exam (%)38.237.60.70.719Passed 1 Regents exam (%)16.415.50.90.579Passed 2 Regents exams (%)10.311.3-1.00.472Passed 3 or more Regents exams (%)27.926.31.70.327Number of Regents exams passed1.41.40.00.427Sample size (total = 1,979)98899199110.3	e v				
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Took at least 1 Regents exam (%) $79.9$ $78.0$ $2.0$ $0.245$ Took 1 Regents exam (%) $9.2$ $9.4$ $-0.3$ $0.846$ Took 2 Regents exams (%) $10.1$ $11.3$ $-1.2$ $0.385$ Took 3 or more Regents exams (%) $60.6$ $57.2$ $3.4$ $0.097$ Passed at least 1 Regents exam (%) $54.7$ $53.1$ $1.6$ $0.401$ Passed at least 2 Regents exam (%) $38.2$ $37.6$ $0.7$ $0.719$ Passed 1 Regents exam (%) $16.4$ $15.5$ $0.9$ $0.579$ Passed 2 Regents exams (%) $10.3$ $11.3$ $-1.0$ $0.472$ Passed 3 or more Regents exams (%) $27.9$ $26.3$ $1.7$ $0.327$ Number of Regents exams passed $1.4$ $1.4$ $0.0$ $0.427$ Sample size (total = $1.979$ ) $988$ $991$ $991$	Number of Regents exams passed	0.9	0.9	0.0	0.532
Took 1 Regents exam (%)9.29.4-0.30.846Took 2 Regents exams (%)10.111.3-1.20.385Took 3 or more Regents exams (%)60.6 $57.2$ $3.4$ *0.097Passed at least 1 Regents exam (%) $54.7$ $53.1$ 1.60.401Passed at least 2 Regents exam (%) $38.2$ $37.6$ $0.7$ $0.719$ Passed 1 Regents exam (%)16.415.5 $0.9$ $0.579$ Passed 2 Regents exams (%)10.311.3-1.0 $0.472$ Passed 3 or more Regents exams (%)27.926.31.7 $0.327$ Number of Regents exams passed1.41.4 $0.0$ $0.427$ Sample size (total = 1,979) $988$ $991$ $991$	Years 1 and 2 combined				
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Took 3 or more Regents exams (%) $60.6$ $57.2$ $3.4$ * $0.097$ Passed at least 1 Regents exam (%) $54.7$ $53.1$ $1.6$ $0.401$ Passed at least 2 Regents exam (%) $38.2$ $37.6$ $0.7$ $0.719$ Passed 1 Regents exam (%) $16.4$ $15.5$ $0.9$ $0.579$ Passed 2 Regents exams (%) $10.3$ $11.3$ $-1.0$ $0.472$ Passed 3 or more Regents exams (%) $27.9$ $26.3$ $1.7$ $0.327$ Number of Regents exams passed $1.4$ $1.4$ $0.0$ $0.427$ Sample size (total = $1.979$ ) $988$ $991$ $991$	Took 1 Regents exam (%)	9.2	9.4	-0.3	0.846
Passed at least 1 Regents exam (%)       54.7       53.1       1.6       0.401         Passed at least 2 Regents exam (%)       38.2       37.6       0.7       0.719         Passed 1 Regents exam (%)       16.4       15.5       0.9       0.579         Passed 2 Regents exams (%)       10.3       11.3       -1.0       0.472         Passed 3 or more Regents exams (%)       27.9       26.3       1.7       0.327         Number of Regents exams passed       1.4       1.4       0.0       0.427         Sample size (total = 1,979)       988       991       991	Took 2 Regents exams (%)	10.1	11.3	-1.2	0.385
Passed at least 2 Regents exam (%)38.237.60.70.719Passed 1 Regents exam (%)16.415.50.90.579Passed 2 Regents exams (%)10.311.3-1.00.472Passed 3 or more Regents exams (%)27.926.31.70.327Number of Regents exams passed1.41.40.00.427Sample size (total = 1,979)988991991	Took 3 or more Regents exams (%)	60.6	57.2	3.4 *	0.097
Passed 1 Regents exam (%)       16.4       15.5       0.9       0.579         Passed 2 Regents exams (%)       10.3       11.3       -1.0       0.472         Passed 3 or more Regents exams (%)       27.9       26.3       1.7       0.327         Number of Regents exams passed       1.4       1.4       0.0       0.427         Sample size (total = 1,979)       988       991	Passed at least 1 Regents exam (%)	54.7	53.1	1.6	0.401
Passed 2 Regents exams (%)       10.3       11.3       -1.0       0.472         Passed 3 or more Regents exams (%)       27.9       26.3       1.7       0.327         Number of Regents exams passed       1.4       1.4       0.0       0.427         Sample size (total = 1,979)       988       991	Passed at least 2 Regents exam (%)	38.2	37.6	0.7	0.719
Passed 3 or more Regents exams (%)       27.9       26.3       1.7       0.327         Number of Regents exams passed       1.4       1.4       0.0       0.427         Sample size (total = 1,979)       988       991       991	Passed 1 Regents exam (%)			0.9	0.579
Number of Regents exams passed1.41.40.00.427Sample size (total = 1,979)988991	Passed 2 Regents exams (%)			-1.0	0.472
Sample size (total = 1,979)         988         991	Passed 3 or more Regents exams (%)	27.9	26.3	1.7	0.327
	Number of Regents exams passed	1.4	1.4	0.0	0.427
	Sample size (total = 1,979)	988	991		

(continued)

#### Table 6.14 (continued)

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

NOTES: The overall outcome measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, U.S. History, Global History, Biology, Chemistry, Physics, and Earth Science.

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 family or sample members. Standard errors were adjusted to account for multiple observations per family.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively.

children involving school and homework. For both groups of children, but particularly for middle school students, the program led to an increase in extracurricular activities, which in many cases were programs to help with school work. However, these small changes in behavior did not lead to increases in attendance or test scores, at least through Year 2. See Box 6.2 (page 185) for a discussion of parents' efforts to improve their children's test performance.

For high school students, the program did not lead to increases in parental engagement and had only a small effect on participation in extracurricular activities. However, the program did lead to an increase in effort for this group. Students in the program group were more likely to have high attendance rates, they attempted more credits during the school year, and they took more Regents exams.

# Effects for Key Subgroups

Family Rewards is unique among incentives programs in that families are offered the rewards and are left largely on their own to earn them. For that reason, among others, the effects of an intervention like this one may vary across different types of students or different types of families. This section examines program effects for selected subgroups of entering ninth-graders.<sup>21</sup> Variation in impacts was examined across three key dimensions — student's prior

<sup>&</sup>lt;sup>21</sup>Effects for elementary and middle school students are shown in Appendix F. In general, the effects for these students did not vary across subgroups.

# **Table 6.15**

# Impacts on Regents Exams Taken and Passed: All High School Students

	Program	Control	Difference	
Outcome	Group	Group	(Impact)	P-Value
<u>Year 1</u>				
Took at least 1 Regents exam (%)	70.2	64.9	5.3 ***	0.001
Took 1 Regents exam (%)	23.5	22.1	1.5	0.337
Took 2 Regents exams (%)	27.3	24.1	3.2 **	0.039
Took 3 or more Regents exams (%)	19.4	18.7	0.7	0.602
Passed at least 1 Regents exam (%)	42.1	38.3	3.7 **	0.017
Passed 1 Regents exam (%)	20.6	18.0	2.6 *	0.065
Passed 2 Regents exams (%)	15.2	13.3	1.9	0.121
Passed 3 or more Regents exams (%)	6.3	7.0	-0.7	0.426
Number of Regents exams passed	0.7	0.7	0.0	0.148
Sample size (total = 3,077)	1,538	1,539		
<u>Year 2</u>				
Took at least 1 Regents exam (%)	68.8	66.7	2.1	0.204
Took 1 Regents exam (%)	13.9	12.4	1.5	0.252
Took 2 Regents exams (%)	17.1	15.7	1.4	0.309
Took 3 or more Regents exams (%)	37.8	38.6	-0.8	0.661
Passed at least 1 Regents exam (%)	45.1	43.7	1.3	0.438
Passed 1 Regents exam (%)	20.7	17.3	3.4 **	0.022
Passed 2 Regents exams (%)	13.2	14.9	-1.8	0.178
Passed 3 or more Regents exams (%)	11.6	11.9	-0.3	0.834
Number of Regents exams passed	0.8	0.9	0.0	0.845
Sample size (total = $2,813$ )	1,386	1,427		
Years 1 and 2 combined				
Took at least 1 Regents exam (%)	80.6	78.2	2.4 *	0.092
Took 1 Regents exam (%)	7.5	8.5	-1.0	0.338
Took 2 Regents exams (%)	11.1	11.5	-0.4	0.749
Took 3 or more Regents exams (%)	62.1	58.3	3.7 **	0.033
Passed at least 1 Regents exam (%)	57.4	55.5	1.9	0.245
Passed at least 2 Regents exam (%)	42.3	40.5	1.8	0.274
Passed 1 Regents exam (%)	15.1	15.0	0.1	0.932
Passed 2 Regents exams (%)	12.9	12.2	0.6	0.610
Passed 3 or more Regents exams (%)	29.4	28.3	1.2	0.454
Number of Regents exams passed	1.5	1.5	0.0	0.448
Sample size (total = $2,813$ )	1,386	1,427		
				(continued)

#### Table 6.15 (continued)

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

NOTES: The overall outcome measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, U.S. History, Global History, Biology, Chemistry, Physics, and Earth Science.

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 family or sample members. Standard errors were adjusted to account for multiple observations per family.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively.

Outcomes for Year 2 and for Years 1 and 2 combined exclude students who entered the program as twelfth-graders.

performance, parent's education level, and student's school environment.<sup>22</sup> As noted in the previous chapter, the key focus of subgroup analysis is not necessarily on the impacts for a given group, but whether the *differences* in impacts across the subgroups are statistically significant.

The first subgroup dimension is prior academic performance, measured by whether the student achieved proficiency on standardized tests in the year prior to entering the study. Because students take standardized tests through the eighth grade, data on last year's performance among high school students are available only for entering ninth-graders. Prior performance may affect a student's ability to respond to the program. In addition, critics of incentives-based education programs have raised the possibility of "discouragement effects" for lower-performing students who have little chance of receiving payments.<sup>23</sup> For that reason, it is of interest to test for differential effects by prior achievement level.

<sup>22</sup>Effects across additional dimensions were also examined as part of a more exploratory analysis. These other dimensions include baseline public assistance receipt, public housing status, borough, and race/ethnicity. In general, the results showed little variation in effects across these groups.

<sup>&</sup>lt;sup>23</sup>Deci, Koestner, and Ryan (2001).

#### **Table 6.16**

Grade Level and Outcome (%)	Program Group	Control Group	Difference (Impact)	P-Value
12th-graders at random assignment				
Graduated, Year 1 Graduated, Year 2 Years 1 and 2 combined	74.1 12.6 85.9	70.9 10.6 80.8	3.3 1.9 5.1	0.503 0.623 0.190
Sample size (total = 264)	152	112		
11th-graders at random assignment				
Graduated, Year 2	67.1	57.6	9.5	0.121
Sample size (total = 297)	136	161		

#### **Impacts on Graduation**

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

NOTES: 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 family or sample members. Standard errors were adjusted to account for multiple observations per family.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively.

Table 6.17 (page 186) presents the results, showing that prior achievement is a strong predictor of subsequent achievement and, as such, may be viewed as an indicator of preparation for high school work. For example, within the control group, students who scored at the proficient level or higher on the prior year's math test (top panel), representing about one-third of all ninth-graders in the study sample, were much more likely to progress to tenth grade, had higher attendance rates, earned more credits, and passed more Regents exams than their less proficient counterparts. The table shows that the program had substantially larger and more positive effects for the more proficient subgroup, with statistically significant impacts for all but one of

#### Box 6.2

# Parents' Involvement in Improving Test Scores and Academic Performance for Elementary and Middle School Students

During the in-depth interviews, parents of elementary and middle school students sometimes reflected on some of the challenges their children faced when it came to taking tests. Some talked about their children's efforts to succeed but finding that they were unable to do well on the tests; a few talked about developmental or behavioral challenges that made it especially hard for their children to perform well or meet attendance goals. Some described their children's health problems, as did the following parent:

And the 10-year-old, she had a heart problem, that was two years ago, she lost a lot of school time. She had to go to doctors every day. She tells me it hurts, I have to take her to the hospital. They recently told me that her heart problem was okay... But she has missed a lot of school. They've been in school for about two or three months so she's missed school about five times.

Other parents were much more focused on their children succeeding more generally in school — behaving appropriately in the classroom and getting good grades, for example — than they were specifically focused on supporting children regarding standardized tests. Although many parents talked about helping their children with homework every night, very few mentioned having purchased a test preparation book with the reward money they'd earned. Some mentioned that schools or after-school programs themselves made a big effort to help their children work on test preparation, and that their own role in coaching children was limited to keeping them well fed and rested on the day of the test:

Well, I make them go to bed early the night before.... Make sure they have a good dinner.... Make sure they, you know, shower and get in the bed early. That morning when they get up, I have a nice breakfast for them, you know, and make sure there's no fussing, arguing. You know? Just let everything be nice, you know, peaceful.

the 12 measured outcomes.<sup>24</sup> For this more proficient subgroup, the program increased the rate of progression into tenth grade (by 5.4 percentage points), increased the fraction of students who had earned at least 22 credits through Year 2 (by 8.1 percentage points), increased the proportion of students passing at least two Regents exams (by 5.9 percentage points), and

<sup>&</sup>lt;sup>24</sup>Results were similar when the sample was divided according to scores on the previous year's ELA test.

# **Table 6.17**

# Impacts on School Outcomes for Students in Grade 9 at the Time of Random Assignment, by Performance in the Prior Year (Grade 8)

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Sig
	Gloup	Oloup	(impact)	I - Value	oig.
<u>Scored at or above proficiency level</u> on annual math test in 8th grade <sup>a</sup>					
Enrolled in 10th grade, Year 2 (%)	90.8	85.5	5.4 **	0.045	
Remained in 9th grade, Year 2 (%)	3.0	8.8	-5.8 ***	0.003	†
Attendance rate 95% or higher, Year 1 (%)	54.2	46.7	7.4 *	0.063	
Attendance rate 95% or higher, Year 2 (%)	51.1	36.2	14.9 ***	0.000	†††
Attempted at least 11 credits, Year 1 (%)	95.7	91.6	4.1 **	0.020	
Attempted at least 11 credits, Year 2 (%)	92.2	89.6	2.6	0.236	
Earned at least 11 credits, Year 1 (%)	77.6	68.8	8.9 **	0.013	+++
Earned at least 11 credits, Year 2 (%)	71.9	62.5	9.3 **	0.015	+++
Earned at least 22 credits, Years 1 to 2 (%)	72.7	64.5	8.1 **	0.032	††
Passed at least 1 Regents exam, Year 1 (%)	74.5	67.1	7.5 **	0.046	
Passed at least 1 Regents exam, Year 2 (%)	78.2	72.4	5.8 *	0.100	
Passed at least 2 Regents exams, Years 1 to 2 (%)	77.6	71.7	5.9 *	0.098	†
Number of Regents exams passed, Years 1 to 2	2.9	2.6	0.3 **	0.026	††
Sample size (total = 584)	298	286			
<u>Scored below proficiency level</u> on annual math test in 8th grade <sup>a</sup>					
Enrolled in 10th grade, Year 2 (%)	66.7	65.5	1.2	0.674	
Remained in 9th grade, Year 2 (%)	22.1	21.8	0.3	0.074	+
-			0.5		Ţ
Attendance rate 95% or higher, Year 1 (%)	29.0	26.8	2.2	0.413	
Attendance rate 95% or higher, Year 2 (%)	21.8	19.3	2.5	0.291	<b>†††</b>
Attempted at least 11 credits, Year 1 (%)	90.5	84.9	5.6 ***	0.002	
Attempted at least 11 credits, Year 2 (%)	80.9	78.7	2.2	0.355	
Earned at least 11 credits, Year 1 (%)	43.6	47.1	-3.5	0.234	+++
Earned at least 11 credits, Year 2 (%)	37.6	41.4	-3.8	0.191	†††
Earned at least 22 credits, Years 1 to 2 (%)	38.1	40.1	-2.0	0.492	††
Passed at least 1 Regents exam, Year 1 (%)	22.4	21.7	0.7	0.759	
Passed at least 1 Regents exam, Year 2 (%)	33.9	35.1	-1.2	0.665	
Passed at least 2 Regents exams, Years 1 to 2 (%)	22.9	25.2	-2.3	0.343	†
Number of Regents exams passed, Years 1 to 2	0.8	0.9	-0.1	0.341	††
Sample size (total = $1,143$ )	565	578			

(continued)

#### Table 6.17 (continued)

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

NOTES: 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 are indicated as follows:  $\dagger\dagger\dagger=1$  percent;  $\dagger\dagger=5$  percent;  $\dagger=10$  percent.

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

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively.

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

increased the average number of Regents exams passed (from 2.6 for the control group to 2.9 for the program group).<sup>25</sup> In contrast, the program had little effect on the less proficient subgroup. With the exception of an increase in those who attempted at least 11 credits in Year 1, the effects across the range of measures for that subgroup are small and statistically insignificant. As noted by the daggers in the rightmost column, the differences between impacts across the two subgroups are statistically significant on seven outcome measures, meaning that these differences were very unlikely to have arisen by chance. (See Box 6.3 for an illustration from the in-depth parent interviews of different responses by students to school and the program.)

Effects on parental engagement and children's activities were also estimated across the subgroups (not shown in table). The only notable difference in effects was on parent attendance at parent-teacher conferences. Program impacts were positive and large for parents of more proficient students, but not for parents of students in the less proficient subgroup.<sup>26</sup>

Parents' education level has a strong effect on children's school performance and may also be related to their ability to respond to the program. More educated parents, for example,

<sup>&</sup>lt;sup>25</sup>Effects on progression into tenth grade were driven entirely by differences in grade retention and not in transfer rates.

<sup>&</sup>lt;sup>26</sup>Among parents of the participant students, 85.3 percent of the control group reported attending a parentteacher conference since random assignment, compared with 95.7 percent of program group parents, for an impact of 10.3 percentage points.

#### Box 6.3

### Lower- Versus Higher-Performing High School Students

The differential findings for higher- and lower-performing teenagers were reflected during indepth parent interviews. Parents of high school students were more likely to describe these children as engaged with and interested in the program. Not surprisingly, parents described their older children as feeling more pressure to have cash for clothing, shoes, and other purchases. They also described them as being more aware of the program, in that they have their own, separate bank accounts. One parent described the difference that this separate account made for her daughter:

*Participant:* The more I began to mention the money, I said, "You know, if you do this you're gonna get this amount...." I gave her the Chase card and I said, "This is your card . . . . The money that's on it is yours. Whatever you need it for you can use it, but the more you do what you're supposed to do, the benefits go on this card," and she was like, "Wow."

Interviewer: So...that was a huge thing for her.

Participant: Oh yeah. Bribery. (Laughter)

However, not every teenager was able to take advantage of these rewards. As suggested by the relatively lower school attendance for this group relative to elementary school children, some parents said that their children had not made a successful transition from middle school to high school. As one said, "He goes to high school, he doesn't — he's like out of it. He doesn't want to do anything. The teachers are calling me. He was failing classes. It doesn't matter how much you would tell him, he . . . doesn't want to go to school. It was a problem."

Parents described these children as unable to succeed in school, even with the promise of cash rewards. In contrast, those who had generally better histories in school were sometimes described as being both interested in the rewards and better able to take advantage of them; other parents said that their children appreciated the rewards but were likely to succeed without them, based on their assessment of their past performance. One parent talked about her daughter's strong motivation:

She's taking the English, the math [Regents]. And I just want her to do her best, that's all I expect from her. And she's doing really great in school; my daughter does good in school. She wants to become a pilot. And she's very pretty and she likes to keep a pencil in her hair and a book in her hand. So she does great. She just got her report card. She[has an] 80 percent [average].... I went to the parent-teacher conference and they wish they had more students like her. She's very quiet. She's reserved. She's in karate. My baby does — she's doing her thing.

may be in a better position to offer help with homework or to seek out resources in the community for their children. The results are shown in Table 6.18 (page 190).<sup>27</sup> As the control group patterns illustrate, children of more educated parents (top panel) tended to perform better over the year than children of less educated parents, although the differences are not as large as for students' prior academic performance. The impacts of Family Rewards did not differ for the two groups. For example, although there is a statistically significant increase in Year 2 attendance for children of more educated parents (of 6 percentage points), it is statistically indistinguishable from the 4 percentage point increase for children of less educated parents.

Finally, school environment, as measured by test scores of earlier cohorts in a student's school, may also be related to a student's response to the rewards. Students in low-performing schools with low-performing peers may be less able or less willing to attend school more frequently or to improve their academic performance. School environment is defined by ranking students' schools according to their average pass rates of the English and math Regents exams in the 2005-2006 and 2006-2007 school years. The schools are then divided into thirds based on this ranking. The results are shown in Table 6.19 (page 192). The table shows that school environment is strongly associated with student outcomes. For example, among students in the control group, those attending schools with lower pass rates had much lower attendance rates than those attending schools with higher pass rates, and they were much less likely to progress to tenth grade by Year 2. Despite these dramatic differences in outcomes, the effects of Family Rewards did not vary significantly by school environment.

# Conclusion

Through two years, Family Rewards has had mixed success in improving children's school outcomes. The program had few effects on younger students, but did lead to notable gains for a group of more academically prepared high school students. The effects for the more proficient high school students are encouraging. Even though this group may be the least disadvantaged academically among low-income students, they still face many obstacles to success. As an example, only about 65 percent of these students had accumulated enough credits by the end of their second year of high school for an on-time graduation. The program increased this rate by 8 percentage points. Longer-term follow up will be needed to assess whether the program can help these students stay on track and whether their control group counterparts fall further behind.

<sup>&</sup>lt;sup>27</sup>In order to maintain a consistent sample for the subgroup analysis, effects by parent's education and school environment are also presented for entering ninth-graders only. The results were similar when examined for all entering high school students.

#### **Table 6.18**

# Impacts on School Outcomes for Students in Grade 9 at the Time of Random Assignment, by Parent's Education

	Program	Control	Difference	
Subgroup and Outcome	Group	Group	(Impact)	P-Value
Parent earned at least a high school diploma/GED cer	rtificate_			
Enrolled in 10th grade, Year 2 (%)	73.1	70.3	2.8	0.263
Remained in 9th grade, Year 2 (%)	16.3	16.5	-0.2	0.913
Attendance rate 95% or higher, Year 1 (%)	38.6	35.0	3.6	0.194
Attendance rate 95% or higher, Year 2 (%)	32.9	26.9	6.0 **	0.021
Attempted at least 11 credits, Year 1 (%)	88.7	86.2	2.5	0.143
Attempted at least 11 credits, Year 2 (%)	83.3	80.1	3.2	0.132
Earned at least 11 credits, Year 1 (%)	53.3	54.2	-1.0	0.723
Earned at least 11 credits, Year 2 (%)	49.6	49.2	0.4	0.879
Earned at least 22 credits, Years 1 to 2 (%)	50.0	48.6	1.3	0.624
Passed at least 1 Regents exam, Year 1 (%)	41.5	40.0	1.5	0.552
Passed at least 1 Regents exam, Year 2 (%)	50.9	47.9	3.0	0.253
Passed at least 2 Regents exams, Years 1 to 2 (%)	43.2	43.1	0.1	0.967
Number of Regents exams passed, Years 1 to 2	1.6	1.5	0.1	0.521
Sample size (total = 1,159)	558	601		
Parent did not earn at least a high school diploma/GE	D certificate			
Enrolled in 10th grade, Year 2 (%)	66.3	66.8	-0.6	0.873
Remained in 9th grade, Year 2 (%)	16.7	20.0	-3.3	0.239
Attendance rate 95% or higher, Year 1 (%)	27.4	27.0	0.3	0.918
Attendance rate 95% or higher, Year 2 (%)	23.5	19.5	4.0	0.168
Attempted at least 11 credits, Year 1 (%)	85.6	81.7	3.9	0.105
Attempted at least 11 credits, Year 2 (%)	75.9	75.9	0.0	0.993
Earned at least 11 credits, Year 1 (%)	44.9	45.0	-0.1	0.982
Earned at least 11 credits, Year 2 (%)	37.6	40.4	-2.9	0.403
Earned at least 22 credits, Years 1 to 2 (%)	37.5	38.8	-1.4	0.693
Passed at least 1 Regents exam, Year 1 (%)	30.6	26.0	4.7 *	0.091
Passed at least 1 Regents exam, Year 2 (%)	37.4	39.5	-2.1	0.509
Passed at least 2 Regents exams, Years 1 to 2 (%)	30.6	29.9	0.7	0.806
Number of Regents exams passed, Years 1 to 2	1.1	1.1	0.0	0.924
Sample size (total = 750)	393	357		
				(continued)

#### Table 6.18 (continued)

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

NOTES: In most cases, the subgroup for parent's education level is based on the mother's education level. The father's education level is used in male-only households.

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 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 families or sample members. Standard errors were adjusted to account for multiple observations per family.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively.

Given that families were largely left on their own to find ways to earn the incentives in Family Rewards, it makes sense that the achievement gains would be larger for the more proficient subgroup. These students were staying afloat academically and probably had the personal and other resources necessary to take advantage of the incentives that were offered. In contrast, the less proficient students may have faced too many barriers, both academic and otherwise, to respond in a similar way. The lack of effects through Year 2 for this group is discouraging, although it is still too early to conclude that the program does not work for them. The more disadvantaged students and families in the study may have taken longer to engage with the program, and staff increased their efforts to work with less engaged parents beginning in Year 2.

Regarding the absence of effects for the younger students, it is worth noting that, with the exception of whole school reforms or the implementation of certain types of accountability systems, educational interventions typically have not increased test scores for such students.<sup>28</sup> Perhaps the modest changes in parental engagement and student activities generated by Family Rewards were not enough to affect achievement, or perhaps it is still too early to expect achievement impacts.

The lack of effects on attendance among younger students is somewhat surprising. Attendance rates were already quite high for the younger students, but there was some room for improvement, particularly among the approximately 30 percent of students who were absent more than 10 percent of the time. It may be the case that students who are already chronically absent in elementary and middle school need more than incentives to reengage with school. In

<sup>&</sup>lt;sup>28</sup>Kane (2004); Jacob and Ludwig (2009).

#### **Table 6.19**

# Impacts on School Outcomes for Students in Grade 9 at the Time of Random Assignment, by School Environment

	Program	Control	Difference		
School Ranking and Outcome	Group	Group	(Impact)	P-Value	
Students in lower-ranking schools					
Enrolled in 10th grade, Year 2 (%)	63.0	60.7	2.3	0.510	
Remained in 9th grade, Year 2 (%)	21.6	25.6	-4.1	0.194	
Attendance rate 95% or higher, Year 1 (%)	21.0	23.4	-2.4	0.436	
Attendance rate 95% or higher, Year 2 (%)	19.1	18.1	1.0	0.726	
Attempted at least 11 credits, Year 1 (%)	89.1	83.7	5.4 **	0.023	
Attempted at least 11 credits, Year 2 (%)	79.4	75.8	3.5	0.247	
Earned at least 11 credits, Year 1 (%)	42.0	41.1	0.9	0.800	
Earned at least 11 credits, Year 2 (%)	36.6	37.7	-1.1	0.762	
Earned at least 22 credits, Years 1 to 2 (%)	37.0	35.8	1.2	0.731	
Passed at least 1 Regents exam, Year 1 (%)	24.8	26.6	-1.7	0.542	ŧ
Passed at least 1 Regents exam, Year 2 (%)	35.8	34.4	1.3	0.682	
Passed at least 2 Regents exams, Years 1 to 2 (%)	24.7	26.2	-1.5	0.604	
Number of Regents exams passed, Years 1 to 2	0.9	1.0	-0.1	0.536	
Sample size (total = 745)	342	403			
Students in medium-ranking schools					
Enrolled in 10th grade, Year 2 (%)	73.5	71.3	2.2	0.556	
Remained in 9th grade, Year 2 (%)	14.3	15.7	-1.4	0.658	
Attendance rate 95% or higher, Year 1 (%)	40.5	34.7	5.8	0.157	
Attendance rate 95% or higher, Year 2 (%)	31.9	22.9	9.0 **	0.016	
Attempted at least 11 credits, Year 1 (%)	90.7	90.5	0.2	0.942	
Attempted at least 11 credits, Year 2 (%)	84.2	80.3	3.9	0.222	
Earned at least 11 credits, Year 1 (%)	54.5	57.0	-2.5	0.542	
Earned at least 11 credits, Year 2 (%)	44.6	46.7	-2.1	0.611	
Earned at least 22 credits, Years 1 to 2 (%)	47.6	47.9	-0.3	0.937	
Passed at least 1 Regents exam, Year 1 (%)	42.0	33.8	8.2 **	0.024	†
Passed at least 1 Regents exam, Year 2 (%)	50.1	44.8	5.3	0.184	
Passed at least 2 Regents exams, Years 1 to 2 (%)	41.1	37.4	3.7	0.309	
Number of Regents exams passed, Years 1 to 2	1.5	1.4	0.1	0.216	
Sample size (total = 555)	287	268			

(continued)

School Ranking and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	
Students in higher-ranking schools					
Enrolled in 10th grade, Year 2 (%)	80.7	78.1	2.6	0.451	
Remained in 9th grade, Year 2 (%)	10.1	11.4	-1.3	0.669	
Attendance rate 95% or higher, Year 1 (%)	46.6	42.5	4.1	0.357	
Attendance rate 95% or higher, Year 2 (%)	42.3	32.9	9.4 **	0.024	
Attempted at least 11 credits, Year 1 (%)	91.2	90.8	0.4	0.877	
Attempted at least 11 credits, Year 2 (%)	87.2	85.6	1.7	0.569	
Earned at least 11 credits, Year 1 (%)	62.4	61.4	1.0	0.805	
Earned at least 11 credits, Year 2 (%)	62.3	60.6	1.7	0.688	
Earned at least 22 credits, Years 1 to 2 (%)	59.6	58.1	1.5	0.723	
Passed at least 1 Regents exam, Year 1 (%)	55.2	57.8	-2.6	0.495	†
Passed at least 1 Regents exam, Year 2 (%)	62.7	63.8	-1.0	0.796	
Passed at least 2 Regents exams, Years 1 to 2 (%)	58.4	61.2	-2.7	0.477	
Number of Regents exams passed, Years 1 to 2	2.2	2.2	0.0	0.876	
Sample size (total = 457)	239	218			

#### Table 6.19 (continued)

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

NOTES: School environment is measured as the average percentage of students in the school who passed the Regents English and math exams in the 2005-2006 and 2006-2007 school years. Higher-ranking schools have a pass rate of 84 percent or higher; medium-ranking schools have a pass rate of 73 percent to 83 percent; and lower-ranking schools have a pass rate of 72 percent or lower.

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 are indicated as follows:  $\dagger \dagger \dagger = 1$  percent;  $\dagger = 5$  percent;  $\dagger = 10$  percent.

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

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively.

any case, it will be important to track effects for these younger children through key transition periods during which many students falter. During the third year of the program, entering fourth-graders will move into middle school and entering seventh-graders will move into high school.

Some school-based reforms have been found to be successful at keeping high school students on track and in school, although many have been much more intensive than Family

Rewards. Both the Talent Development Model and First Things First led to effects on attendance and progression that are similar in size to Family Rewards' effects for higher-performing ninth-graders.<sup>29</sup> However, both of those programs were whole-school reforms that attempted to fundamentally change the school environment. What is impressive about Family Rewards is that it achieved its effects without any changes in school policies or teachers' instructional practices.

Other studies of interventions involving financial rewards for students show evidence of incentive strategies' potential effects. For example, one program offering high school students direct incentives for taking and passing Advanced Placement exams was found to have a range of positive effects on educational outcomes.<sup>30</sup> Another program that offered incentives for taking and passing a series of high school exams that were necessary to earn a matriculation certificate, which is required for postsecondary schooling, produced large increases in certification rates for girls.<sup>31</sup> The effects were concentrated on relatively higher-performing girls, which, except for the gender distinction, is consistent with the pattern of effects found for Family Rewards.

Another way to think about the size of effects for the higher-performing ninth-graders is to consider the achievement gap between higher- and lower-income students. DOE data for New York City's more than 370 high schools were used for this exercise. First, the schools were ranked based on the number of low-income students they serve.<sup>32</sup> Among schools in which low-income students made up more than 80 percent of enrollment, about 74 percent of first-year students earned 10 or more credits during the year. In contrast, among schools in which less than a third of their students were low-income, this rate was 85 percent, for an 11 percentage point differential. For the subgroup of more proficient ninth-graders, Family Rewards increased the number of students who earned 11 or more credits during Year 1 by 8.9 percentage points. Thus, at least in terms of credits earned, the program appears to have led to sizable and policy-relevant gains in school progress during its first two years of operation, akin to narrowing the achievement gap between New York City schools with predominantly lower-income versus relatively higher-income student bodies.

<sup>&</sup>lt;sup>29</sup>The Talent Development Model seeks to transform low-performing high schools through organizational and curricular changes, such as the implementation of learning communities, research-based curricula, and teacher professional development (Kemple, Herlihy, and Smith, 2005). First Things First called for similarly major changes, including learning communities, instructional improvement, and a family advocate system (Quint et al., 2005).

<sup>&</sup>lt;sup>30</sup>Jackson (2010).

<sup>&</sup>lt;sup>31</sup>Angrist and Lavy (2009).

<sup>&</sup>lt;sup>32</sup>This ranking was conducted using the percentage of students who were eligible for Title I funds.

#### Chapter 7

# **Health Care Rewards and Health Impacts**

Making safety net benefits for low-income families conditional on certain preventive health care practices is a core feature of conditional cash transfer (CCT) programs worldwide. These programs typically require families to obtain regular checkups at health clinics and, in some cases, to participate in health and nutrition education sessions that are designed to promote active attention to health care in order to receive cash benefits.<sup>1</sup> As noted in Chapter 1, a number of studies found that some of these programs have important positive effects on the receipt of health care services as well as certain health outcomes among poor families.

Family Rewards builds on the basic principle of linking financial payments to preventive health care that has been used outside this country, adapted for the very different health care and safety net context found in the United States. It offers low-income families incentives to maintain public or private health insurance and to obtain age-appropriate preventive medical and dental checkups.<sup>2</sup>

This chapter describes the health impacts of Family Rewards. Specifically, it examines the extent to which adults and children in the program earned rewards for health-related activities during the first two years of the program's operation. It then presents findings on the short-term effects of the program on participants' health insurance coverage, use of health care services, and health outcomes. The findings show that within about 18 months, Family Rewards produced a number of small, positive effects on outcomes in the health domain. It increased the continuity of health insurance coverage and increased the receipt of regular preventive care, particularly dental care. It also increased families' reliance on regular health care providers over emergency roombased care, and it produced some beneficial effects on health outcomes for both adults and children. The positive benefits in health care coverage and utilization (though not health status) are concentrated among the better-educated subsample. Although most of the short-term health effects of Family Rewards are small, they are observed on outcomes that are generally considered difficult to influence through social interventions, especially within a relatively brief follow-up period.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup>Fernald, Gertler, and Neufeld (2008).

<sup>&</sup>lt;sup>2</sup>See Chapter 1 for a discussion of the logic model and the pathways through which Family Rewards is expected to influence health.

<sup>&</sup>lt;sup>3</sup>The literature on the effectiveness — or the relative value — of preventive clinical interventions (that is, interventions designed to change health care behavior) is vast and inconsistent. (In general, the response to preventive clinical interventions is weak.) In a systematic review and analysis of recent interventions, Macio-sek et al. (2006) find insufficient evidence to support the effectiveness of a variety of counseling and preventive (continued)

The families in the Family Rewards sample had higher-than-expected insurance coverage and patterns of preventive care when they entered the study. These characteristics may reflect efforts in recent years in New York City and New York State to improve access to health care coverage and to improve the health delivery system for low-income and moderate-income families. For example, State and City officials have worked with a range of stakeholders to implement measures to reduce administrative barriers to enrollment in and maintenance of public health insurance programs in order to provide coverage to more individuals.<sup>4</sup> Moreover, New York City has been at the forefront of creating public-private partnerships to identify and enroll eligible uninsured residents. This enrollment push has been aided by a combination of State funding support, City agency partnerships, and use of community-based enrollment staff.<sup>5</sup> The City and State have also enacted a series of reforms to increase the retention of public insurance among participating families and individuals.<sup>6</sup> For instance, they have reduced documentation requirements for Medicaid renewal and streamlined the renewal process.

All these reforms are an important backdrop for understanding the health-related impacts of Family Rewards. They are likely to account for the already high health care coverage and preventive health care practices reported by control group parents at the time they entered the study and in follow-up interviews. Consequently, on some measures, Family Rewards has limited room to improve health outcomes further.

# Measuring the Health-Related Impacts of Family Rewards

The analysis of health-related outcomes and impacts is based on a variety of data sources. First, Seedco's Family Rewards payment system provides data on the receipt of health rewards during the first two years of the program. As described in Chapter 4, this system records the number and types of health reward payments earned, as well as the total amount earned by adults and children. Second, the analysis of public health insurance coverage (that is, Medicaid and the Children's Health Insurance Program, or CHIP) is based on administrative

care practices (for example, counseling the general population of adults and children about physical activity and diet; counseling children and adults about preventive dental care practices; or counseling older children, adolescents, and adults on safety practices). Furthermore, while some evidence suggests that health insurance alone has beneficial effects on life expectancy, the impacts are small (Muennig, Franks, and Gold, 2005). On the other hand, the effects of social interventions, such as improved early childhood education, have demonstrated effective ways of improving later health outcomes (Belfield, 2007). The gains are large, ranging from four to nine years in increased life expectancy for those who earn a high school diploma, or up to an 11.5 percent increase (Muennig, 2000). These interventions, however, require many years to demonstrate effects.

<sup>&</sup>lt;sup>4</sup>Even when they meet income requirements, undocumented immigrants are not eligible for public health insurance because their immigration status disqualifies them for the programs.

<sup>&</sup>lt;sup>5</sup>New York City Mayor's Office of Health Insurance Access (2004).

<sup>&</sup>lt;sup>6</sup>See United Hospital Fund (2009).

records obtained from New York City's Human Resources Administration (HRA).<sup>7</sup> These data are used to calculate public health insurance receipt for adults and children, and are available for two to three quarters prior to random assignment, and for six to seven quarters afterward.<sup>8</sup> Third, the Family Rewards 18-month parent survey, fielded for a random subset of the full study sample, provides extensive information on health care practices and outcomes that cannot be captured from the administrative records databases.<sup>9</sup> For the most part, these survey interviews were conducted between December 2008 and July 2009, which is part way through the second year of the program. The survey is the only source of data for analyzing the program's effects on parents' and children's health care utilization and health outcomes. It also provides information on access to private health insurance, which, unlike information on public health insurance, is not available from administrative records. Where possible, the chapter presents survey estimates for adults and for three groups of focal children, based on the grade they were in when they entered the study: elementary school (kindergarten through fifth grade), middle school (sixth through eighth grades), and high school (ninth through twelfth grades).

All the survey-based measures involving health and health care are reported by the parents in the study sample. One potentially problematic aspect of measurement from survey-based assessment is the extent to which respondents tend to give "socially desirable" answers to questions about their health care behavior rather than reporting on their actual behavior. This report is mindful of the potential problems of social desirability, as well as the accuracy of respondent recall, another potential problem in survey data, and, wherever possible, uses other sources (for instance, Seedco's earnings data or national and local studies) to try to put the Family Rewards survey findings in context.

Finally, the impact analysis examines a large number of outcomes related to health care. As mentioned in Chapters 5 and 6, as the number of outcomes used for impact estimates increases, the probability of finding "false positives," or differences that are statistically significant simply by chance, also increases. Although no attempt is made to formally account for "multiple hypothesis testing," caution must be used when interpreting impacts that do not appear to be part of a larger pattern of impacts within a given set of measures.

<sup>&</sup>lt;sup>7</sup>As noted in Chapter 1, Medicaid is available to pregnant women and children under 6 years of age whose family income is at or below 133 percent of the federal poverty level, for children ages 6 to 19 with family income up to 100 percent of the federal poverty level, and for families receiving government income support through the federal Temporary Assistance for Needy Families program or New York State's Safety Net Assistance program.

<sup>&</sup>lt;sup>8</sup>Because of issues with coverage dates included in the data, Medicaid receipt in a given quarter is measured using the recipient's status on the first day of a quarter. As a result, the measure reported here captures coverage status at the start of each quarter.

<sup>&</sup>lt;sup>9</sup>For a description of the survey and an analysis of response patterns, see Appendix D. Most survey respondents (92 percent) were interviewed between 15 and 20 months after random assignment.

# The Health Care Rewards

Table 7.1 summarizes the Family Rewards health incentives.<sup>10</sup> The first two panels focus on rewards for preventive medical and dental examinations. Each program year, families can earn \$200 per family member for completing an annual nonemergency medical checkup. Families with infants and toddlers can get one early childhood intervention screening, in addition to a regular checkup, if it is recommended by a physician. Increasing preventive health care is expected to ensure that family members get regular medical attention, which can lead to early diagnosis and treatment of health problems that can become more serious if left untreated. In addition, the program's designers hoped that by encouraging regular care, they could increase the likelihood that participants would establish a "medical home" — in other words, a relationship with a doctor (or health care institution) who knows their medical history and can provide a place for them to turn when problems arise, rather than resorting to hospital emergency rooms as a first response.

To promote these visits, participants are expected to present doctors with an ageappropriate "preventive care checklist form" that identifies a set of common health conditions that doctors should explore or screen for in any thorough annual physical examination. (Separate forms were created for parents and children.) The form is also a way to specify exactly what kind of visit to the doctor is to be rewarded, and it communicates to the doctor and the patient that the reward is given to participants for preventive behavior only — not for going to the doctor when they feel sick or have a particular medical problem. Specifying the activities that are supposed to take place during the visit is one way of distinguishing this type of doctor visit from other types of doctor visits. Figure 7.1 presents the "Child Non-Emergency Medical Checkup Form" for children that is used in the Family Rewards program. Parents are required to have the doctor sign this form, which is tailored to the needs of infants and toddlers (ages 0 to 5 years), younger children (ages 6 to 12 years), and teenagers (ages 13 to 19 years). As shown, for infants and toddlers, the form includes a standard set of questions to encourage the doctor to screen for developmental problems and to make an appropriate referral for a fuller early intervention evaluation when warranted.

To encourage adherence to physician-advised follow-up care, the program also offered an incentive payment for one follow-up visit per family member per year over the first two years of the program. For families with very young children, it also included a reward for completing a comprehensive early intervention assessment (which is free of charge to all qualifying residents of New York City) in cases where a physician identifies potential developmental problems.

<sup>&</sup>lt;sup>10</sup>See Chapter 1 for further detail.

#### Table 7.1

#### Health Rewards

Activity	Payment
Preventive health care	
Complete annual nonemergency medical checkup	\$200 per family member; once a year
Complete physician-advised follow-up	\$100 per family member; once a year
Complete pediatrician-advised early-intervention referral and evaluation for child under 30 months	\$200 per child; once a year
Preventive dental care	
Complete 2 dental visits per year for family members 6 and older	\$100 per family member; twice a year
Complete 1 dental visits per year for family members ages 1-5	\$100 per child; once a year
<u>Health insurance coverage<sup>a</sup></u>	
Get or maintain public health insurance coverage, including Medicaid, Family Health Plus, and/or Child Health Plus	\$40 every 2 months; per adult and for all children combined
Get or maintain private health insurance	\$100 every 2 months; per adult and for all children combined

NOTE: <sup>a</sup>No matter how many children a family has, they receive only \$40 or \$100 per period for this reward; it is not paid per child. The health insurance rewards were discontinued at the start of Year 3 of the program, but were in effect for most of the period covered by this report.

Family Rewards also offers an incentive for preventive dental care. It rewards two visits per year for cleanings and checkups for all enrolled family members 6 years of age and older, and one per year for children between the ages of 1 and 5 years.

The bottom panel of Table 7.1 focuses on rewards for health insurance coverage. Many families who enrolled in the study are eligible for means-tested public health insurance through Medicaid, CHIP,<sup>11</sup> or Family Health Plus.<sup>12</sup> The incentive payments are intended to encourage families to keep their coverage in effect. Substantial evidence exists regarding the potentially harmful impacts of the loss of Medicaid insurance. Studies have linked loss of coverage with

<sup>&</sup>lt;sup>11</sup>CHIP targets uninsured children and pregnant women in families with incomes too high to qualify for Medicaid, but often too low for them to afford private coverage.

<sup>&</sup>lt;sup>12</sup>Family Health Plus is also a public health insurance program for adults who are age 19 to 64 who have income or resources too high to qualify for Medicaid. Health care is provided through participating managed care plans in the area.

# Figure 7.1

# Family Rewards Bilingual Nonemergency Medical Checkup Form for Children

PORTUNITY NC famil	ly rewards					
					F	ORM
Child Non-Emergenc Médico de No Urgenc Program Year / Año del Pro	ia para N	ños(as)				
Patient Name / Nombre del Pacier	nte: DOB Nacim	Fecha de iento:	Patient # Paciente:		əl	Date of Visit / Fecha de la Visita:
			01			
		creenings /		_		
CONDITIONS / AFFECCIONES		S / INSTRUCCIO	And the second se		LE HON ST	TATUS / ESTADO FINALIZADO
Developmental Assessment e.g. Ages and Stages)	Assess annu	+), refer children	1944		Assessment Referred to	
ead Exposure Screen	Measure at a	nnual visit for 1			ssessment completed	
Body Mass Index (BMI) (Discuss tnessgram)	Measure at e	every annual visit			Screening c	ompleted
Routine physical	Complete at	annual visit			Physical cor	mpleted
	EOP AG	ES 6-12 / PAR		E 6 12		
Body Mass Index (BMI) (Discuss fitne		Measure at eve			Scr	coning completed
Routine physical		Complete at an	inual visit		Screening completed     Physical completed	
	FOR AGE	S 13-19 / PAR	A EDADES D	)E 13-1		
ody Mass Index (BMI) (Discuss fitne		Measure at eve				eening completed
Reproductive Health Counseling		Counseling, rel and dispensing	of contracepti		-	unseling completed
Routine physical		and screening Complete at an			D Phy	sical completed
Imm	unizations	Review / Re	visión de l	nmuni	1	•
	and the state of the	tion status and		CONTRACTOR CONTRACTOR OF		
Recommended Follow-Up	Visit / Visita		iento Reco	mend	ada (Witl	
lext visit should occur in:	peorumot / CO		Next annual pre			
<ul> <li>3 Months</li> <li>Up to 6 Months</li> <li>Up to 1 year</li> </ul>					• <sub>1</sub>	year
	octor's Infe	ormation / In	nformación	del M	édico	
AME (NONROE)		0000	DEIEIDATA			
IAME / NOMBRE:		SIGNATU	JRE/FIRMA:			
FFICE OR CLINIC NAME / OFICINA O NO	MBRE DE LA CL	NICA:				
TREET ADDRESS / DIRECCIÓN:						
ITY, STATE, ZIP / CIUDAD, ESTADO, CO.	DIGO POSTAL: _					
ELEPHONE NUMBER / NÚMERO TELEFO	ÓNICO:			EMAIL:		5. 7 <u>7 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100</u>

discontinuity of care, reduced ambulatory care use, increased emergency room use, higher health care costs, and worse patient outcomes.<sup>13</sup> Furthermore, children of adults who lose Medicaid may themselves be affected through "spillover effects" and are more likely to be uninsured despite their eligibility for coverage.

Because recipients of Temporary Assistance for Needy Families (TANF) and Safety Net Assistance (SNA) are routinely enrolled in Medicaid and are not required to reestablish their eligibility as long as they remain on TANF or SNA cash welfare,<sup>14</sup> they were ineligible for this incentive while receiving those benefits.<sup>15</sup> A slightly higher payment was offered to families when the parent had coverage from private, employer-sponsored health insurance, to offset the higher costs of obtaining coverage.

The health insurance rewards were discontinued at the start of Year 3. As noted in Chapter 1, this decision was made partially because data from the early stages of the evaluation suggested that insurance coverage rates were very high for participants in the study and there was not very much room for Family Rewards to improve them. This change does not affect the results discussed in this chapter, which cover the first and, in some cases, a portion of the second program year only.

## **Receipt of Health Care Rewards**

This section briefly reviews the extent to which program members earned health care rewards during the first two years of Family Rewards. As discussed in Chapter 4, almost 90 percent of the participating families earned at least one health care reward in Year 1 of the program. Data for Year 2 suggest that an equally high proportion of families continued to earn health rewards into the second year of the program. Further, most families were fairly well informed and knowledgeable about the health-related activities that the program rewarded. While there was some confusion about activities that the program did not reward, almost all survey respondents knew that they could earn rewards for getting and maintaining health insurance coverage (93 percent) and for making regular doctor or dentist visits for preventive care (83 and 97 percent, respectively). This section takes a closer look at Seedco's payment data to help clarify the extent to which study participants earned the various health care rewards that the program offered.

<sup>&</sup>lt;sup>13</sup>See Saunders and Alexander (2009); Fairbrother et al. (2004); Cassedy, Fairbrother, and Newacheck (2008); Duderstadt, Hughes, Soobader, and Newacheck (2006).

<sup>&</sup>lt;sup>14</sup>Safety Net Assistance provides benefits to eligible individuals and families who do not qualify for TANF or other federal cash assistance programs.

<sup>&</sup>lt;sup>15</sup>However, as discussed in the next section, complexities in administering this portion of the Family Rewards program meant that during the first and second years of operations, many of these families did, in fact, receive the rewards.

Table 7.2 summarizes the rewards that adults and children in the program earned for preventive medical and dental visits. Data are shown for each of the first two years of the program separately and for the two years combined. The first year of the program covers September 2007 through August 2008, and the second year covers September 2008 through August 2009. Over the two-year period, 72.6 percent of participating adults earned rewards for health and dental care visits. The reward rates were higher for preventive health care checkups (64.2 percent for an annual physical) than for regular dental care visits (56.7 percent). Less than half the participants earned a reward for a doctor-recommended follow-up visit. As expected, the proportion of adults receiving rewards for health-related activities increased slightly over time.

#### The Opportunity NYC Demonstration: Family Rewards

#### **Table 7.2**

		Y	Years 1 and 2
Outcome (%)	Year 1	Year 2	Combined
Parent			
Earned at least one reward for medical or dental visit	60.3	62.2	72.6
Annual physical	49.7	51.1	64.2
Dental care visit	42.1	45.8	56.7
One dental visit	26.4	27.4	NA
Two dental visits	15.7	18.4	NA
Doctor-recommended follow-up visit	27.9	31.4	43.9
Sample size			2,515
Children			
Earned at least one reward for medical or dental visit	71.9	68.7	80.0
Annual physical	63.0	58.3	75.0
Dental care visit <sup>a</sup>	54.6	52.9	67.0
Doctor-recommended follow-up visit	30.4	29.9	44.0
Sample size			5,680

#### **Rewards Earned for Parents' and Children's Doctor and Dentist Visits**

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

NOTES: The first program year covers September 2007 through August 2008, and the second year covers September 2008 through August 2009. "Sample size" refers to the number of individuals.

<sup>a</sup>Families can earn rewards for preventive dental visits up to twice a year for each child ages 6 and up and once a year for children under age 6.

NA = Not applicable.

The table also presents the medical and dental care rewards that all children in the study received (bottom panel). About 80 percent of the children earned health or dental care rewards over the two-year period. Similar to the pattern that was observed for adults, the reward rates for health care checkups were higher than the reward rates for dental visits (75 percent compared with 67 percent). While these data point to generally strong participation for children in health-related activities, Year 2 data show a small drop in the proportion of children who received rewards for regular preventive medical and dental care. Interview data discussed in Chapter 4 suggest that, for some families, connection to the program fluctuated with life events, which might explain part of the pattern observed for children.

Table 7.3 shows the preventive health and dental care rewards for children by age and school level. There are few differences by child's age or school level, and high school students were not more likely to earn rewards than were elementary or middle school students.<sup>16</sup> Over the two-year period, the most common reward earned for health care activities was for getting an annual health checkup, with 77.8 percent and 76.7 percent of elementary and middle school students (respectively) and 71.9 percent of high school students earning at least one reward of this type over the reported period. Rewards for doctor-recommended follow-up visits were also earned, but reward rates for this activity were much lower than the preventive health and dental care rewards earned by school level. Reward rates for early intervention evaluation visits, which were offered for children who were younger than 30 months of age, remained low, or about 9.8 percent over the two-year period.

Table 7.4 presents rewards earned for getting or maintaining health insurance coverage by TANF or SNA status at the time of random assignment. The top panel presents findings for adults and families who were *not* receiving TANF or SNA at random assignment. It shows that 69.2 percent of the parents in these families had earned at least one reward for getting or maintaining public health insurance. Another 29.8 percent had earned at least one reward for getting or getting or maintaining private insurance.

The bottom panel of Table 7.4 presents the findings for families who *were* receiving this assistance at the time of random assignment. As noted above, recipients of TANF and SNA are automatically enrolled in Medicaid and are not required to reestablish their Medicaid eligibility as long as they remain on TANF or SNA. Thus, by design, Family Rewards participants are not to be considered eligible for the program's health insurance incentive while they are receiving TANF or SNA (although they could become eligible for the rewards after exiting those programs if they still qualified for public insurance). Despite this restriction, 89.4 percent of parents in

<sup>&</sup>lt;sup>16</sup>As discussed in Chapter 1, some education payments were made to high school students directly, but all other payments, including all health payments, were made to the parents.

# Table 7.3

# Rewards Earned for Children's Doctor and Dentist Visits, by Child's Age or School Level

			Years 1 and
Outcome (%)	Year 1	Year 2	2 Combined
<u>All children</u>			
Child earned at least one reward for medical or dental visit	71.9	68.7	80.0
Annual physical	63.0	58.3	75.0
Dental care visit <sup>a</sup>	54.6	52.9	67.0
Doctor-recommended follow-up visit	30.4	29.9	44.0
Sample size			5,680
<u>Children under 30 months of age</u>			
Child earned at least one reward for medical or dental visit	76.4	72.8	83.9
Annual physical	70.1	66.5	82.3
Early intervention evaluation	8.3	1.6	9.8
Dental care visit <sup>a</sup>	27.6	42.9	49.2
Doctor-recommended follow-up visit	34.7	32.3	49.2
Sample size			254
Children 30 months to 5 years of age			
Child earned at least one reward for medical or dental visit	73.5	73.9	81.9
Annual physical	67.1	63.4	79.5
Dental care visit <sup>a</sup>	54.8	59.4	71.3
Doctor-recommended follow-up visit	33.6	34.6	49.5
Sample size			547
Elementary school students			
Child earned at least one reward for medical or dental visit	74.3	73.6	82.5
Annual physical	65.9	62.8	77.8
Dental care visit <sup>a</sup>	59.6	59.8	72.0
Doctor-recommended follow-up visit	31.2	33.3	46.2
Sample size			1,889
Middle school students			
Child earned at least one reward for medical or dental visit	72.4	70.6	81.3
Annual physical	63.5	59.7	76.7
Dental care visit <sup>a</sup>	56.1	53.8	67.3
Doctor-recommended follow-up visit	31.5	30.1	44.9
Sample size			1,264

(continued)

			Years 1 and
Outcome (%)	Year 1	Year 2	2 Combined
High school students			
Child earned at least one reward for medical or dental visit	71.3	63.8	78.5
Annual physical	61.0	52.3	71.9
Dental care visit <sup>a</sup>	54.9	48.4	66.1
Doctor-recommended follow-up visit	28.5	26.5	41.2
Sample size			1,538

Table 7.3 (continued)

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

NOTES: The first program year covers September 2007 through August 2008, and the second year covers September 2008 through August 2009. "Sample size" refers to the number of children.

<sup>a</sup>Families can earn rewards for preventive dental visits up to twice a year for each child ages 6 and up and once a year for children under age 6.

families receiving TANF or SNA at random assignment received at least one reward for maintaining public health insurance — a rate higher than that for the subgroup that was not receiving TANF or SNA. This pattern can be accounted for by certain difficulties that Seedco encountered in implementing this feature of the program. In particular, the administrative records data to which it had access for determining families' health insurance status turned out to be incomplete or not current enough. It also faced difficulty obtaining timely information on families' TANF or SNA status, which often changed. Recognizing these administrative complexities, the program designers made a policy decision to continue to pay public health insurance rewards to participants who were receiving TANF or SNA in the second year of the program.

Overall, a large proportion of program participants earned the health care rewards that the program offered. However, as subsequent sections show, the proportion of program group members who report on the 18-month survey (as well as on the Background Information Form at the time of enrollment in the study) that they have had preventive medical and dental visits is higher than the proportion of participants who, according to Seedco's payment data, earned rewards from the program for the same types of activities. The estimates from these different data sources could vary because they cover somewhat different reporting periods, or because the survey respondent's recollection of when a particular activity actually took place may be based on a longer time horizon than specified in a survey question. Survey respondents may also overstate their preventive health care practices in order to give more socially desirable responses to the interviewer. Also relevant is the fact that Seedco's data reflect rewards earned for *verified* activities, and, of course, its counts do not include cases where a participant completed the relevant health activities but did not submit the paperwork necessary to claim a payment. It is not possible to determine how important this factor is relative to others that might

# Table 7.4

# Health Insurance Rewards Earned for Maintaining Coverage, by Temporary Assistance for Needy Families (TANF) or Safety Net Assistance (SNA) Status at the Time of Random Assignment

Outcome (%)	Year 1	Year 2	Years 1 and 2 Combined
Families not receiving TANF/SNA at random assignment	10411	10412	Combined
Parents			
Earned at least one reward for			
Parent's public heath insurance	61.4	63.4	69.2
Parent's private health insurance	25.8	25.1	29.8
Parent's public or private health insurance	82.4	84.1	90.3
Sample size			1,848
Families			
Earned at least one reward for			
Children's public health insurance	68.9	69.0	74.9
Children's private health insurance	20.0	17.8	22.9
Children's public or private health insurance	83.2	82.3	89.3
Sample size			1,724
Families receiving TANF/SNA at random assignment			
Parents			
Earned at least one reward for			
Parent's public heath insurance	81.3	82.5	89.4
Parent's private health insurance	3.1	3.8	4.8
Parent's public or private health insurance	82.5	85.1	90.9
Sample size			583
Families			
Earned at least one reward for			
Children's public health insurance	75.4	77.0	82.6
Children's private health insurance	2.3	2.1	3.0
Children's public or private health insurance	76.3	78.7	83.7
Sample size			569

(continued)

			Years 1 and 2
Outcome (%)	Year 1	Year 2	Combined
All families			
Parents			
Earned at least one reward for			
Parent's public heath insurance	66.5	68.3	74.3
Parent's private health insurance	20.1	19.7	23.6
Parent's public or private health insurance	82.3	84.3	90.3
Sample size			2,515
Families			
Earned at least one reward for			
Children's public health insurance	70.8	71.2	77.1
Children's private health insurance	15.4	13.6	17.7
Children's public or private health insurance	81.5	81.4	87.9
Sample size			2,377

**Table 7.4 (continued)** 

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

NOTE: The first program year covers September 2007 through August 2008, and the second year covers September 2008 through August 2009.

cause the disparity, but the evaluation's in-depth interviews with a small number of program participants suggest that it is a relevant factor. Those interviews reveal that some health care providers took weeks to complete the paperwork after the visit. Once it was ready, participants had to return to the provider to pick it up. For these reasons, at least 13 participants who took part in the in-depth qualitative interviews missed deadlines for coupon submission but had in fact completed the activity. Only one participant submitted the coupon after the deadline. Another participant explained the challenges she faced in completing the activity:

Yes, the kid's dentist. I was not able to send it because I missed the date and, you know, you get an appointment and their doctor wasn't accepting the insurance that I had, and when I called and made an appointment the date was past. And also, I missed two, the one to the dentist and the one for the physical, which is every six months. Because I took it to fill it out and it took them a month and a half to fill it out.

In addition, some participants encountered resistance from health care providers who were unfamiliar with the program. As one participant explained, "In my case, I rarely send it. A lot of times, my doctor, a lady, says, 'No, but I don't have time. I don't have knowledge of this. I have to know more about this.'"

These types of experiences may explain why participants reported more preventive health care visits than are evident in the program data.

# Impacts on Health Insurance Coverage and Health Care

This section examines the impact of Family Rewards on health insurance coverage and health care for adults and children who are enrolled in the program.<sup>17</sup> As discussed in previous sections, overall health insurance coverage was already extremely high for this sample. None-theless, Family Rewards helped raise it even higher.

#### Health Insurance Coverage Overall

The analysis of health insurance coverage draws on both the 18-month survey and administrative records data. The survey provides a more comprehensive snapshot of health insurance coverage by including a series of questions on whether participants — and members of their families — were covered by public or private health insurance in the month prior to the survey interview. The administrative records data, on the other hand, capture receipt of public insurance only, but offer multiple data points, pre- and post-random assignment, allowing the study to trace impacts on Medicaid receipt over time. Therefore, these two data sources offer slightly different lenses for assessing the program's effects on health insurance coverage.

Tables 7.5 and 7.6 present these findings. Starting with the survey-based results (see the first panel of Table 7.5), it is evident that at about 18 months after random assignment (the average length of the survey follow-up period), few sample members were without health insurance coverage. About 95.6 percent of the program group members reported having some form of public or private health insurance, compared with 93.7 percent of the control group members, a statistically significant though small difference of 1.9 percentage points. The program group reported slightly higher levels of both public and private insurance, producing the overall difference in coverage between the two groups.

The control group coverage rates are higher than the designers of Family Rewards anticipated, especially for people living in the very high-poverty neighborhoods from which the sample was selected. Consistent with these expectations, a national health study found that

<sup>&</sup>lt;sup>17</sup>The health insurance reward was dropped for the third year of the program. This change does not affect the results presented in this section.

## Table 7.5

# Impacts on Families' Health Insurance Coverage and Parents' Receipt of Health Care Services

	Program	Control Difference			Effect
Outcome (%)	Group	Group	(Impact)	P-Value	Size
Health insurance in previous month					
Respondent had health insurance	95.6	93.7	1.9 **	0.020	
Publicly funded	73.3	72.4	0.9	0.451	
Privately, but not publicly, funded <sup>a</sup>	22.2	21.4	0.8	0.475	
All dependent children had health insurance <sup>b</sup>	94.8	93.5	1.3	0.133	
All children covered by public health insurance only <sup>c</sup>	75.4	74.3	1.1	0.446	
All children covered by private health insurance only <sup>c</sup>	15.2	15.9	-0.7	0.542	
Health insurance coverage since random assignment					
Respondent had a period with no coverage	16.1	19.4	-3.3 **	0.016	
Some or all of respondent's children had a					
period with no coverage	14.6	17.9	-3.3 **	0.014	
<b>Respondent's health care utilization</b>					
Has a usual source of health care	94.9	91.4	3.5 ***	0.000	
Clinic or health center	61.0	51.6	9.5 ***	0.000	
Doctor's office	21.2	23.4	-2.2	0.126	
Hospital emergency room	3.3	5.3	-2.0 ***	0.006	
Hospital outpatient department	9.4	11.1	-1.8	0.109	
Other	0.1	0.1	0.0	0.980	
Has a personal doctor or health care provider	94.4	93.4	1.0	0.244	
Saw a personal doctor in the past 12 months	86.1	82.3	3.8 ***	0.004	
Had a health checkup since random assignment	93.2	91.7	1.5	0.128	
Dental visits since random assignment					
Had at least 1 dental visit	86.0	83.0	3.0 **	0.024	
Had at least 2 dental visits	67.4	57.9	9.5 ***	0.000	
Stayed in hospital overnight since random assignment <sup>d</sup>	16.7	18.5	-1.7	0.464	
<u>Unmet health needs</u>					
Did not get needed medical care because of cost in					
past 12 months <sup>e</sup>	6.5	10.4	-3.9 ***	0.000	
Did not fill prescription because of cost in past 12 months	13.6	15.8	-2.1 *	0.096	
Received help finding a dentist or health care provider					
from any NPO	9.5	10.7	-1.1	0.297	
Respondent's health care satisfaction					
Average patient satisfaction score <sup><math>f</math></sup> (1 = low; 5 = high)	3.7	3.7	0.0 *	0.094	0.075
General satisfaction <sup>g</sup>	3.6	3.6	0.0	0.357	0.041
Communication <sup>h</sup>	4.0	4.0	0.0	0.546	0.027
				(22	ntinued)

(continued)

	Program	<b>D V</b> 1	Effect		
Outcome (%)	Group	Group	(Impact)	P-Value	Size
Technical quality <sup>i</sup>	4.0	3.8	0.1 ***	0.001	0.153
Time spent with doctor <sup>j</sup>	3.6	3.6	0.0	0.317	0.045
Accessibility and convenience <sup>k</sup>	3.5	3.5	0.0	0.766	0.013
Sample size (total $=$ 3,082)	1,574	1,508			

#### Table 7.5 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: Sample sizes vary because of missing values.

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 families or sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcome for both groups combined.

<sup>a</sup>Respondents with public coverage were not asked whether they have private coverage; therefore, it is not possible to estimate if they also have private coverage. Seedco's program data indicate that 5 percent of families in the program group earned rewards for having both private and public coverage. Even more families may have had both public and private coverage but did not actively submit coupons for private coverage and, therefore, are not captured in the program data.

<sup>b</sup>Child-related health insurance measures were calculated for sample members with at least one child at the time of the survey.

<sup>c</sup>The percentages of all children covered by public and all children covered by private health insurance do not add up to the percentage of all children covered by any insurance because some families reported having children covered by both types of insurance.

<sup>d</sup>The items in this section of the survey were administered to a random subsample (N = 1,022) of the survey respondents.

<sup>e</sup>This excludes prescriptions.

<sup>f</sup>The items in this section of the survey were administered to a random subsample (N = 2,043) of the survey respondents. The five patient satisfaction subscales are based on ten items from the RAND Patient Satisfaction Questionnaire (PSQ-18). Higher values (maximum = 5) reflect more satisfaction with medical care, and lower values (minimum = 1) reflect more dissatisfaction (www.rand.org/health surveys\_tools/psq/index.html). The average patient satisfaction score is the average of the five subscale scores.

<sup>g</sup>The "general satisfaction" subscale is an average of the responses to two questions about agreement with the following statements: "The medical care I have been receiving is just about perfect" and "I am dissatisfied with some things about the medical care I receive."

<sup>h</sup>The "communication" subscale is based on agreement with the following statement: "Doctors I go to are good about explaining the reasons for medical tests."

<sup>i</sup>The "technical quality" subscale is based on agreement with the following statement: "When I go for medical care, they are careful to check everything when treating and examining me."

<sup>3</sup>The "time spent with doctor" subscale is an average of the responses to two questions about agreement with the following statements: "Doctors usually spend enough time time talking with me about my medical condition or treatment" and "Those who provide my medical care sometime hurry too much when they treat me."

<sup>k</sup>The "accessibility and convenience" subscale is an average of the responses to four questions about agreement with the following statements: "Where I get medical care, I have to wait too long for emergency treatment," "I find it hard to get an appointment for medical care right away," "I have easy access to the medical specialist(s) I need," and "I am able to get medical care when I need it." only 81 percent of food stamp recipients had some form of health insurance.<sup>18</sup> A number of factors may be contributing to the higher rates found in the Family Rewards sample. First, the study sample does not include undocumented immigrants, who tend to have much lower coverage rates than legal immigrant and nonimmigrant low-income families. Second, as discussed previously, New York City and New York State have expanded public health insurance coverage for low-income families (Medicaid program, Family Health Plus, and CHIP, also known as Child Health Plus) and have intensified their efforts to market that coverage to those families in recent years. Along with the efforts to expand coverage, the City and State have also made significant investments in strengthening the primary and preventive health care delivery system.<sup>19</sup> Moreover, many states "churn" Medicaid recipients at a higher rate, requiring them to reduce the number of adults and children churning on and off Medicaid and CHIP, New York has implemented several steps to streamline and simplify Medicaid renewal processes.<sup>20</sup>

#### Public Health Insurance Coverage

On the 18-month parent survey, program and control groups report fairly comparable levels of public health insurance coverage: 73.3 percent of the program group and 72.4 percent of the control group reported having such insurance at the time of the interview, a difference of 0.9 that is not statistically significant (see Table 7.5). The public health insurance levels reported at the point of the survey interview are fairly comparable with the levels reported upon entry into the study.

Findings on public insurance coverage are also available from administrative records data and are presented in Table 7.6. The table presents Medicaid receipt for adults grouped by their TANF or SNA status at the time of random assignment.<sup>21</sup> The top panel shows the impacts for program and control group members who were *not* receiving TANF or SNA at the point of random assignment. As shown, the program increased this group's Medicaid receipt rates starting in Quarter 5 of random assignment, producing small but positive effects that persisted through the end of the follow-up period for this report. The effects were largest in Quarter 5:

<sup>&</sup>lt;sup>18</sup>The National Health and Nutrition Examination Survey (NHANES) is the primary data source for monitoring the nation's nutrition and health status. This report by Cole and Fox (2004) describes the nutrition and health characteristics of participants and nonparticipants in the Food Stamp program using data from the third NHANES survey, which was completed between 1988 and 1994 for a large, nationally representative sample.

<sup>&</sup>lt;sup>19</sup>Coalition of New York State Public Health Plans (2009).

<sup>&</sup>lt;sup>20</sup>United Hospital Fund (2009).

<sup>&</sup>lt;sup>21</sup>Because reliable data on start and end dates were not available, Medicaid receipt in a given quarter is measured using the recipient's status on the first day of that quarter. As a result, the measure reported here captures coverage status at the start of each quarter.

#### Table 7.6

# Impacts on Parents' Medicaid Receipt, by Temporary Assistance for Needy Families (TANF) or Safety Net Assistance (SNA) Status at the Time of Random Assignment

	Program	Control	Difference	
Outcome	Group	Group	(Impact)	P-Value
Medicaid coverage among parents not receiving				
TANF/SNA at random assignment				
Quarter of random assignment (%)	56.3	55.9	0.4	0.680
Quarter 2	58.5	58.6	-0.1	0.000
Quarter 3	58.8	57.8	1.0	0.405
Quarter 4	59.2	57.4	1.8	0.403
Quarter 5	60.8	56.5	4.4 ***	0.001
Quarter 6	60.4	56.5	3.9 ***	0.001
Quarter 7	59.2	56.3	2.8 **	0.035
Covered by Medicaid in all 7 quarters from				
time of random assignment (%)	44.7	41.0	3.7 ***	0.007
Average number of quarters covered by Medicaid	3.6	3.4	0.1 **	0.022
Sample size (total = 3,696)	1,837	1,859		
Medicaid coverage among parents receiving				
TANF/SNA at random assignment				
Quarter of random assignment (%)	88.8	89.5	-0.8	0.604
Quarter 2	88.2	87.8	0.4	0.824
Quarter 3	85.4	85.2	0.2	0.939
Quarter 4	86.0	82.7	3.3	0.123
Quarter 5	83.8	80.4	3.5	0.120
Quarter 6	80.1	79.6	0.5	0.816
Quarter 7	80.9	80.9	-0.1	0.982
Covered by Medicaid in all 7 quarters from				
time of random assignment (%)	62.4	62.8	-0.4	0.887
Average number of quarters covered by Medicaid	5.0	5.0	0.1	0.396
Sample size (total $= 1,121$ )	579	542		
Medicaid coverage among parents				
	64.1	64.1	0.0	0.086
Quarter of random assignment (%) Quarter 2	65.6	64.1 65.9	-0.4	0.986 0.714
•				
Quarter 3	65.1	64.5	0.6	0.583
Quarter 4	65.5	63.8	1.7	0.123
Quarter 5	66.0	62.6	3.4 ***	0.002
Quarter 6	65.1	62.6	2.5 **	0.030
Quarter 7	64.2	62.7	1.5	0.207
Covered by Medicaid in all 7 quarters from				
time of random assignment (%)	49.0	46.4	2.6 **	0.036
Average number of quarters covered by Medicaid	3.9	3.8	0.1 *	0.070
Sample size (total = $4,966$ )	2,498	2,468		

#### Table 7.6 (continued)

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

NOTES: Because reliable data on start and end dates are not available, Medicaid receipt in a given quarter is measured using the recipient's status on the first day of that quarter.

The sample excludes 30 members randomly assigned between January and March 2008.

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 families or sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

56.5 percent of the control group participants who were not receiving TANF or SNA at baseline were receiving Medicaid, compared with 60.8 percent of the program group, a statistically significant difference of 4.4 percentage points.

The next panel shows the same types of outcomes for the group that *was* receiving TANF or SNA at random assignment. Recall that these individuals were not supposed to be eligible for the program's public health incentives while receiving TANF or SNA. About one-third of the enrolled sample (N = 1,121) was in this subgroup, and, as expected, Medicaid receipt rates for this group were higher for both the program and control groups, and Family Rewards did not increase the receipt rate for the program group.

The final panel shows results for the full sample of parents enrolled in the program. By Quarter 5 after random assignment, which coincides with the early part of Year 2 of the program, Family Rewards had increased Medicaid coverage for parents in the program group by 3.4 percentage points. However, that impact on the full sample fades by Quarter 7.

#### **Continuous Health Insurance Coverage**

Low-income families experience a high rate of interruptions — or churning — in public health coverage. It is estimated that approximately one-third of New York's public health enrollees fail to complete the recertification process each year and lose coverage.<sup>22</sup> Even though they remain eligible, families are prone to lose coverage at the time of recertification because they fail to successfully complete the process. Furthermore, gaps in coverage also occur with private insurance programs. This section draws on both administrative records and survey data to examine the effects of Family Rewards on continuity of health insurance coverage.

<sup>&</sup>lt;sup>22</sup>Lake Research Partners and Perry (2009).

Table 7.6 shows the data on the continuity of Medicaid coverage for parents. The top panel shows that Family Rewards increased the continuity of that coverage for parents who were not receiving TANF or SNA at the time of random assignment. Among that group, 44.7 percent of parents in the program group received Medicaid for all seven quarters of the available follow-up period, which is 3.7 percentage points higher than the 41.0 percent rate among the control group parents in that subgroup. However, it produced no effects on the continuity of Medicaid coverage for the subgroup that was receiving TANF or SNA (second panel of Table 7.6), for which continuity of coverage was already higher, as illustrated by the fact that 62.8 percent of the control group members had continuous coverage. The positive impacts for the full sample, shown in the bottom panel of Table 7.6, largely reflect the impacts for the subgroup that was not receiving TANF or SNA, which accounts for three-fourths of the full sample.

The 18-month survey findings provide another lens on this issue. The survey respondents were asked to report whether they or their children had not been covered by *public or private health insurance* since random assignment. Table 7.5 shows that Family Rewards decreased gaps in health insurance for both adults and children. Among adults, roughly 16.1 percent of program group respondents and 19.4 percent of control group respondents were without coverage at some point following random assignment (shown in the second panel of Table 7.5), a statistically significant reduction of 3.3 percentage points. Similarly, 14.6 percent of program group respondents and 17.9 percent of control group respondents indicated that some or all of their children had been without coverage at some point since random assignment, also a statistically significant reduction of 3.3 percentage points. Thus, the analyses of Medicaid records and the parent survey results show that Family Rewards reduced lapses in health insurance coverage for adults and children.

#### Source of Health Care

The 18-month survey included a question asking respondents whether they had a regular source of care — a place where they usually go when they are sick or in need of advice about their health, or when they need routine health care, like a checkup. Those with a positive response to the question were asked whether they go to a clinic or health center, a doctor's office or HMO, a hospital emergency room, a hospital outpatient department, or some other place for care.<sup>23</sup> This question does not attempt to measure actual emergency room or hospital outpatient department use; rather, it attempts to assess whether families have a "usual" place of

<sup>&</sup>lt;sup>23</sup>National estimates for this type of measure suggest that 16 percent of adults 18 years of age and over were without a usual place of health care. Of those with a usual place of care, 77 percent considered a doctor's office or HMO to be their usual place of health care, 20 percent considered a clinic or health center to be their usual place of health care, and 3 percent considered a hospital emergency room or outpatient department to be their usual place of health care (Pleis, Lucas, and Ward, 2009).

care to which they turn when needed for routine health care purposes. By encouraging participants to have a regular health care provider, the program is promoting the "medical home" concept, a model of health care delivery that, as explained earlier, includes an ongoing relationship between provider and patient, and a comprehensive approach to care and coordination of care through providers and community services.<sup>24</sup> Such a model of health care delivery is expected to reduce reliance on hospital emergency rooms for routine care.

At 18 months, Family Rewards produced a small but noticeable impact on the likelihood that program participants had a usual source of care and on the places from which that care was sought (see Table 7.5, third panel). Almost 95 percent of the program group reported that they had a usual source of care, compared with 91.4 percent of the control group, a statistically significant increase of 3.5 percentage points.<sup>25</sup> Program group members were more likely to report a clinic or health center as a usual source of care (61 percent compared with 51.6 percent), a statistically significant 9.5 percentage point impact over the control group.

Additionally, in the short run, the program reduced reported reliance on hospitals as a family's primary source of care. About 3.3 percent of the program group reported going to an emergency room for regular care, compared with 5.3 percent of the control group, a statistically significant reduction of 2 percentage points. Emergency room costs per visit are generally much higher than the costs of delivering comparable care in an outpatient clinic or doctor's office, so even this small reduction on this measure may yield important cost savings.

#### **Receipt of Health Care Services**

As discussed previously, Family Rewards incentives are also intended to promote regular preventive medical and dental care for all family members. Adopting good preventive health care practices is linked to healthier lives by reducing unmet health needs. National data from one study show that 77 percent of adults 18 years of age and over had contacted a doctor or

<sup>&</sup>lt;sup>24</sup>The concept of the medical home has evolved since its introduction by the American Academy of Pediatrics in 1967. Research suggests that individuals who have continuity with a regular practitioner are more likely to adhere to prescribed medications and to receive preventive care and well-coordinated, resource-efficient, and family-centered care, and are less likely to visit the emergency department and be hospitalized; in addition, their practitioner is more likely to recognize their problems and track their information (Christakis et al., 2001, 2002, 2003; Starfield and Shi, 2004).

<sup>&</sup>lt;sup>25</sup>According to national estimates released by the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS) updates based on data from the January-June 2009 National Health Interview Survey (NHIS), the percentage of persons who had a usual place to go for medical care was 85.4 percent, which was lower than, but not significantly different from, the 2008 estimate of 86.4 percent. These estimates are based on household interviews of a sample of the civilian noninstitutionalized population.

other health professional within the previous 12 months (excluding overnight hospital stays).<sup>26</sup> While it is unclear whether these visits were for regular checkups, these rates are lower than the rates of preventive health care visits reported by the low-income Family Rewards sample. The program's designers expected that the opposite would be the case.

The 18-month survey attempts to capture receipt of preventive health care services by asking respondents whether they had gone to a doctor, hospital, or clinic for a routine physical checkup (when they were not sick) since random assignment. A separate question asked whether they had seen their personal doctor or health care provider for a checkup or any medical care in the prior 12 months. Similarly, since the program encourages participants to have two dental checkups a year, survey respondents were asked how many times they had seen a dentist for a routine checkup or to have their teeth cleaned.

These findings are shown under the third panel of Table 7.5. First, 86.1 percent of the program group and 82.3 percent of the control group reported that they had seen their personal doctor or health care provider in the past 12 months — a 3.8 percentage point difference that is statistically significant. Family Rewards encouraged participants to adhere to physician-advised follow-up care, which might have contributed to this impact.

An even higher proportion of program and control group participants (93 percent and 92 percent, respectively) reported having had an annual health checkup in the period since random assignment, which could have ranged between 16 and 24 months for survey respondents. These rates appear to be exceptionally high, even for a sample that is reasonably well insured and includes no undocumented immigrants. However, they are high for both the program and control groups and there is no evidence that Family Rewards affected this particular measure.

In contrast, the program had some positive effects on preventive dental care. As Table 7.5 shows, 86 percent of the program group reported having a dental checkup since random assignment, compared with 83 percent of the control group, a statistically significant difference of 3 percentage points. Family Rewards offered incentives for program participants to have two dental checkups in a program year, as recommended by the American Dental Association, and the data suggest that the program resulted in a statistically significant 9.5 percentage point increase on this outcome.<sup>27</sup> Approximately 67.4 percent of the program group reported having two or more dental visits (which could include checkups/teeth cleaning) since random assign-

<sup>&</sup>lt;sup>26</sup>Another study, using a 19-month window, finds that 90 percent of all Americans, 74 percent of African-Americans, and 70 percent of children age 5-15 received preventive exams in that period (see Cherry, Woodwell, and Rechtsteiner, 2007).

<sup>&</sup>lt;sup>27</sup>Nationally, among adults 18-64 years of age, the prevalence rate for seeing a dentist is about 63 percent (NCHS, 2008).

ment, compared with 57.9 percent of the control group. Those who had not seen a dentist since random assignment offered a variety of reasons, including being scared of the dentist, not having the time, or lacking insurance or money. Less than 5 percent of those who did not see a dentist said they did not have a regular dentist (not shown in table).

Some participants in in-depth interviews credited the program for helping them make changes to their health care efforts. One participant said that, prior to enrollment in the program, she took her children to the dentist only when there was a problem. Because of Family Rewards, she said, she took her children for a checkup, including her four-year-old, who had never seen a dentist. Reflecting on her daughter's reaction to seeing a dentist, another participant said:

She's always been afraid of the dentist, so — I mean I had to take it. It was like a month before her . . . six-month checkup, so I said, "We have to go into the dentist today." She said, "Mommy, I don't want to go. . . . They hurt me." I say, "No they don't." I said, "But you're gonna get money for it." She said, "For real?" I say, "Yeah." She said, "Okay," and she went to that dentist and she sat down and opened her mouth. She doesn't have cavities or anything, but they cleaned her teeth and stuff.

Another participant reported that her family had been neglecting doctor visits prior to enrolling in Family Rewards because they lacked money for the copayments and medication recommended by doctors. With Family Rewards, they were able to go. "So that's a plus right there," said the mother. Some participants had neglected their own medical checkups, and were able to have a regular health checkup after enrolling in the program. Some were simply motivated by the rewards. One participant said,

Well, even though we were doing the thing all along, we know that, you know, sometimes you slack off. It motivates you! Okay, you know that if you take the kids to the dentist and say, "Okay, maybe next time," but you know that during this period you will get \$100, instead of waiting for some other time, you do it.

#### **Unmet Health Needs**

Family Rewards produced a small reduction in the extent to which families experienced medical-related hardships because of costs. In order to determine the program's effects on reducing unmet health needs, the 18-month survey included questions that asked respondents whether they needed to see a doctor or fill a prescription for medicine in the prior year but had not done so because of the cost. As shown in Table 7.5 (fourth panel, "Unmet health needs"), fewer program group members reported not being able to get medical care because they could not afford it (6.5 percent versus 10.4 percent, a statistically significant difference of 3.9 percen-

tage points).<sup>28</sup> Similarly, 13.6 percent of the program group and 15.8 percent of the control group reported that they had not been able to fill a prescription because of cost, a statistically significant reduction of 2.1 percentage points.

Finally, patient satisfaction has emerged as a critical outcome of medical care. It has been associated with patient adherence to medical recommendations, "doctor shopping," and disenrollment from prepaid health plans. Survey participants were administered items from the RAND Patient Satisfaction Questionnaire, a multidimensional scale assessing five domains of patient satisfaction.<sup>29</sup> Respondents report relatively high levels of satisfaction with the quality of health care received, among both groups and across all five domains of patient satisfaction (see Table 7.5, last panel). However, there is a small but statistically significant difference in respondents' rating of the technical quality of health care (that is, the patient's satisfaction with the treatment at the time of medical care), with program group members reporting higher levels of satisfaction, it is possible that the Family Rewards patient checklist form that was designed for doctor visits increased participants' awareness of the care they receive and what they are supposed to receive, and improved their interactions with their health care providers in terms of treatment. As discussed in Chapter 1, participants are expected to use for annual physical examinations.

# Health Outcomes

If Family Rewards encourages continuous health care coverage and the use of preventive health care visits, a logical question is whether this behavior translates into improved health outcomes for both adults and children. In the short run, Family Rewards is expected to improve health status through more diagnosis and management of chronic health conditions. Through its focus on health, the program might also have potential "spillover" effects on other health risk-taking behavior, such as smoking and lifestyle habits that lead to obesity, both of which are linked to mortality and a wide range of health problems and costs.<sup>30</sup> By

<sup>&</sup>lt;sup>28</sup>By comparison, for the period January through June 2009, 7.2 percent of the national population failed to obtain needed medical care because of cost at some time during the preceding 12 months (Blumberg and Luke, 2009).

<sup>&</sup>lt;sup>29</sup>The Patient Satisfaction Questionnaire (PSQ), consisting of 80 items, was originally developed by Ware and his colleagues (Ware, Snyder, and Wright, 1976a, 1976b). The items used for the Family Rewards survey are drawn from the PSQ-18, a short-form version of the original that retains many characteristics of its full-length counterpart (Marshall and Hays, 1994).

<sup>&</sup>lt;sup>30</sup>Obesity has been linked to an increased risk of numerous comorbidities, including high blood pressure, high blood cholesterol, type 2 diabetes mellitus, coronary heart disease, osteoarthritis, asthma, and gallbladder disease (Must et al., 1999; Mokdad et al., 2003). Moreover, obesity has been found to significantly lower life expectancy, particularly among young adults (Fontaine et al., 2003). With the rise in (continued)

conditioning reward payments on preventive health care activities, and by providing participants with the health care checklist to guide the rewarded interactions with doctors, it is possible that the program can generate secondary benefits, such as reductions in the types of behavior that have documented health risks.

### **Health Status**

Table 7.7 presents several measures for assessing the program's effects on health outcomes. The first item is a widely used and validated global self-assessment of health status. Perceived health status is assessed based on an item drawn from the "Short Form 12 Health Survey" (SF12), a widely used scale in national health surveys that provides a generic, multidimensional measure of physical and mental health. The Family Rewards 18-month survey respondents were asked, "Would you say your health in general was excellent, very good, good, fair, or poor?" When the same question was posed to a national sample, 13 percent of U.S. adults 18 years of age and over assessed themselves as being in fair or poor health. Adults in near-poor and poor families were two to three times more likely to have fair or poor health compared with adults in families who were not poor.<sup>31</sup>

As shown in Table 7.7, Family Rewards produced a small but statistically significant shift in the perceived health status of the program group relative to the control group. For example, it increased the proportion of program group members who rated their health as "excellent" by 2.3 percentage points and reduced the proportion who rated their health as "poor" by 1.9 percentage points.

#### Health Conditions and Risks

Survey respondents were also asked whether they had a medical or health problem, such as high blood pressure, high cholesterol, asthma, cancer, diabetes, or another health problem. They were asked to indicate whether the conditions that they mentioned were being treated. Overall, the program had no impact on the likelihood of reporting a medical condition.<sup>32</sup> However, program group members were slightly more likely than their control group counterparts to be receiving medical attention for health conditions. Just over 47 percent of the program

obesity, poor diet and physical inactivity have now become the number two preventable causes of death in the United States, behind only tobacco in the number of lives claimed each year (Mokdad, Marks, Stroup, and Gerberding, 2004).

<sup>&</sup>lt;sup>31</sup>This is consistent with the NHANES finding that Food Stamp program (FSP) participants have a more negative perception of their health status than do higher-income nonparticipants. About a third of the FSP participants rated their health status as very good or excellent, and a third rated their health status as fair or poor. The NHANES also finds that physician assessments of general health status are consistently more positive than are self-assessments.

<sup>&</sup>lt;sup>32</sup>The table shows only the four most common health conditions.

### Table 7.7

# Impacts on Parents' Health Outcomes

Health status           Average self-rated health (1 = poor; 5 = excellent)         3.2         3.1         0.1 **         0.011         0.00           Excellent (%)         15.8         13.5         2.3 *         0.064           Very good (%)         22.6         22.2         0.3         0.824           Good (%)         23.4         33.7         -0.3         0.857           Poor (%)         6.3         8.2         -1.9 **         0.033           Health conditions and risks            0.33           Has any medical condition <sup>*</sup> (%)         53.4         51.7         1.8         0.286           Asthma         17.0         15.7         1.8         0.286           Asthma         17.0         15.7         1.3         0.315           Diabetes         9.1         7.9         1.2         0.212           Currently being treated for any medical condition <sup>*</sup> (%)         47.2         44.4         2.8 *         0.092           Asthma         14.6         13.6         1.0         0.411         High blood pressure/hypertension         22.4         21.2         1.2         0.406           High blood pressure/hypertension         22.4		Program	Control	Difference		Effect
Average self-rated health $(1 = poor; 5 = excellent)$ 3.23.10.1 **0.0110.00Excellent (%)15.813.52.3 *0.064Very good (%)22.622.20.30.824Good (%)33.433.7-0.30.857Fair (%)21.922.3-0.40.753Poor (%)6.38.2-1.9 **0.033Health conditions and risksHas any medical condition* (%)53.451.71.80.286Astima17.015.71.30.315High blood pressure/hypertension23.923.40.50.737High blood pressure/hypertension23.923.40.50.737High blood pressure/hypertension24.91.0.510.10.40.691Diabetes9.17.91.20.2120.212Currently being treated for any medical condition* (%)47.244.42.8*0.092Asthma14.613.61.00.4111111610.60.532Average Body Mass Index (BMI)30.330.4-0.10.732-0.01Underweight (%)2.020.41.60.2840.284Overweight (%)2.220.41.60.2840.284Overweight (%)2.23.5-1.40.4360.507Normal weight (%)2.83.2-0.30.5970.57Normal weight (%)2.83.2-0.30.5970.57 <th>Outcome</th> <th>Group</th> <th>Group</th> <th>(Impact)</th> <th>P-Value</th> <th>Size</th>	Outcome	Group	Group	(Impact)	P-Value	Size
Excellent (%)15.813.52.3 $*$ 0.064Very good (%)22.622.20.30.824Good (%)33.433.7-0.30.857Fair (%)21.922.3-0.40.753Poor (%)6.38.2-1.9**Has any medical condition* (%)53.451.71.80.286Asthma17.015.71.30.315High blood pressure/hypertension23.923.40.50.737High cholesterol/high LDL10.510.10.40.691Diabetes9.17.91.20.212Currently being treated for any medical condition* (%)47.244.42.8*Asthma14.613.61.00.411High blood pressure/hypertension22.421.21.20.406High blood pressure/hypertension22.421.21.20.406High blood pressure/hypertension22.421.21.20.406High blood pressure/hypertension22.421.21.20.406High blood pressure/hypertension22.421.21.20.406High blood pressure/hypertension22.422.22.02.0.33Our endy field (%)1.01.1-0.10.787Normal weight (%)22.020.41.60.284Overweight (%)22.233.5-1.40.436Obese (%)44.845.0-0.20.928Number of cigarettes s	Health status					
Very good (%)22.622.20.30.824Good (%)33.433.7-0.30.857Fair (%)21.922.3-0.40.753Poor (%)6.38.2-1.9**0.033Health conditions and risksHas any medical condition*(%)53.451.71.80.286Asthma17.015.71.30.315High blood pressure/hypertension23.923.40.50.737High cholesterol/high LDL10.510.10.40.691Diabetes9.17.91.20.212Currently being treated for any medical condition*(%)47.244.42.8 *0.092Asthma14.613.61.00.411High cholesterol/high LDL8.98.70.20.831Diabetes9.58.80.60.532Average Body Mass Index (BMI)30.330.4-0.10.732-0.01Underweight (%)22.020.41.60.284Overweight (%)22.233.5-1.40.436Obese (%)44.845.0-0.20.928Number of cigarettes smoked per day (%)2.83.2-0.30.577Diabetes9.917.576.21.30.3791.511.410.70.60.5736-108.39.9-1.60.121More than 102.83.2-0.30.597D.57D.5775.0.030.5	Average self-rated health $(1 = poor; 5 = excellent)$	3.2	3.1	0.1 **	0.011	0.081
Good (%) $33.4$ $33.7$ $-0.3$ $0.857$ Fair (%) $21.9$ $22.3$ $-0.4$ $0.753$ Poor (%) $6.3$ $8.2$ $-1.9$ $**$ $0.033$ Health conditions and risksHas any medical condition <sup>8</sup> (%) $53.4$ $51.7$ $1.8$ $0.286$ Asthma $17.0$ $15.7$ $1.3$ $0.315$ High blood pressure/hypertension $23.9$ $23.4$ $0.5$ $0.737$ High cholesterol/high LDL $10.5$ $10.1$ $0.4$ $0.691$ Diabetes $9.1$ $7.9$ $1.2$ $0.212$ Currently being treated for any medical condition <sup>6</sup> (%) $47.2$ $44.4$ $2.8$ $*$ Asthma $14.6$ $13.6$ $1.0$ $0.411$ High cholesterol/high LDL $8.9$ $8.7$ $0.2$ $0.831$ Diabetes $9.5$ $8.8$ $0.6$ $0.532$ Average Body Mass Index (BMI) $30.3$ $30.4$ $-0.1$ $0.732$ $-0.01$ Underweight (%) $22.0$ $20.4$ $1.6$ $0.284$ Overweight (%) $22.2$ $33.5$ $-1.4$ $0.436$ Obese (%) $44.8$ $45.0$ $-0.2$ $0.928$ Number of cigarettes smoked per day (%) $0$ $7.5$ $76.2$ $1.3$ $0.379$ $1.5$ $11.4$ $10.7$ $0.6$ $0.573$ $6-10$ $8.3$ $9.9$ $-1.6$ $0.121$ More than 10 $2.8$ $3.2$ $-0.3$ $0.597$ <b>Exchosocial well</b>						
Fair (%) Poor (%) $21.9$ $6.3$ $22.3$ $8.2$ $-0.4$ $-1.9$ $0.753$ $0.033$ Health conditions and risksHas any medical condition <sup>a</sup> $53.4$ $10.5$ $51.7$ $1.3$ $1.8$ $0.516$ $0.286$ $0.737$ Asthma $17.0$ $15.7$ $15.7$ $1.3$ $0.516$ $0.315$ $0.737$ High blood pressure/hypertension Diabetes $23.4$ $0.510.1$ $0.5$ $0.4$ $0.737$ Currently being treated for any medical condition <sup>a</sup> (%) Asthma $47.2$ $14.6$ $13.6$ $44.4$ $2.8$ $2.2.4$ $2.8$ $2.2.2$ $0.092$ $0.411$ High blood pressure/hypertension $22.4$ $21.2$ $22.4$ $21.2$ $1.2$ $0.406$ $0.411$ High blood pressure/hypertension $22.4$ $22.4$ $21.2$ $1.2$ $0.406$ $0.411$ High blood pressure/hypertension $22.4$ $22.4$ $21.2$ $1.2$ $0.406$ $0.11$ $0.11$ $0.11$ $0.10$ $0.12$ $0.732$ $0.204$ Average Body Mass Index (BMI) Normal weight (%) $0.922$ $30.3$ $30.4$ $30.3$ $30.4$ $-0.1$ $-0.1$ $0.732$ $0.204$ Number of cigarettes smoked per day (%) $0$ $0.573$ $0.22$ $0.32.5$ $0.379$ $0.32.2$ Number of cigarettes smoked per day (%) $0$ $0.5973$ $0.21.3$ $0.32.5$ $0.379$ $0.5973$ Psychological Distress Scale (K10)° (10 = low; 50 = high) $18.9$ $12.8$ $19.4$ $12.9$ $-0.5$ $0.135$ $0.02$ $0.135$ Psychological Distress Scale (K10)° (10 = low; 50 = high) $12.8$ $12.8$ $12.9$ $12.9$ $-0.2$ $0.213$ $0.913$ Average		22.6			0.824	
Poor (%)       6.3       8.2 $-1.9 **$ 0.033         Health conditions and risks						
Health conditions and risks         Has any medical condition <sup>a</sup> (%) $53.4$ $51.7$ $1.8$ $0.286$ Asthma $17.0$ $15.7$ $1.3$ $0.315$ High blood pressure/hypertension $23.9$ $23.4$ $0.5$ $0.737$ High cholesterol/high LDL $10.5$ $10.1$ $0.4$ $0.691$ Diabetes $9.1$ $7.9$ $1.2$ $0.212$ Currently being treated for any medical condition <sup>a</sup> (%) $47.2$ $44.4$ $2.8$ $*$ $0.092$ Asthma $14.6$ $13.6$ $1.0$ $0.411$ High cholesterol/high LDL $8.9$ $8.7$ $0.2$ $0.831$ Diabetes $9.5$ $8.8$ $0.6$ $0.532$ Average Body Mass Index (BMI) $30.3$ $30.4$ $-0.1$ $0.732$ $-0.02$ Underweight <sup>6</sup> (%) $1.0$ $1.1$ $-0.1$ $0.787$ Normal weight (%) $22.0$ $20.4$ $1.6$ $0.284$ Overweight <sup>6</sup> (%) $22.0$ $20.4$ $1.6$ $0.284$ Obese (%)						
Has any medical condition* (%) $53.4$ $51.7$ $1.8$ $0.286$ Asthma17.0 $15.7$ $1.3$ $0.315$ High blood pressure/hypertension $23.9$ $23.4$ $0.5$ $0.737$ High cholesterol/high LDL $10.5$ $10.1$ $0.4$ $0.691$ Diabetes $9.1$ $7.9$ $1.2$ $0.212$ Currently being treated for any medical condition* (%) $47.2$ $44.4$ $2.8$ $*$ $0.092$ Asthma $14.6$ $13.6$ $1.0$ $0.411$ High cholesterol/high LDL $8.9$ $8.7$ $0.2$ $0.831$ Diabetes $9.5$ $8.8$ $0.6$ $0.532$ Average Body Mass Index (BMI) $30.3$ $30.4$ $-0.1$ $0.732$ $-0.01$ Underweight* (%) $1.0$ $1.1$ $-0.1$ $0.787$ Normal weight (%) $22.0$ $20.4$ $1.6$ $0.284$ Overweight (%) $32.2$ $33.5$ $-1.4$ $0.436$ Obese (%) $44.8$ $45.0$ $-0.2$ $0.928$ Number of cigarettes smoked per day (%) $0$ $7.5$ $76.2$ $1.3$ $0.379$ $1.5$ $11.4$ $10.7$ $0.6$ $0.573$ $6-10$ $8.3$ $9.9$ $-1.6$ $0.121$ More than 10 $2.8$ $3.2$ $-0.3$ $0.597$ $5.97$ $5.97$ $5.92$ $0.913$ Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high) $18.9$ $19.4$ $-0.5$ $0.135$ $-0.06$ Experienced serious psychological distress	Poor (%)	6.3	8.2	-1.9 **	0.033	
Astima17.015.71.30.315High blood pressure/hypertension23.923.40.50.737High cholesterol/high LDL10.510.10.40.691Diabetes9.17.91.20.212Currently being treated for any medical condition <sup>a</sup> (%)47.244.42.8*Asthma14.613.61.00.411High cholesterol/high LDL8.98.70.20.831Diabetes9.58.80.60.532Average Body Mass Index (BMI)30.330.4-0.10.732-0.01Underweight <sup>b</sup> (%)1.01.1-0.10.7870.20.831Normal weight (%)22.020.41.60.28400ese (%)00.20.928Number of cigarettes smoked per day (%)077.576.21.30.3791.50.121More than 102.83.2-0.30.5977571.40.15730.121Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high)18.919.4-0.50.135-0.06Experienced serious psychological distress12.812.9-0.20.9130.913Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high)17.517.30.20.1080.07	Health conditions and risks					
High blood pressure/hypertension23.923.40.50.737High cholesterol/high LDL10.510.10.40.691Diabetes9.17.91.20.212Currently being treated for any medical condition <sup>a</sup> (%)47.244.42.8 *0.092Asthma14.613.61.00.411High blood pressure/hypertension22.421.21.20.406High cholesterol/high LDL8.98.70.20.831Diabetes9.58.80.60.532Average Body Mass Index (BMI)30.330.4-0.10.732-0.01Underweight <sup>b</sup> (%)1.01.1-0.10.787Normal weight (%)22.020.41.60.284Overweight (%)32.233.5-1.40.436Obese (%)44.845.0-0.20.928Number of cigarettes smoked per day (%)077.576.21.30.3791.511.410.70.60.5736-108.39.9-1.60.121More than 102.83.2-0.30.597 <b>Psychological Distress</b> Scale (K10) <sup>c</sup> (10 = low; 50 = high)18.919.4-0.50.135-0.06Experienced serious psychological distress12.812.9-0.20.913Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high)17.517.30.20.1080.07	Has any medical condition <sup>a</sup> (%)	53.4	51.7	1.8	0.286	
High cholesterol/high LDL10.510.10.40.691Diabetes9.17.91.20.212Currently being treated for any medical condition <sup>a</sup> (%)47.244.42.8 *0.092Asthma14.613.61.00.411High blood pressure/hypertension22.421.21.20.406High cholesterol/high LDL8.98.70.20.831Diabetes9.58.80.60.532Average Body Mass Index (BMI)30.330.4-0.10.732-0.01Underweight <sup>b</sup> (%)1.01.1-0.10.787Normal weight (%)22.020.41.60.284Overweight (%)32.233.5-1.40.436Obese (%)44.845.0-0.20.928Number of cigarettes smoked per day (%)077.576.21.30.3791-511.410.70.60.5736-108.39.9-1.60.121More than 102.83.2-0.30.597Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high)18.919.4-0.50.135-0.06Experienced serious psychological distressin the past month <sup>c</sup> (%)12.812.9-0.20.913Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high)17.517.30.20.1080.07		17.0	15.7	1.3	0.315	
Diabetes9.17.91.20.212Currently being treated for any medical conditiona (%)47.244.42.8 *0.092Asthma14.613.61.00.411High blood pressure/hypertension22.421.21.20.406High cholesterol/high LDL8.98.70.20.831Diabetes9.58.80.60.532Average Body Mass Index (BMI)30.330.4-0.10.732-0.01Underweight <sup>b</sup> (%)1.01.1-0.10.787Normal weight (%)22.020.41.60.284Overweight (%)32.233.5-1.40.436Obese (%)44.845.0-0.20.928Number of cigarettes smoked per day (%)77.576.21.30.3791-511.410.70.60.5736-108.39.9-1.60.121More than 102.83.2-0.30.597 <b>Psychological Distress Scale (K10)</b> <sup>c</sup> (10 = low; 50 = high)18.919.4-0.50.135-0.06Experienced serious psychological distressin the past month <sup>c</sup> (%)12.812.9-0.20.913Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high)17.517.30.20.1080.07		23.9	23.4	0.5		
Currently being treated for any medical condition <sup>a</sup> (%)47.244.42.8 *0.092Asthma14.613.61.00.411High blood pressure/hypertension22.421.21.20.406High cholesterol/high LDL8.98.70.20.831Diabetes9.58.80.60.532Average Body Mass Index (BMI)30.330.4-0.10.732-0.01Underweight <sup>b</sup> (%)1.01.1-0.10.787Normal weight (%)22.020.41.60.284Overweight (%)32.233.5-1.40.436Obese (%)44.845.0-0.20.928Number of cigarettes smoked per day (%)077.576.21.30.3791-511.410.70.60.5736-108.39.9-1.60.121More than 102.83.2-0.30.597 <b>Psychosocial well-being</b> -0.20.913Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high)18.919.4-0.50.135-0.06Experienced serious psychological distressin the past month <sup>c</sup> (%)12.812.9-0.20.913Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high)17.517.30.20.1080.07	0					
Asthma14.613.61.00.411High blood pressure/hypertension $22.4$ $21.2$ $1.2$ $0.406$ High cholesterol/high LDL $8.9$ $8.7$ $0.2$ $0.831$ Diabetes $9.5$ $8.8$ $0.6$ $0.532$ Average Body Mass Index (BMI) $30.3$ $30.4$ $-0.1$ $0.732$ Underweight <sup>b</sup> (%) $1.0$ $1.1$ $-0.1$ $0.787$ Normal weight (%) $22.0$ $20.4$ $1.6$ $0.284$ Overweight (%) $32.2$ $33.5$ $-1.4$ $0.436$ Obese (%) $44.8$ $45.0$ $-0.2$ $0.928$ Number of cigarettes smoked per day (%) $0$ $77.5$ $76.2$ $1.3$ $0.379$ $1-5$ $11.4$ $10.7$ $0.6$ $0.573$ $6-10$ $8.3$ $9.9$ $-1.6$ $0.121$ More than $10$ $2.8$ $3.2$ $-0.3$ $0.597$ Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high) $18.9$ $19.4$ $-0.5$ $0.135$ $-0.06$ Experienced serious psychological distress $12.8$ $12.9$ $-0.2$ $0.913$ Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high) $17.5$ $17.3$ $0.2$ $0.108$ $0.07$	Diabetes	9.1	7.9	1.2	0.212	
High blood pressure/hypertension $22.4$ $21.2$ $1.2$ $0.406$ High cholesterol/high LDL $8.9$ $8.7$ $0.2$ $0.831$ Diabetes $9.5$ $8.8$ $0.6$ $0.532$ Average Body Mass Index (BMI) $30.3$ $30.4$ $-0.1$ $0.732$ $-0.01$ Underweight <sup>b</sup> (%) $1.0$ $1.1$ $-0.1$ $0.775$ Normal weight (%) $22.0$ $20.4$ $1.6$ $0.284$ Overweight (%) $32.2$ $33.5$ $-1.4$ $0.436$ Obese (%) $44.8$ $45.0$ $-0.2$ $0.928$ Number of cigarettes smoked per day (%) $77.5$ $76.2$ $1.3$ $0.379$ $0$ $77.5$ $76.2$ $1.3$ $0.379$ $1-5$ $11.4$ $10.7$ $0.6$ $0.573$ $6-10$ $8.3$ $9.9$ $-1.6$ $0.121$ More than $10$ $2.8$ $3.2$ $-0.3$ $0.597$ Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high) $18.9$ $19.4$ $-0.5$ $0.135$ Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high) $18.9$ $19.4$ $-0.5$ $0.135$ $-0.06$ Experienced serious psychological distressin the past month <sup>c</sup> (%) $12.8$ $12.9$ $-0.2$ $0.913$ Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high) $17.5$ $17.3$ $0.2$ $0.108$ $0.07$	Currently being treated for any medical condition <sup>a</sup> (%)	47.2	44.4	2.8 *	0.092	
High cholesterol/high LDL $8.9$ $8.7$ $0.2$ $0.831$ Diabetes $9.5$ $8.8$ $0.6$ $0.532$ Average Body Mass Index (BMI) $30.3$ $30.4$ $-0.1$ $0.732$ $-0.01$ Underweight <sup>b</sup> (%) $1.0$ $1.1$ $-0.1$ $0.732$ $-0.01$ Underweight (%) $22.0$ $20.4$ $1.6$ $0.284$ Overweight (%) $32.2$ $33.5$ $-1.4$ $0.436$ Obese (%) $44.8$ $45.0$ $-0.2$ $0.928$ Number of cigarettes smoked per day (%) $0$ $77.5$ $76.2$ $1.3$ $0.379$ $0$ $77.5$ $76.2$ $1.3$ $0.379$ $0.573$ $6-10$ $8.3$ $9.9$ $-1.6$ $0.121$ More than 10 $2.8$ $3.2$ $-0.3$ $0.597$ Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high) $18.9$ $19.4$ $-0.5$ $0.135$ $-0.06$ Experienced serious psychological distressin the past month <sup>c</sup> (%) $12.8$ $12.9$ $-0.2$ $0.913$ Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high) $17.5$ $17.3$ $0.2$ $0.108$ $0.07$	Asthma	14.6	13.6	1.0	0.411	
Diabetes9.58.80.60.532Average Body Mass Index (BMI) $30.3$ $30.4$ $-0.1$ $0.732$ $-0.01$ Underweight <sup>b</sup> (%) $1.0$ $1.1$ $-0.1$ $0.787$ Normal weight (%) $22.0$ $20.4$ $1.6$ $0.284$ Overweight (%) $32.2$ $33.5$ $-1.4$ $0.436$ Obese (%) $44.8$ $45.0$ $-0.2$ $0.928$ Number of cigarettes smoked per day (%) $0$ $77.5$ $76.2$ $1.3$ $0.379$ $0$ $77.5$ $76.2$ $1.3$ $0.379$ $1-5$ $6-10$ $8.3$ $9.9$ $-1.6$ $0.121$ More than 10 $2.8$ $3.2$ $-0.3$ $0.597$ Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high) $18.9$ $19.4$ $-0.5$ $0.135$ $-0.06$ Experienced serious psychological distressin the past month <sup>c</sup> (%) $12.8$ $12.9$ $-0.2$ $0.913$ Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high) $17.5$ $17.3$ $0.2$ $0.108$ $0.07$	High blood pressure/hypertension	22.4	21.2	1.2	0.406	
Average Body Mass Index (BMI) $30.3$ $30.4$ $-0.1$ $0.732$ $-0.01$ Underweight <sup>b</sup> (%) $1.0$ $1.1$ $-0.1$ $0.787$ Normal weight (%) $22.0$ $20.4$ $1.6$ $0.284$ Overweight (%) $32.2$ $33.5$ $-1.4$ $0.436$ Obese (%) $44.8$ $45.0$ $-0.2$ $0.928$ Number of cigarettes smoked per day (%) $77.5$ $76.2$ $1.3$ $0.379$ $0$ $77.5$ $76.2$ $1.3$ $0.379$ $1-5$ $11.4$ $10.7$ $0.6$ $0.573$ $6-10$ $8.3$ $9.9$ $-1.6$ $0.121$ More than $10$ $2.8$ $3.2$ $-0.3$ $0.597$ Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high) $18.9$ $19.4$ $-0.5$ $0.135$ $-0.06$ Experienced serious psychological distress $12.8$ $12.9$ $-0.2$ $0.913$ Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high) $17.5$ $17.3$ $0.2$ $0.108$ $0.75$	High cholesterol/high LDL	8.9	8.7	0.2	0.831	
Underweight Normal weight (%)1.01.1-0.10.787 0.22.0Normal weight (%)22.020.41.60.284 0.284Overweight (%)32.233.5-1.40.436 0.436Obese (%)44.845.0-0.20.928Number of cigarettes smoked per day (%)77.576.21.30.379 0.573077.576.21.30.3791-511.410.70.60.573 0.5736-108.39.9-1.60.121 0.121More than 102.83.2-0.30.597 <b>Psychological bistress</b> Scale (K10) <sup>c</sup> (10 = low; 50 = high)18.919.4-0.50.135-0.06Experienced serious psychological distress in the past month <sup>c</sup> (%)12.812.9-0.20.913Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high)17.517.30.20.1080.07	Diabetes	9.5	8.8	0.6	0.532	
Normal weight (%) Overweight (%) $22.0$ $32.2$ $33.5$ $1.6$ $44.8$ $0.284$ $45.0$ Number of cigarettes smoked per day (%) 0 $1-5$ $6-10$ More than 10 $77.5$ $11.4$ $2.8$ $3.2$ $1.3$ $3.2$ $9.9$ $0.379$ $1.6$ $0.121$ $0.597$ Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high) $18.9$ $12.8$ $19.4$ $12.9$ $0.2$ $0.2$ Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high) $18.9$ $12.8$ $19.4$ $12.9$ $0.2$ $0.21$ Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high) $17.5$ $17.5$ $17.3$ $0.2$ $0.108$ $0.07$		30.3	30.4	-0.1	0.732	-0.013
Overweight (%) Obese (%) $32.2$ $44.8$ $33.5$ $44.8$ $-1.4$ $0.2$ $0.436$ $0.928$ Number of cigarettes smoked per day (%) 0 1-5 $6-10$ More than 10 $77.5$ $11.4$ $10.7$ $76.2$ $11.4$ $10.7$ $2.8$ $3.2$ $-0.3$ $0.379$ $0.597$ Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high) $18.9$ $12.8$ $12.8$ $19.4$ $12.9$ $-0.5$ $0.135$ $-0.06$ Experienced serious psychological distress in the past month <sup>c</sup> (%) $12.8$ $12.8$ $12.9$ $17.5$ $-0.2$ $0.913$ Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high) $17.5$ $17.3$ $0.2$ $0.2$ $0.108$ $0.07$	Underweight <sup>b</sup> (%)	1.0	1.1	-0.1	0.787	
Obese (%) $44.8$ $45.0$ $-0.2$ $0.928$ Number of cigarettes smoked per day (%) $77.5$ $76.2$ $1.3$ $0.379$ $0$ $77.5$ $76.2$ $1.3$ $0.379$ $1-5$ $11.4$ $10.7$ $0.6$ $0.573$ $6-10$ $8.3$ $9.9$ $-1.6$ $0.121$ More than $10$ $2.8$ $3.2$ $-0.3$ $0.597$ <b>Psychosocial well-being</b> Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high) $18.9$ $19.4$ $-0.5$ $0.135$ $-0.06$ Experienced serious psychological distress in the past month <sup>c</sup> (%) $12.8$ $12.9$ $-0.2$ $0.913$ Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high) $17.5$ $17.3$ $0.2$ $0.108$ $0.07$				1.6		
Number of cigarettes smoked per day (%) $77.5$ $76.2$ $1.3$ $0.379$ $0$ $77.5$ $76.2$ $1.3$ $0.379$ $1-5$ $11.4$ $10.7$ $0.6$ $0.573$ $6-10$ $8.3$ $9.9$ $-1.6$ $0.121$ More than $10$ $2.8$ $3.2$ $-0.3$ $0.597$ <b>Psychosocial well-being</b> Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high) $18.9$ $19.4$ $-0.5$ $0.135$ $-0.06$ Experienced serious psychological distressin the past month <sup>c</sup> (%) $12.8$ $12.9$ $-0.2$ $0.913$ Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high) $17.5$ $17.3$ $0.2$ $0.108$ $0.07$	Overweight (%)	32.2	33.5	-1.4	0.436	
077.576.21.30.3791-511.410.70.60.5736-108.39.9-1.60.121More than 102.83.2-0.30.597 <b>Psychosocial well-being</b> Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high)18.919.4-0.50.135-0.06Experienced serious psychological distress in the past month <sup>c</sup> (%)12.812.9-0.20.913Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high)17.517.30.20.1080.07	Obese (%)	44.8	45.0	-0.2	0.928	
1-5 $11.4$ $10.7$ $0.6$ $0.573$ $6-10$ $8.3$ $9.9$ $-1.6$ $0.121$ More than $10$ $2.8$ $3.2$ $-0.3$ $0.597$ <b>Psychosocial well-being</b> Psychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high) $18.9$ $19.4$ $-0.5$ $0.135$ Experienced serious psychological distressin the past month <sup>c</sup> (%) $12.8$ $12.9$ $-0.2$ $0.913$ Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high) $17.5$ $17.3$ $0.2$ $0.108$ $0.07$	Number of cigarettes smoked per day (%)					
6-10 More than 10 $8.3$ $2.8$ $9.9$ $3.2$ $-1.6$ $0.597$ $0.121$ $0.597$ <b>Psychosocial well-beingPsychological Distress Scale (K10)</b> <sup>c</sup> (10 = low; 50 = high) $18.9$ $18.9$ $19.4$ $19.4$ $-0.5$ $0.135$ $0.135$ $-0.06$ Experienced serious psychological distress in the past month <sup>c</sup> (%) $12.8$ $12.8$ $12.9$ $17.5$ $-0.2$ $0.108$ $0.07$				1.3	0.379	
More than 10 $2.8$ $3.2$ $-0.3$ $0.597$ Psychosocial well-beingPsychological Distress Scale (K10) <sup>c</sup> (10 = low; 50 = high) $18.9$ $19.4$ $-0.5$ $0.135$ $-0.06$ Experienced serious psychological distress in the past month <sup>c</sup> (%) $12.8$ $12.9$ $-0.2$ $0.913$ Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high) $17.5$ $17.3$ $0.2$ $0.108$ $0.07$	1-5				0.573	
Psychosocial well-being         Psychological Distress Scale $(K10)^c (10 = low; 50 = high)$ 18.9       19.4       -0.5       0.135       -0.06         Experienced serious psychological distress       in the past month <sup>c</sup> (%)       12.8       12.9       -0.2       0.913         Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high)       17.5       17.3       0.2       0.108       0.07						
Psychological Distress Scale $(K10)^c$ (10 = low; 50 = high)       18.9       19.4       -0.5       0.135       -0.06         Experienced serious psychological distress       in the past month <sup>c</sup> (%)       12.8       12.9       -0.2       0.913         Average score on "state of hope" scale <sup>d</sup> (6 = low; 24 = high)       17.5       17.3       0.2       0.108       0.07	More than 10	2.8	3.2	-0.3	0.597	
Experienced serious psychological distress in the past month $^{c}(\%)$ 12.812.9-0.20.913Average score on "state of hope" scale d (6 = low; 24 = high)17.517.30.20.1080.07	Psychosocial well-being					
in the past month12.812.9-0.20.913Average score on "state of hope" scaled $(6 = low; 24 = high)$ 17.517.30.20.1080.07	Psychological Distress Scale $(K10)^{c}$ (10 = low; 50 = high)	18.9	19.4	-0.5	0.135	-0.064
in the past month12.812.9-0.20.913Average score on "state of hope" scaled $(6 = low; 24 = high)$ 17.517.30.20.1080.07	Experienced serious psychological distress					
		12.8	12.9	-0.2	0.913	
	Average score on "state of hope" scale <sup>d</sup> ( $6 = low$ ; $24 = high$ )	17.5	17.3	0.2	0.108	0.070
Sample size (total = $3.082$ ) $1.574 = 1.508$	Sample size (total $=$ 3,082)	1,574	1,508			

(continued)

#### Table 7.7 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: Sample sizes vary because of missing values.

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 families or sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

<sup>a</sup>The four most commonly reported conditions are listed.

<sup>b</sup>Weight categories are from the National Institutes of Health. Underweight is defined as having a BMI of less than 18.5. Normal weight is defined as having a BMI between 18.5 and 24.9. Overweight is defined as having a BMI between 25.0 and 29.9. Obesity is defined as having a BMI at least 30.0. Five percent of the sample are excluded from this analysis because of missing data.

<sup>c</sup>This item measures the score on Kessler's Psychological Distress Scale (K10), a 10-item questionnaire intended to yield a global measure of distress based on questions about anxiety and depressive symptoms that a person has experienced in the most recent four-week period. See Kessler et al. (2002). A randomly selected subsample of survey respondents (N = 2,043) was asked these questions.

<sup>d</sup>The "state of hope scale" measures the level of ongoing goal-directed thinking. The response codes (1 to 4) of the six items for each person are summed, with lower values representing less goal-directed thinking and higher values representing more. The scale is taken from Snyder et al. (1996). A randomly selected subsample of survey respondents (N = 2,043) was asked these questions.

group reported getting treatment for a chronic condition, compared with 44.4 percent of the control group, a statistically significant increase of 2.8 percentage points. These findings suggest that while the prevalence of selected chronic conditions is comparable across the two groups, Family Rewards, perhaps through increasing access to and continuity with health care insurance, enabled participants to seek more regular care and identify health problems that would otherwise have gone undetected. This "treatment effect" could also result from having a regular source of care, which is also one of the short-term effects of Family Rewards.

Beyond the program's effects on health care coverage and utilization, the table presents findings for selected behaviors that are known to have serious health implications: smoking and lifestyle habits that lead to being overweight. To explore the potential impacts of the program, this section presents the estimated effects of Family Rewards on smoking and obesity.

Nationally, the prevalence rate for smoking by individuals who are 18 years of age or older in 2008 was estimated to be 21 percent.<sup>33</sup> The Family Rewards sample reports similar

<sup>&</sup>lt;sup>33</sup>The data suggest that adults with low educational attainment had the highest prevalence of smoking — that is, 41.3 percent among persons with a General Educational Development (GED) certificate, compared (continued)

rates. Survey respondents were asked whether they were currently smoking and the number of cigarettes smoked a day. There were no statistically significant differences between the two groups on this outcome.

Obesity is another pressing health concern, with many experts claiming that the country is suffering from an obesity epidemic. The concerns about the increasing prevalence of obesity are founded in the association between obesity and adverse health outcomes, including excess mortality, and increased health expenditures.<sup>34</sup>

The measure most often used to assess this condition is referred to as the Body Mass Index, or BMI. It is calculated from the sample members' responses to survey questions regarding height and weight.<sup>35</sup> As shown in Table 7.7, there are no statistically significant differences in the BMI scores for the Family Rewards program and control groups. However, close to 45 percent of the sample members in each group were classified in the obese category.

The final set of measures that is shown in the table captures two dimensions of psychological well-being: psychological distress and the belief in one's ability to initiate and sustain action.<sup>36</sup> Consistent with prior research, it is possible that changes in health and economic well-being brought about by such programs could improve mental health and emotional well-being. At this stage of the evaluation, there is limited support for this hypothesis. As shown in Table 7.7, there are no impacts on global measures of distress and feelings of goal orientation. In the short run, while Family Rewards reduced poverty, financial strain, and food insecurity, it may be that overall distress and beliefs about one's control over life events are more deeply rooted, more characteristic of personal dispositions, and take longer to change.<sup>37</sup>

#### Health Impacts for Children

This section turns to the program's health effects for children under age 6 and for the three groups of focal children. As discussed earlier in this report, the survey targeted "focal"

with 5.7 among those with a graduate degree. The prevalence of current smoking is also higher among adults living below the federal poverty level (31.5 percent). See Dube, Asman, Malarcher, and Carabollo (2009).

<sup>&</sup>lt;sup>34</sup>Schmeiser (2008); Flegal, Graubard, Williamson, and Gail (2005).

<sup>&</sup>lt;sup>35</sup>"Underweight" is defined as a BMI of less than 18.5; "normal weight" as greater than or equal to 18.5 and less than 25.0; "overweight" as greater than or equal to 25.0 and less than 30.0; and "obese" as greater than or equal to 30.0. Using self-reported measures of height and weight on the 18-month survey, BMI scores were calculated for the program and control group members in the Family Rewards sample.

<sup>&</sup>lt;sup>36</sup>Distress is measured using the Kessler Psychological Distress Scale, known as the "K-10 scale" (Kessler et al., 2002), which is a 10-item questionnaire intended to yield a global measure of distress based on questions about anxiety and depressive symptoms that a person has experienced in the most recent four-week period. The ability to initiate and sustain action is assessed using the State of Hope scale, which measures goal-directed thinking (Snyder et al., 1996).

<sup>&</sup>lt;sup>37</sup>Bos et al. (1999).

children in three age categories based on the grade at which they entered the study: elementary school (grade 4), middle school (grade 7), and high school (grade 9).

In the 18-month survey, parents were asked to report on a broad set of questions related to the health care practices and health outcomes of their focal child. These measures, many of which were introduced in the parent-focused tables, are presented in Table 7.8, by child's age or grade at the time of random assignment. Most notable from this table is the sizable and statistically significant program impact on dental visits. Family Rewards offers incentive payments for two dental visits per year for cleanings and checkups for all enrolled children who are 6 years of age and older, and for one visit per year for children between the ages 1 and 5 years. The program increased the likelihood of a dental visit for children who are younger than age 6 by 7.2 percentage points. It increased the likelihood of two dental visits per year by 10.4 percentage points among middle school students, and by 13.1 percentage points among high school students. Overall, these findings are consistent with observations from the in-depth field research, which provides several accounts of participants who credited Family Rewards for encouraging families to have regular dental checkups.

Consistent with the findings for adults, Family Rewards also reduced reliance on hospital emergency rooms for routine care for high school children. There is some evidence of a similar pattern for middle and elementary school children, but these differences are not statistically significant. There was no pattern of positive impacts on parent-reported child health status outcomes, and most of the program and control group parents rated their child's health as good, very good, or excellent; there were few reports of fair or poor health.

Table 7.9 presents the impacts on public health insurance coverage for children.<sup>38</sup> Many families who enrolled in Family Rewards were eligible for public health insurance through Medicaid and CHIP, and the program's incentive payments are intended to encourage families to keep coverage for children in effect. The top panel in Table 7.9 presents impacts for Medicaid and CHIP coverage combined, and the two subsequent panels show the same information for the two public health insurance programs separately.<sup>39</sup> Overall, program and control group children were equally likely to receive some form of public health insurance in the six quarters for which both Medicaid and CHIP data are available. While there is evidence of a small impact in Quarter 6, longer-term data are needed to assess the stability of this impact, which appears to be driven by the program's effects on increasing Medicaid coverage for children (see second

<sup>&</sup>lt;sup>38</sup>Appendix Table G.1 presents the impacts on children's public health insurance receipt by TANF/SNA classification at the time of random assignment (similar to the subgroup analysis presented in Table 7.5).

<sup>&</sup>lt;sup>39</sup>Medicaid receipt information was available for seven quarters, and CHIP receipt data were available for six quarters. Medicaid receipt in a given quarter is measured using the recipient's status on the first day of a quarter. As a result, the measure reported here captures coverage status at the start of each quarter.

# Table 7.8

# Impacts on Focal Child's Receipt of Health Services and Health Status, by Child's Age or School Level

	Program		Difference	D 1/1	Effect
Outcome	Group	Group	(Impact)	P-Value	Size
<u>Children under age 6 (%)</u>					
Had routine health checkup in past year <sup>a</sup>	98.0	97.4	0.6	0.566	
Had dental checkup in past year <sup>a, b</sup>	72.0	64.8	7.2 *	0.062	
Any children screened for Early Intervention Program <sup>c</sup>	31.0	26.1	4.9	0.172	
Sample size (total = 701)	371	330			
Elementary school students					
Health care utilization (%)					
Child has usual source of routine care	95.2	92.3	2.9 *	0.074	
Child has personal pediatrician	94.1	93.5	0.6	0.730	
Child had health checkup or got shots in past 12 months	97.4	95.7	1.7	0.160	
Child has usual source of care when sick	95.7	92.6	3.1 *	0.053	
Hospital emergency room	12.1	12.4	-0.3	0.882	
Other place	83.6	80.2	3.4	0.190	
Dental visits in past 12 months					
Child had at least 1 dental visit	94.0	93.3	0.7	0.676	
Child had at least 2 dental visits	67.6	63.4	4.2	0.189	
Health status					
Child's health $(1 = poor; 5 = excellent)$	3.9	3.9	0.0	0.775	0.019
Excellent (%)	39.1	37.1	2.1	0.524	
Very good (%)	23.4	26.6	-3.2	0.264	
Good (%)	29.3	26.3	3.0	0.309	
Fair (%)	6.8	9.5	-2.7	0.131	
Poor (%)	1.4	0.6	0.8	0.196	
Child has any health condition <sup>d</sup> (%)	30.8	32.9	-2.1	0.474	
Asthma	12.4	11.4	1.0	0.632	
Learning disability	9.0	8.6	0.4	0.822	
Attention deficit disorder	3.9	5.4	-1.5	0.270	
Sample size (total = 911)	468	443			

0.4	•		Difference	D V 1	Effect
Outcome           Middle school students	Group	Group	(Impact)	P-Value	Size
Health care utilization (%)					
Child has usual source of routine care	94.9	94.6	0.3	0.863	
Child has personal pediatrician	92.9	91.6	1.3	0.459	
Child had health checkup or got shots in past 12 months	99.0	96.0	3.0 ***	0.004	
Child has usual source of care when sick	96.1	93.4	2.7 *	0.067	
Hospital emergency room	11.7	14.2	-2.5	0.272	
Other place	84.4	79.2	5.2 **	0.043	
Dental visits in past 12 months					
Child had at least 1 dental visit	92.8	91.8	1.0	0.587	
Child had at least 2 dental visits	70.0	59.6	10.4 ***	0.001	
Health status					
Child's health (1=poor; 5=excellent)	4.0	3.9	0.0	0.477	0.046
Excellent (%)	39.8	38.6	1.3	0.700	
Very good (%)	27.5	24.3	3.2	0.275	
Good (%)	24.1	28.8	-4.7	0.107	
Fair (%)	6.8	7.3	-0.5	0.752	
Poor (%)	1.8	1.0	0.8	0.326	
Child has any health condition <sup>d</sup> (%)	28.1	26.3	1.9	0.493	
Asthma	10.1	12.3	-2.2	0.291	
Learning disability	6.9	4.5	2.4	0.105	
Attention deficit disorder	3.5	5.5	-2.0	0.142	
Sample size (total = 911)	485	426			
High school students					
Health care utilization (%)					
Child has usual source of routine care	94.3	96.1	-1.8	0.223	
Child has personal pediatrician	92.0	93.6	-1.6	0.367	
Child had health checkup or got shots in past 12 months	96.1	95.8	0.3	0.813	
Child has usual source of care when sick	96.1	96.0	0.1	0.920	
Hospital emergency room	9.8	15.9	-6.1 ***		
Other place	86.3	80.1	6.2 **	0.014	
Dental visits in past 12 months					
Child had at least 1 dental visit	92.7	89.6	3.1	0.115	
Child had at least 2 dental visits	70.3	57.2	13.1 ***	0.000	

## Table 7.8 (continued)

(continued)

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Health status	<b>1</b>	<b>1</b>	<b>1</b>		
Child's health $(1 = poor; 5 = excellent)$	3.9	3.8	0.1	0.325	0.065
Excellent (%)	36.6	32.4	4.3	0.193	
Very good (%)	26.4	28.8	-2.4	0.436	
Good (%)	26.3	28.0	-1.7	0.575	
Fair (%)	9.1	8.7	0.4	0.822	
Poor (%)	1.6	2.2	-0.6	0.529	
Child has any health condition <sup>d</sup> (%)	24.0	29.1	-5.1 *	0.071	
Asthma	8.5	12.8	-4.3 **	0.039	
Learning disability	6.7	5.2	1.5	0.303	
Attention deficit disorder	2.9	3.2	-0.3	0.794	
Sample size (total = 870)	469	401			

#### Table 7.8 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: This table presents outcomes for the randomly selected focal child only, who must have been living in the household at the time of interview.

Sample sizes vary because of missing values.

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 familiy or sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

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 outcomes for the program and control groups arose by chance.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcome for both groups combined.

<sup>a</sup>This measure pertains only to a child in the household under age 6 who was randomly selected for the respondent to discuss.

<sup>b</sup>If the randomly selected child is less than 1 year old, then the child is excluded from this measure.

<sup>c</sup>This includes any of the respondent's children under age 6.

<sup>d</sup>This includes physical, medical, learning, emotional, or mental health conditions. The three most commonly reported conditions are listed. Sample members may list multiple conditions.

panel in Table 7.9). However, there is no program effect on continuous Medicaid receipt, at least in the seven quarters observed here. Just over 50 percent of the program group children and 49.2 percent of the control group children were covered by Medicaid in all seven quarters following random assignment.<sup>40</sup>

<sup>&</sup>lt;sup>40</sup>Since CHIP data are missing for every third calendar quarter, it was not possible to estimate "continuous" coverage for Medicaid and CHIP combined (top panel of Table 7.9) or for CHIP alone (third panel of Table 7.9), which covers only a small proportion of the children in the study. However, continuous coverage is reported for Medicaid.

# Table 7.9

# Impacts on Children's Receipt of Public Health Insurance

	Program	Control	Difference	
Outcome	Group	Group	(Impact)	P-Value
Public health insurance (Medicaid or CHIP)				
coverage among all children <sup>a</sup>				
Quarter of random assignment (%)	71.3	72.1	-0.8	0.631
Quarter 2	71.3	71.7	-0.4	0.690
Quarter 3	70.9	70.8	0.1	0.912
Quarter 4	70.5	69.0	1.5	0.262
Quarter 5	72.6	69.9	2.7	0.186
Quarter 6	69.4	67.2	2.2 *	0.054
Sample size (total = 11,331)	5,680	5,651		
Medicaid coverage among all children <sup>b</sup>				
Quarter of random assignment (%)	67.6	66.9	0.7	0.436
Quarter 2	68.1	68.4	-0.3	0.776
Quarter 3	68.1	67.4	0.7	0.518
Quarter 4	68.0	66.2	1.8 *	0.094
Quarter 5	67.7	65.1	2.6 **	0.022
Quarter 6	66.5	64.2	2.4 **	0.038
Quarter 7	65.7	64.8	0.9	0.452
Covered by Medicaid in all 7 quarters from				
time of random assignment (%)	50.1	49.2	0.9	0.498
Average number of quarters covered by Medicaid	4	4	0.1	0.107
Sample size (total = 11,264)	5,640	5,624		
CHIP coverage among all children				
Quarter of random assignment (%)	3.6	4.2	-0.5	0.563
Quarter 2	3.4	3.4	-0.1	0.919
Quarter 3	2.8	3.4	-0.6	0.163
Quarter 4	3.3	3.6	-0.3	0.598
Quarter 5	2.5	2.8	-0.3	0.644
Quarter 6	3.0	3.1	-0.1	0.838
Sample size (total = 11,331)	5,680	5,651		(continued)

(continued)

#### Table 7.9 (continued)

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

NOTES: Because reliable data on start and end dates are not available, Medicaid receipt in a given quarter is measured using the recipient's status on the first day of that quarter.

<sup>a</sup>Due to missing data, the sample sizes range from 3,373 to 11,331 children.

<sup>b</sup>The sample excludes 30 members randomly assigned between January and March 2008.

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 families or sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

CHIP = Children's Health Insurance Program.

Since CHIP data are missing for every third calendar quarter, it is not possible to estimate "continuous" coverage for Medicaid and CHIP combined (top panel) or for CHIP alone, which covers only a small proportion of children in the study.

Finally, as shown in the bottom panel of Table 7.9, a very small proportion of the program and control group children received health insurance coverage through CHIP, which targets uninsured children in families with incomes that are too high to qualify them for Medicaid, but are often too low for them to afford private coverage. About 3 percent of the program and control group children were covered by this form of public health insurance.

# Effects for Key Subgroups

Because average effects for the full group can mask program effects for some groups of study participants, the health impacts of Family Rewards are analyzed for two subgroups defined by baseline measures of education and employment. These two subgroups were preselected, based on the extensive literature demonstrating inequalities in health care access and health outcomes by socioeconomic characteristics.<sup>41</sup> While numerous variables can capture the social and economic status of individuals, education, income, and employment or occupational status are most often used to examine variations in the distribution of disease and health.<sup>42</sup>

<sup>&</sup>lt;sup>41</sup>In addition to education and employment, variation in impacts was examined across a range of dimensions including race/ethnicity, assisted housing status, and poverty status at random assignment. Overall, the impacts are pretty similar across these subgroups, with a few exceptions. For example, effects on having an annual physical were larger for Hispanics and for families with a household income below 50 percent of the federal poverty level. These findings will be explored further in future reports.

<sup>&</sup>lt;sup>42</sup>Kreiger, Williams, and Moss (1997).

Recent reviews reveal that these measures remain persistent and pervasive predictors of variations in health.

In general, impacts are expected to vary to some extent across subgroups, simply as a result of natural variation around the average impact for the full sample. This section focuses on whether that variation in impacts across subgroups is statistically significant, or whether it goes beyond what would be expected to occur naturally. For this reason, the focus is not on whether a given impact for the less educated subgroup is statistically significant, for example, but whether *the difference* between that impact and the impact for the more educated subgroup is statistically significant (as indicated by daggers in the rightmost column of the tables). If the difference between these two impacts is not statistically significant, the results suggest that the effects observed for the full sample generally hold across more and less educated individuals.

#### Impacts by Educational Status at Baseline

In general, studies find that more educated adults report better health than those who are less educated. They are less likely to be hypertensive, to suffer from diabetes, to report that they are in poor health, and to report anxiety or depression.<sup>43</sup> There are multiple reasons for these associations, although it is likely that these health differences are in part the result of differences in behavior across education groups. Overall, research suggests very strong gradients where the better educated have more healthful behaviors along virtually every margin: those with more years of schooling are less likely to smoke, drink heavily, be overweight or obese, or use illegal drugs.

The Family Rewards health impacts were analyzed separately for parents who had less than a high school diploma or GED certificate at the time of random assignment and for those with at least a high school diploma or GED certificate. As Table 7.10 shows, the program's impacts on a variety of health measures are statistically significant for the subgroup with a high school diploma or a GED certificate. However, only the two impact estimates showing a reduction in unmet health needs because of costs are statistically significantly different from the impact estimates on the same variables for the subgroup with less education.

The two panels of Table 7.11 report impacts on adult Medicaid receipt by the parent's educational status at random assignment. The first panel shows that Family Rewards increased continuity of Medicaid coverage in the seven quarters of follow-up among people who had obtained at least a high school degree or a GED certificate. For example, 43.7 percent of the program group was covered during all seven quarters, compared with 38.4 percent of the control group, a 5.3 percentage point increase in continuous coverage. The program had no

<sup>&</sup>lt;sup>43</sup>Muennig, Schweinhart, Montie, and Neidell (2009); Muennig (2007); Cutler and Lleras-Muney (2006).

# **Table 7.10**

# Impacts on Family Health Insurance Coverage and Parents' Receipt of Health Care, by Respondent's Education Level

	0		Difference	DVI	
Outcome (%)	Group	Group	(Impact)	P-Value	
High school diploma/GED certificate					
Health insurance coverage in previous month					
Respondent had health coverage	95.9	93.2	2.7 **	0.012	
All dependent children had health coverage <sup>a</sup>	94.8	92.8	2.0 *	0.084	
Health insurance coverage since random assignment					
Respondent had a period with no coverage	16.0	19.4	-3.4 *	0.059	
Some or all of respondent's children had a period with no coverage <sup>a</sup>	15.5	18.4	-2.9	0.109	
Health care utilization					
Had a health checkup since random assignment	94.0	92.2	1.8	0.141	
Dental visits since random assignment Had at least 1 dental visit Had at least 2 dental visits	86.4 68.4	82.0 56.9	4.4 ** 11.5 ***	0.012 0.000	
Unmet health needs					
Did not get needed medical care because of cost in past 12 months <sup>b</sup>	7.2	12.6	-5.4 ***	0.000	<b>†</b> †
Did not fill prescription because of cost in past 12 months	14.0	18.3	-4.4 **	0.012	††
Sample size (total = 1,820)	922	898			
No high school diploma/GED certificate					
Health insurance coverage in previous month					
Respondent had health coverage	95.2	94.5	0.7	0.596	
All dependent children had health coverage <sup>a</sup>	94.7	94.4	0.2	0.860	
Health insurance coverage since random assignment					
Respondent had a period with no coverage	16.6	19.0	-2.4	0.283	
Some or all of respondent's children had a period with no coverage <sup>a</sup>	13.6	17.1	-3.6	0.101	

(continued)

Outcome (%)	Program Group	Control Group	Difference (Impact)	P-Value	
Health care utilization					
Had a health checkup since random assignment	91.8	91.3	0.5	0.757	
Dental visits since random assignment Had at least 1 dental visit Had at least 2 dental visits	85.6 66.3	84.6 58.9	1.0 7.4 ***	0.651 0.009	
Unmet health needs					
Did not get needed medical care because of cost in past 12 months <sup>b</sup>	5.5	7.0	-1.5	0.292	††
Did not fill prescription because of cost in past 12 months	13.2	12.1	1.1	0.580	††
Sample size (total = 1,186)	610	576			

Table 7.10 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: Sample sizes vary because of missing values.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Differences in impacts across subgroups were tested for statistical significance. Statistical significance levels are indicated as follows:  $\dagger\dagger\dagger=1$  percent;  $\dagger=5$  percent;  $\dagger=10$  percent.

<sup>a</sup>Child-related health insurance measures were calculated for sample members with at least one child at the time of the survey interview.

<sup>b</sup>This excludes prescriptions.

effect on this measure for the less educated subgroup, and the difference in impacts across the two subgroups is statistically significant.

Appendix Table G.2 reports impacts on adults' health status by respondent's educational level at the time of random assignment. While Family Rewards appears to have improved perceived health status on the whole, the impacts on health status were not significantly different across subgroups defined by baseline educational status.

### Impacts by Employment Status at Baseline

Several studies have documented the relationship between health and employment.<sup>44</sup> Among studies of welfare recipients and low-income mothers, health problems (of parents and children) are a barrier to regular employment and to entry into the labor force.<sup>45</sup> These studies also show that employed women have been consistently found to report better health than unemployed women. However, the causal chain underlying the relationship between employ-

<sup>&</sup>lt;sup>44</sup>Rogot, Sorlie, and Johnson (1992); Ross and Mirowsky (1995).

<sup>&</sup>lt;sup>45</sup>Zwedlewski (1999).

### **Table 7.11**

### Impacts on Parents' Medicaid Receipt, by Respondent's Education Level at the Time of Random Assignment

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	
High school diploma or GED certificate at time of random assignment					
Covered by Medicaid in all 7 quarters from time of random assignment (%)	43.7	38.4	5.3 ***	0.001	††
Average number of quarters covered by Medicaid	3.5	3.3	0.2 **	0.023	
Sample size (total = 2,852)	1,400	1,452			
<u>No high school diploma or GED certificate at time</u> <u>of random assignment</u>					
Covered by Medicaid in all 7 quarters from time of random assignment (%)	55.9	56.8	-0.9	0.666	<b>†</b> †
Average number of quarters covered by Medicaid	4.5	4.5	0.1	0.490	
Sample size (total = 1,946)	1,012	934			

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

NOTES: Because reliable data on start and end dates are not available, Medicaid receipt in a given quarter is measured using the recipient's status on the first day of that quarter.

The sample excludes 30 members randomly assigned between January and March 2008.

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 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 families or sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between the program and control groups.

The p-value indicates the likelihood that the difference between program and control groups arose by chance.

ment and health is still open to debate. Longitudinal evidence seems to suggest that employment affects health, but reciprocal effects are also possible.<sup>46</sup> This section extends the subgroup analysis and examines the program's impacts on health by respondents' self-reported employment status at the time of random assignment.

Table 7.12 shows that, for the Family Rewards sample, there were few differences in health coverage and health care utilization among members of the control group according to

<sup>&</sup>lt;sup>46</sup>See Polit, London, and Martinez (2001).

### **Table 7.12**

### Impacts on Health Status, by Respondent's Employment Status at the Time of Random Assignment

	Program	Control	Difference		Effect	
Outcome	Group	Group	(Impact)	P-Value	Size	
Employed						
Average self-rated health $(1 = poor; 5 = excellent)$	3.4	3.3	0.1 *	0.058	0.089	
Excellent (%)	18.5	15.8	2.7	0.161		
Very good (%)	26.6	26.7	-0.1	0.952		
Good (%)	35.6	35.7	-0.1	0.973		
Fair (%)	17.2	17.9	-0.7	0.697		
Poor (%)	2.1	3.8	-1.7 **	0.038		
Has any medical condition (%)	45.8	41.3	4.5 *	0.059		
Currently being treated for any medical condition (%)	39.0	33.6	5.5 **	0.019		
Experienced serious psychological distress						
in the past month <sup>a</sup> (%)	7.6	9.7	-2.1	0.225		ŧ
Sample size (total = 1,599)	823	776				
Not employed						
Average self-rated health $(1 = poor; 5 = excellent)$	3.0	2.9	0.1 **	0.042	0.095	
Excellent (%)	13.2	10.8	2.4	0.158		
Very good (%)	18.5	16.9	1.7	0.399		
Good (%)	30.8	31.6	-0.8	0.738		
Fair (%)	26.5	28.1	-1.6	0.471		
Poor (%)	11.1	12.7	-1.6	0.336		
Has any medical condition (%)	61.7	62.7	-1.0	0.669		
Currently being treated for any medical condition (%)	56.1	56.0	0.1	0.973		
Experienced serious psychological distress						
in the past month <sup>a</sup> (%)	18.6	15.7	2.9	0.231		†
Sample size (total = $1,440$ )	725	715				

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: Sample sizes vary because of missing values.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Differences in impacts across subgroups were tested for statistical significance. Statistical significance levels are indicated as follows:  $\dagger \dagger \dagger = 1$  percent;  $\dagger \dagger = 5$  percent;  $\dagger = 10$  percent.

<sup>a</sup>This item measures the score on Kessler's Psychological Distress Scale (K10), a 10-item questionnaire intended to yield a global measure of distress based on questions about anxiety and depressive symptoms that a person has experienced in the most recent four-week period. See Kessler et al. (2002). A randomly selected subsample of survey respondents (N = 2,043) was asked these questions.

their baseline employment status. Moreover, there is no evidence that the program's impacts varied across the two subgroups. Extending this comparative analysis across additional measures of health coverage and health outcomes produces similar results: in the short run, there are no notable differences in the program's health impacts by baseline employment status (see Appendix Table G.3).

# Conclusion

Family Rewards health incentives were designed to encourage low-income families to adopt better preventive health care practices. It turned out that higher proportions of families than the program's designers had expected were already receiving health insurance coverage and practicing preventive health care, which limits the program's ability to improve some health practices and health care behavior further for this sample.

Nonetheless, the evidence so far suggests that Family Rewards produced a number of impacts on some important health indicators, even if only by a small amount. For example, it increased the maintenance of health insurance coverage for participants who were not receiving TANF or SNA, increased the use of preventive dental care, reduced emergency room-based health care, reduced the reported number of health care needs that were not met because of prohibitive costs, and produced a significant shift in the perceived health status of the program group relative to the control group. This general pattern of positive findings was evident for both adults and children.

### Chapter 8

# Work-Related Rewards and Impacts

Offering incentives for work and training is not a new idea, and there is evidence from earlier programs that these incentives can increase work and, in some cases, training.<sup>1</sup> What is new, however, and what makes Family Rewards unique, is that these incentives are part of a larger package of rewards. A family with two children in the program, for example, could earn up to \$3,000 from the children's education rewards, more than \$2,000 from the family health rewards, and more than \$2,000 from the parents' work and training rewards. This structure, in which families can earn rewards through a range of activities, has two potential implications for effects on work. First, the large menu of options may encourage individuals to focus on some activities to the exclusion of others. As noted in earlier chapters, parents tended to view Family Rewards largely as an education program, particularly during the first year. Second, the additional money that families receive from the other rewards may reduce the need to work and offset any work incentive created by the work rewards.

This chapter presents the effects of Family Rewards on parents' employment and earnings. As with the findings in other areas, the results presented here, covering the first year to year-and-a-half, are not the final story. In addition to the time it took to fully implement the program, staff began to market the program's workforce rewards more heavily during the second year. Finally, the state of the economy was rapidly changing during the later part of the evaluation period, as unemployment rates began to increase. Although it is not obvious how the economic downturn will affect participants' responses to the program, it will be important to track the effects for several more years.

The findings suggest that the program led to a small increase in employment in jobs that are not covered by the unemployment insurance (UI) system and to a small decrease in employment in UI-covered jobs. Some workers are not covered by the UI system by law, such as self-employed individuals, federal government employees, and domestic workers. But the UI system also misses informal (casual or irregular) jobs (for instance, babysitting) that are never reported to state agencies. It is not clear why the effects of the program would vary across types of employment. For some parents, non-UI-covered jobs may have been easier to get in a flailing economy, particularly those that offered the full-time hours that are necessary to qualify for the work rewards. For other parents, the additional income they obtained from the other rewards may have allowed them to move out of UI-covered jobs and

<sup>&</sup>lt;sup>1</sup>Riccio et al. (2008); Martinson and Hendra (2006); Michalopoulos et al. (2002).

into non-UI-covered jobs. The latter jobs may have been more attractive options if they were more conveniently located, easier to obtain, or offered more flexible schedules.

## The Work and Training Rewards Offer

The schedule of workforce rewards is presented in Table 8.1. In order to receive the employment reward, participants had to work at least 30 hours per week for six out of every eight weeks during each two-month rewards payment cycle. Parents who work the minimum amount receive \$300 every two months, or up to \$1,800 per year. By increasing the payoff to work, the reward creates an incentive for parents to get a job or, if already working part time, to move into full-time work. A parent working 40 hours per week at \$8 per hour, for example, stands to increase her net wage by 11 percent, to about \$8.90 per hour, if she earns the program's employment reward.

Recognizing that work by itself is not always a route to advancement, the program's designers incorporated payments into Family Rewards for completing skill-building activities that can increase parents' job skills and help them move into higher-level, better-paying jobs. In order to qualify for these rewards during the first two years of the program, parents had to participate in job-related education and training activities while working at least 10 hours per week. This minimum work-hours requirement was set in order to discourage participants from remaining unemployed or from dropping out of the labor force in order to undertake training.<sup>2</sup>

## Data and Samples

The two data sources used in this chapter are earnings records from the New York State unemployment insurance (UI) system and the Family Rewards 18-month parent survey. The UI data provide quarterly employment and earnings information, as reported by employers, for the majority of workers in the state. These data are available for the entire Family Rewards study sample of nearly 5,000 parents for several quarters prior to their date of random assignment and for one year afterward, and, unlike survey data, they do not depend on respondent recall. At the same time, although these records cover most employment in a given state, they do not capture certain types of jobs, including self-employment, federal government employment, military personnel, informal jobs, and out-of-state jobs. Another drawback of the UI records is that they do not provide information on hours worked during a quarter or week or on the characteristics of jobs held, such as hourly wage rates, benefits, and schedule.

<sup>&</sup>lt;sup>2</sup>The minimum work-hours requirement was dropped for the third year of the program, in part because so few parents took up the training rewards (shown later in this chapter).

#### Table 8.1

### Work and Training Rewards

Activity	Payment
Work 30 or more hours per week for 6 or more weeks each 2-month period	\$300 every two months
Education and training Must work at least 10 hours per week while completing an <i>approved</i> course <sup>a</sup>	\$300 to \$600, depending on length of course; maximum of \$3,000 per adult

NOTE: <sup>a</sup>Training may also include basic education activities, such as English as a Second Language (ESL), basic skills, and GED preparatory.

The 18-month survey complements the UI data by capturing all types of jobs held and providing data on their characteristics. Respondents provided information on whether these jobs were full time or part time, their wage rates, and any benefits offered by the employer. These data are available for a randomly chosen subset of the full study sample, or just over 3,000 individuals. As discussed in detail in Appendix D, although the survey sample is generally representative of the full evaluation sample, some caution must be used when interpreting findings from the survey. There were some differences in characteristics between program and control group respondents; in particular, the program group had higher UI-covered earnings in the year prior to entering the study compared with the control group.<sup>3</sup>

## Receipt of Work and Training Rewards

In contrast to the relatively high receipt rate of the education and health rewards, less than half of families in the Family Rewards group received at least one workforce reward (as discussed in Chapter 4). Table 8.2 presents the receipt of the work and training rewards in more detail, focusing on parents rather than families as the unit of analysis. The first panel shows that almost all the workforce rewards that were earned were for full-time work. Very few parents in the sample earned rewards for taking up education and training. In addition, receipt of the full-time work rewards was somewhat regular. Only about 1 in 10 parents who received a reward did so in only one activity period. (An activity period is two months in duration.) Patterns were very similar for Years 1 and 2.

<sup>&</sup>lt;sup>3</sup>This difference is accounted for in the impact analysis. The impact regression model includes UI-reported employment and earnings and a range of demographic characteristics.

### Table 8.2

#### Workforce Rewards Earned by Parents

			Years 1 and 2
Outcome (%)	Year 1	Year 2	Combined
Parent earned at least one workforce reward	41.6	40.6	47.7
Full-time employment <sup>a</sup>	41.1	40.4	47.2
Education and training while employed <sup>b</sup>	1.8	1.5	2.5
Parent earned a workforce reward in <sup>c</sup>			
1 activity period only	12.9	11.2	
2 or 3 activity periods only	21.6	20.7	
4 or 5 activity periods only	27.8	30.6	
6 activity periods	37.7	37.6	
Sample size			2,515
	Employment	Status at Rand	om Assignment
	Full-Time <sup>a</sup>	Part-Time	Not Working
Parent earned at least one full-time employment reward			
Year 1	73.2	40.8	12.9
Year 2	68.6	42.2	15.1
Years 1 and 2 combined	78.8	50.5	18.6
Sample size <sup>d</sup>	967	206	1,148

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

NOTES: The first program year covers activities that occurred September 2007 through August 2008, and the second program year covers activities that occured September 2008 through August 2009.

<sup>a</sup>Full-time employment is at least 30 hours per week for six weeks or more in each two-month activity period, or approximately 75 percent of the time.

<sup>b</sup>A parent must work at least 10 hours per week while attending a course of at least 35 hours.

<sup>c</sup>This is calculated only for adults with any workforce rewards.

<sup>d</sup>A total of 8 percent of the sample are missing employment status information at the time of random assignment.

Although only about 40 percent of parents received a full-time work reward in either year, this reward is undoubtedly more difficult to earn than many of the rewards in the education and health areas. In this case, it may be unrealistic to expect that similarly high proportions of families would earn workforce rewards. In two recent work incentives programs that also provided bonuses for full-time work, receipt rates ranged from 30 percent to 40 percent.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup>Riccio et al. (2008); Martinson and Hendra (2006).

Receipt rates by employment status at baseline may provide a better indication of individuals' ability or willingness to earn these rewards (bottom panel of Table 8.2). Not surprisingly, receipt rates are much higher for parents who reported being employed full time (or for at least 30 hours per week) at the time of entering the study, a group most likely to be eligible for the rewards. About 73 percent of parents in this group received at least one reward during the first program year. Receipt rates among likely eligible participants in the two incentives programs mentioned above ranged from 55 percent to 76 percent. In that context, the rate of 73 percent for the Family Rewards subgroup of full-time workers is fairly high. However, a natural question is why the remaining 27 percent of likely eligible parents did not earn a reward for sustained employment. Some of them may have lost their jobs after entering the study, others may have been unable to or otherwise neglected to provide adequate documentation to the program in order to earn the rewards, and still others may not have tried to maintain the required level of employment, focusing instead on rewards in the health and education areas. The bottom panel of Table 8.2 also shows that the likelihood of receiving at least one full-time employment reward was lower among parents who were working part time when they entered the study (for example, 41 percent in Year 1), and even lower among parents who were not employed at study entry (for example, 13 percent in Year 1).

## Impacts on Parents' Education and Training

This section presents the program's impacts on parents' participation in education and training activities and on certificate and degree receipt. Despite the low receipt of the training rewards, it is possible that the program might increase participation in educational activities by increasing family resources. Alternatively, the program might reduce such participation if it encourages more individuals to work full time.

As shown in Table 8.3, about 40 percent of control group respondents reported participating in some education and training activity since random assignment, with the most common activities being vocational training and college courses. The program did not affect participation in education and training, with the exception of a small negative effect on English as a Second Language (ESL) classes. There is no obvious reason the program should have reduced participation in ESL classes, although the effect is very small and very few individuals participated in this activity. On average, individuals who participated in training did so for about 18 to 20 weeks during the year. Participation was typically the longest in college courses, at about 27 to 28 weeks, and the shortest in vocational training, at about 8 to 11 weeks.

The bottom row of Table 8.3 shows a small, positive impact on the percentage of parents who reported being both employed and engaged in training while working, from 13.8 percent for the control group to 16.4 percent for the program group. This effect is likely driven by

### Table 8.3

#### Impacts on Participation in Employment and Education Activities

	Program	Control	Difference	
Outcome	Group	Group	(Impact)	P-Value
Ever participated in an education, training,				
or employment activity <sup>a</sup> (%)	37.3	39.6	-2.3	0.282
ABE, GED, or high school classes	7.4	7.8	-0.4	0.751
ESL classes	4.4	6.8	-2.4 **	0.013
College courses for credit	11.3	11.7	-0.4	0.763
Vocational training	14.2	15.6	-1.4	0.364
Other educational, training, or employment program activities	10.3	9.0	1.3	0.324
Number of weeks respondent participated in the following				
since random assignment <sup>b</sup>				
Any education, training, or employment activity	17.8	19.6		
ABE, GED, or high school classes	14.5	16.5		
ESL classes	11.7	17.0		
College courses for credit	28.1	26.8		
Vocational training	8. <i>3</i>	11.1		
Other educational, training, or employment program activities	9.1	7.7		
Received help finding or enrolling in training (%)	7.8	8.4	-0.7	0.585
Worked and participated in an education or training activity (%)	16.4	13.8	2.6 *	0.091
Sample size (total = $2,061$ )	1,051	1,010		

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: Items in this section of the survey were administered to a random subset (N = 2,061) of survey respondents.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent. Italic type indicates comparisons that are nonexperimental. Statistical tests were not performed.

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

Rounding may cause discrepancies in calculating sums and differences.

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.

<sup>a</sup>Percentages may sum to more than the number participating in any activity because sample members could list more than one response.

<sup>b</sup>These measures are calculated among sample members who participated in the relevant activity or activities.

the fact that, according to the survey, the program group was also somewhat more likely to work during the period, as shown later.

Table 8.4 presents data on the receipt of education credentials. The table shows the percentage of individuals holding a given credential as of the time of the survey interview, and not the percentage who obtained these degrees since study entry. The program led to

#### Table 8.4

#### **Impacts on Educational Attainment**

	Program	Control	Difference	
Outcome (%)	Group	Group	(Impact)	P-Value
Has any degree, license, or certificate	81.0	81.1	-0.1	0.935
Has any trade license or training certification	54.2	51.2	3.0 *	0.088
Has any degree or diploma	64.2	64.7	-0.5	0.677
Highest degree or diploma				
GED certificate	17.5	19.5	-2.0	0.144
High school diploma	28.1	29.2	-1.1	0.472
Associate's degree	10.2	7.7	2.5 **	0.014
Bachelor's degree or higher	8.4	8.3	0.1	0.906
Sample size (total $=$ 3,082)	1,574	1,508		

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: Sample sizes vary because of missing values.

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 families or sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

This table reports on degrees, licenses, and diplomas received, regardless of whether they were received before or after random assignment.

small increases in the number of parents with a trade license or certificate and in the number of parents who held an associate's degree. The training rewards are unlikely to have led to these effects, since so few participants received them. They may instead be driven by the extra income that was provided to families through the program, which may have functioned as a form of financial aid.

## Impacts on Employment and Earnings

This section presents the effects of Family Rewards on employment and earnings during the first 12 to 18 months after the start of the program. Effects for the full sample of parents in the evaluation are estimated using UI records data. These records cover one year after the sample members' dates of random assignment. Because the data are reported quarterly, the first follow-up year for most sample members (who entered the study during July through September of 2007) covers October 2007 through September 2008. Effects for the subsample of parents who responded to the 18-month survey are examined using both UI and survey data. As discussed below, the survey data typically capture more employment than do the UI records, since the latter data source only includes employment reported to the UI system.

#### **Results for the Full Sample**

Table 8.5 presents UI-reported employment and earnings during Year 1. About 59 percent of the control group worked at some point during Year 1 in UI-covered jobs. On average, they earned just over \$12,000 during the year, although this average includes zeroes for those who did not work. Among those who did work, average earnings were about \$21,000 (not shown). The program group was slightly less likely to have worked during the year than the control group, with a negative impact of 2.3 percentage points. Data on quarterly employment (not shown) indicate that the reduction in employment rates was statistically significant only for the last quarter of the year.<sup>5</sup>

Although the program did not lead to a statistically significant reduction in average annual earnings, it did reduce the fraction of individuals who were earning very low amounts (less than \$5,000 annually), perhaps reducing work among individuals who would have worked only one or two quarters during the year. Coupled with the negative employment effects later in the year, the program seems to have discouraged some individuals who would have eventually entered UI-covered employment from going to work.

Why would a program with work incentives *reduce* employment rates? As noted earlier, Family Rewards differs from other work incentives programs in that participants can, and did, earn substantial rewards for a variety of nonwork activities. These additional resources offer families more flexibility in terms of work choices. (See Box 8.1 for an illustration from the in-depth interviews with parents.) Some parents might use the extra money to cut back on work hours and spend more time with their children. Others might take longer to find a new job, while others might take a job closer to home, even though it may offer fewer hours or lower pay. Economists refer to the reduction in work in response to increased income as the "income effect." Consistent with this hypothesis, this reduction in work occurred in later follow-up quarters, after families began to accumulate income from the other reward payments.<sup>6</sup> The pattern of effects on total earnings shown in Table 8.5, in which much of the reduction in work during the year appears to have occurred among those who would have had very low earnings, is also consistent with an income effect drawing individuals who are only marginally attached to the labor force out of work.

<sup>&</sup>lt;sup>5</sup>Effects on UI-covered employment in the first quarter of Year 2, available for a subset of the sample, were similarly negative, suggesting that this effect in the last quarter of the year is not a chance finding.

<sup>&</sup>lt;sup>6</sup>It is also possible that the magnitude of the reduction in UI-covered employment would have been greater had Family Rewards not included a reward tied to employment.

### Table 8.5

#### **First-Year Impacts on UI-Covered Employment and Earnings**

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Ever employed (%)	56.2	58.5	-2.3 **	0.011
Average quarterly employment (%)	49.0	50.3	-1.3 *	0.091
Total earnings (\$)	12,114	12,354	-240	0.284
Total earnings (%)				
\$1 - \$4,999	9.0	10.6	-1.5 *	0.059
\$5,000 - \$9,999	6.7	7.5	-0.8	0.256
\$10,000 - \$19,999	14.6	14.6	0.0	0.986
\$20,000 - \$29,999	11.1	10.2	0.9	0.300
Over \$30,000	14.9	15.7	-0.8	0.255
Sample size (total = 4,994)	2,513	2,481		

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

NOTES: 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 families or sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between outcimes for the program and control groups.

The p-value indicates the likelihood that the difference between the program and control groups arose by chance.

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 unemployment insurance (UI) program. It does not include employment outside New York or in jobs not covered by the UI system (for example, "off the book" jobs and federal government jobs).

Year 1 covers October 2007 through September 2008 for sample members randomly assigned before October 2007. For sample members randomly assigned on or after October 1, 2007, Year 1 covers January through December 2008.

#### **Results for the Survey Sample**

The survey data are an important part of the evaluation, since they capture jobs that are not covered by the UI data. Although some employers may fail to report earnings for all their workers to the UI system, the records, by law, do not cover several types of employment, including informal jobs, self-employment, federal government jobs, and out-of-state jobs. Thus,

### Box 8.1

### Income from Family Rewards and Work Decisions

During the in-depth interviews, participants did not generally report that rewards for full-time work changed the way they looked for jobs or influenced the outcomes of their efforts. Many cited child-raising, health problems, training needs, or a poor economy as more important factors in their job-seeking behavior. In some rare instances, participants acknowledged that the income from Family Rewards relieved some of the pressure to get a job, when family commitments would otherwise push them to stay at home. As one woman who was already working full time said about the effect of extra income:

I was gonna get [an additional] part-time job, but then this came up. I'm like, "Okay, I'll wait two years then." 'Cause then I have the five-year-old back, then ... I was gonna have an issue with the school and picking him up and dropping him off. This ... program really helped me in that sense.

non-UI employment is not necessarily synonymous with informal, off-the-books jobs. However, for low-income populations, informal work and self-employment are typically more prevalent and probably do reflect a significant fraction of the jobs that are not accounted for in the UI records.<sup>7</sup> Box 8.2 shows that the non-UI-covered jobs for the parents in the study are "lower quality" than UI jobs in that they pay somewhat lower wages and are less likely to come with key benefits. In what follows, work that is reported on the survey but not in the UI records is sometimes referred to as "informal" work.

Table 8.6 presents employment and earnings data for the survey sample. The table presents employment captured by the survey and by the UI records data. The first panel presents respondents' reports of work since random assignment, or roughly over the past 18 months, and at the time of the survey. According to the survey data, the program increased the percentage of parents who worked at some point during the year by 3 percentage points. Parents in the program group worked, on average, half of a month more than those in the control group, and, consistent with the rewards conditions, all of this additional work was full time. The program led to

<sup>&</sup>lt;sup>7</sup>Other research suggests that the UI data may miss relatively more employment for low-income populations than for higher-income groups. For example, the discrepancy between the survey findings and the UI records is larger for less educated workers (Abraham, Haltiwanger, Sandusky, and Spletzer, 2009). In addition, smaller employers and employers with high turnover, who tend to employ relatively high numbers of less skilled workers, tend to underreport earnings to the UI system more often than do other types of employers (Burgess, Blakemore, and Low, 1998).

## Box 8.2

## **UI-Covered and Non-UI-Covered Jobs**

Although UI records typically cover about 90 percent of all employment, they exclude informal jobs (for which employers do not report employee earnings to the state), self-employment, federal government and military jobs, and out-of-state jobs (since the data are reported only to the state in which the employee works). To provide a more detailed look at what type of jobs the UI records miss for the Family Rewards sample, the table below presents selected characteristics of jobs reported by respondents to the 18-month survey.

The first column presents job characteristics for respondents who reported being employed at the survey interview but who were not identified as employed in that same calendar quarter according to the UI data. The second column presents job characteristics for respondents for whom both data sources indicated employment. Although non-UI-covered jobs are just as likely to be full time, they tend to pay lower wages, more of them have irregular schedules, and they are less likely to come with employer-provided benefits. Finally, more than one-fourth of the non-UI-covered work for this Family Rewards sample is self-employment.

	Survey Data Only	UI and Survey
Variable	(Non-UI)	Data
Hourly wage (\$)	12.8	13.2
Hourly earnings (%)	24.9	9.1
Less than \$7	11.5	18.1
\$7 to 8.99	46.9	63.5
More than \$9	16.7	9.3
Not reported		
Working full time (%)		
(30+ hours per week)	81.3	80.7
Schedule (%)		
Regular daytime	72.1	76.6
Regular night	9.7	11.3
Rotating/split	8.5	7.8
Irregular	8.7	2.9
Employer-provided benefits (%)		
Paid sick days	46.4	64.3
Paid vacation	49.5	70.6
Paid holidays	51.9	70.4
Dental plan	38.1	53.5
Retirement play	41.9	54.6
Health insurance	42.5	59.1
Self-employed (%)	28.9	3.9

### Job Characteristics at Time of Survey Interview

### Table 8.6

### Comparison of Employment and Earnings Impacts Based on Administrative Records and Similar Impacts Based on Survey Data, Among Respondents to the 18-Month Survey

	Program	Control	Difference	DUI
Outcome	Group	Group	(Impact)	P-Value
Employment status, survey				
Ever worked since random assignment (%)	74.6	71.6	3.0 **	0.025
Number of months worked since random assignment date Full time	7.0 5.7	6.5 5.0	0.5 *** 0.6 ***	$0.000 \\ 0.000$
Currently working (%)	59.9	54.3	5.6 ***	0.000
Employment status, UI records				
Ever employed, Year 1 (%)	57.2	58.6	-1.4	0.220
Total earnings (\$)	12,332	12,089	243	0.396
Less than \$5,000 \$5,000 - \$9,999 \$10,000 - \$19,999 \$20,000 - \$29,999 \$30,000 or more	9.0 6.7 14.6 11.1 14.9	10.6 7.5 14.6 10.2 15.7	-1.5 * -0.8 0.0 0.9 -0.8	0.059 0.256 0.986 0.300 0.255
Working in quarter of survey interview <sup>a</sup> (%)	48.9	49.6	-0.6	0.686
Employment status, survey and UI records <sup>b</sup> (%)				
Currently working, according to survey but not UI records	16.2	10.8	5.4 ***	0.000
Currently working, according to both survey and UI records	44.8	43.4	1.5	0.354
Currently working, according to UI records only	4.1	6.2	-2.1 **	0.023
Not working, according to survey and UI records	34.9	39.7	-4.8 ***	0.003
Sample size (total = 3,082)	1,574	1,508		

SOURCES: MDRC calculations using data from the Family Rewards 18-Month Survey and unemployment insurance (UI) administrative records from the State of New York.

NOTES: Sample sizes vary because of missing values.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent. Estimates were regression-adjusted using ordinary least squares, controllling for pre-random assignment charactertistics of families or sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

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

<sup>a</sup>UI data are not available for the quarter of survey interview for sample members interviewed toward the end of the survey fielding period (approximately one-quarter of all survey respondents).

<sup>b</sup>These outcomes are not measured for respondents interviewed toward the end of the survey fielding period.

an even larger effect on the percentage of parents who reported working at the time of the survey, an increase of 5.6 percentage points.

The difference between these positive effects on work versus the slightly negative effects shown in Table 8.5 could be related to several factors. First, the survey sample may simply be different from the full evaluation sample. In that case, effects on UI-covered employment should also be positive for the survey sample. The second panel of Table 8.6 ("Employment status, UI records") indicates that this is not the case. Impacts on UI-covered work are slightly negative, as they are for the full sample, although not statistically significant. In addition, as shown for the full sample, the reduction in work seems to have come largely from individuals who would have earned very little during the year. Second, the program may have increased work in the types of jobs that are not covered by the UI system. The bottom panel of the table attempts to address that issue.

The correspondence between the two data sources was examined using a subset of the survey sample for which UI data were available for the same calendar quarter in which individuals were interviewed for the survey. The data show that the UI records miss a substantial amount of employment, as is typically the case. About 11 percent of the control group reported working at the time of the survey interview but were not registered as working in the UI records. In contrast, 16 percent of parents in the program group worked in these types of jobs. This impact on non-covered work explains why the survey shows positive employment effects while the UI data do not.

The Family Rewards program offered incentives for all types of full-time jobs, so it is not clear why the program would only increase non-UI-covered employment, particularly since individuals had to present adequate documentation in order to earn rewards (see Box 8.3).

Nonetheless, these jobs, particularly those that were full time, may have been easier to obtain than formal jobs during this period. Despite the fact that non-UI-covered jobs typically offer fewer benefits, they may have also been more attractive if they offered more flexible hours or were in more convenient locations.<sup>8</sup> The in-depth interviews with families indicated that many adults did work in what would appear to be non-UI-covered jobs, such as washing hair and tutoring.

<sup>&</sup>lt;sup>8</sup>Some support for this idea comes from the evaluation of the Chicago Employment Retention and Advancement program. Staff in that program found that many of the individuals they served were working in informal jobs (for example, babysitting and house cleaning) that were often close to home and offered flexible hours. They were often reluctant to move into more formal jobs that also typically involved commuting into downtown Chicago (Bloom, Hendra, and Page, 2006).

### Box 8.3

### **Documenting Work**

To earn a reward for full-time work, participants were required to submit, along with the mail-in coupon, either a pay stub indicating weekly hours worked during the given activity period or, if weekly hours are not indicated on pay stubs, a letter on official letterhead from their employer providing this information. (However, it was not always possible to determine from this information whether the employer paid taxes on that particular individual.)

Self-employed participants were required to submit other forms, depending on their type of work. Participants who provided child care within their home, for example, were required to list hours and weeks of care provided per child, with supporting letters from parents and quarterly estimated tax payments (Form 1040-ES). Participants who were working as nannies outside the home also had to document hours and weeks worked, along with their employer's ID number (indicating that the employer withholds and pays taxes for the employee). Other self-employed workers were required to indicate the number of hours worked during the activity period and to submit invoices to clients, records of earnings and expenses, and quarterly estimated tax payments.

Another possible reason for the increase in employment based on survey reports is that program group respondents may have been more willing than control group respondents to report employment to the survey interviewer, given that they had gone through the process of "formalizing" their employment by providing all the necessary documentation to earn rewards. In this case, the impact on employment according to the survey would not represent a real increase in work, but an increase in the reporting of work. Some evidence that is consistent with differential reporting is the reduction in UI-only work, or work that is indicated on the UI records but that the respondent did not report to the survey interviewer, shown in the final panel of Table 8.6. Although a small effect (-2.1 percentage points), it does suggest the possibility that program group respondents were more likely to report work on the survey.<sup>9</sup> However, it is not possible to determine with any certainty whether and to what degree differential reporting may have contributed to the employment impacts.

<sup>&</sup>lt;sup>9</sup>Abraham, Haltiwanger, Sandusky, and Spletzer (2009) suggest that individuals who work in UI-covered jobs but do not report employment on surveys are marginal workers, working part time or part of the year, who may not consider themselves formal workers. The Family Rewards survey data are consistent with this notion. Median quarterly earnings for the UI-only workers were less than half the earnings of those who were employed according to both sources.

Table 8.7 provides more information about how the program may have affected the types of jobs that participants held at the time of the survey — that is, the types of jobs that individuals took up in response to the program. The top row repeats the impact on employment at the time of the survey that is shown in Table 8.6, an increase of 5.6 percentage points. The subsequent rows help to describe this new employment. For example, the impact on working at least 30 hours per week (at 5.6 percentage points) is essentially equal to the impact on work, suggesting that all of the new employment generated by the program was full-time work. This finding is expected given that full-time work was a requirement to earn the rewards. Data on wage rates show that the new employment was distributed across the wage categories, although most of it was in jobs that paid \$9 or more per hour.

The impact of 2.2 percentage points on the rate of self-employment suggests that about one-third of the increase in survey-reported employment was self-employment (2.2 percentage points divided by 5.6 percentage points). Similarly, while most of the new employment offered paid sick days as a benefit (an impact of 3.8 percentage points divided by 5.6 percentage points), only about half of the jobs offered health insurance (an impact of 2.8 percentage points divided by 5.6 percentage points). Nonetheless, the data on employer-provided benefits suggest that a significant fraction of employment that the UI records miss is legitimate employment, but it is work that is either not covered by the UI system or not reported to the UI system by employers.

# Effects for Key Subgroups

Previous studies of work incentives programs have typically found that the effects vary across types of individuals. The effects of Family Rewards were examined for a range of subgroups. This section presents findings for subgroups defined by individuals' work history and education level when they entered the study.

Work history is defined by employment status at the time of random assignment, as self-reported on the Background Information Form. A recent study of a post-employment program for welfare recipients that similarly included a financial incentive for full-time work found that it had larger effects for individuals who had some recent employment history at the time they entered the program.<sup>10</sup> Such individuals might be better able to take up the offer of rewards for full-time work.

The first two panels of Table 8.8 present the results for Family Rewards. The program had no effect on UI-covered employment for those who were working at the time of random assignment, but it did lead to a small increase in employment according to survey reports, from 82.4 percent for the control group to 86.3 percent for the program group. Additional

<sup>&</sup>lt;sup>10</sup>Martinson and Hendra (2006).

### Table 8.7

# **Impacts on Job Characteristics**

	Program	Control	Difference	
Outcome	Group	Group	(Impact)	P-Value
Employment status (%)				
Currently employed at the time of the survey	59.9	54.3	5.6 ***	0.000
Characteristics of current job <sup>a</sup>				
Average hourly wage (\$)	13.07	12.85		
Less than \$7.00 (%)	8.1	6.3	1.8 **	0.047
\$7.00 - \$8.99 (%)	9.6	7.9	1.8 *	0.078
\$9.00 or more (%)	36.2	31.8	4.3 ***	0.003
Not reported (%)	6.0	8.3	-2.3 **	0.014
Hours worked per week (%)				
1-19	4.2	3.0	1.3 *	0.058
20-29	6.6	7.6	-1.0	0.297
30-34	8.9	6.1	2.8 ***	0.003
35 or more	39.4	36.2	3.1 **	0.034
Not reported	0.8	1.4	-0.5	0.152
Worked at least 30 hours per week (%)	48.6	43.0	5.6 ***	0.000
Average weekly earnings(\$)	446	440		
Usual work schedule (%)				
Regular daytime shift	44.1	40.8	3.3 **	0.034
Regular evening/night shift	7.0	6.9	0.1	0.902
Rotating or split shift	4.9	4.3	0.6	0.430
Irregular shift	2.9	1.5	1.4 ***	0.009
Other	0.9	0.6	0.3	0.289
Self-employed (%)	7.0	4.9	2.2 ***	0.009
Employer-provided benefits <sup>b</sup> (%)				
Paid sick days	35.1	31.3	3.8 ***	0.005
Paid vacation days	37.7	34.8	2.9 **	0.033
Paid holidays, including Christmas and New Year's Day	37.7	35.2	2.6 *	0.066
Dental benefits	28.0	27.2	0.8	0.535
A retirement plan	28.5	26.5	2.0	0.136
A health or medical insurance plan	31.8	29.0	2.8 **	0.039
Enrolled in a work-related health or medical				
insurance plan	23.9	22.4	1.5	0.225
				(continued)

(continued)

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Employment search (%)				
Looked for work in previous 4 weeks	26.7	26.4	0.3	0.842
Received help finding a job (%)	15.0	13.4	1.6	0.190
From a program or agency <sup>c</sup>	9.8	8.5	1.3	0.223
Unemployment agency	0.8	1.0	-0.1	0.681
Job center	1.0	0.7	0.3	0.398
Temp agency	0.4	0.7	-0.3	0.293
Work Force One Center or One-Stop Center	1.6	1.4	0.2	0.624
Community organization	0.6	0.1	0.5 **	0.031
Other	5.8	4.9	0.9	0.297
Sample size (total = $3,082$ )	1,574	1,508		

#### Table 8.7 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: Sample sizes vary because of missing values.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent. Italic type indicates comparisons that are nonexperimental. Statistical tests were not performed.

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

Rounding may cause slight discrepancies in calculating sums and differences.

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.

<sup>a</sup>If a respondent currently works multiple jobs, then only the primary job is reported. (The job at which the respondent works the most hours is considered primary.)

<sup>b</sup>This includes benefits that are or eventually will be offered, regardless of whether the respondent receives them.

<sup>c</sup>Percentages for finding help through specific programs or agencies do not add up to the percentage who found help "from a program or agency" because several sample members did not know or refused to identify the exact source of help.

analyses (not shown) indicate that this effect, as for the full sample, represents an increase in non-UI-covered work, or work that is reported on the survey but not in the UI records. In contrast, among individuals who were not working at the time of random assignment, the program led to a reduction in UI-covered employment and an increase in work reported on the survey, suggesting some substitution out of UI-covered work into non-UI-covered work (see Table 8.8, second panel).<sup>11</sup>

<sup>&</sup>lt;sup>11</sup>This substitution is not observed directly for the survey sample, since (unlike for the full sample of parents who were not working at study entry), there were no negative effects on UI-covered employment. Nonetheless, results for the full sample suggest substitution out of formal work. The lack of negative effects for the survey sample suggests that some caution be used for this subgroup when generalizing the survey findings to the full sample.

## Table 8.8

## Impacts on Work and Earnings, by Respondent's Employment Status and Education Level at the Time of Random Assignment

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Employed				
Full sample (UI records)				
Ever employed, year 1 (%)	83.0	84.0	-1.0	0.275
Average quarterly employment (%)	77.0	77.7	-0.7	0.439
Total earnings (\$)	20,449	20,806	-357	0.314
Sample size (total = 2,634)	1,325	1,309		
Survey sample				
Ever worked since random assignment (%)	95.8	95.0	0.8	0.443
Currently working at the time of the survey (%)	86.3	82.4	3.9 **	0.029
Sample size (total = 1,599)	823	776		
Not employed				
Full sample (UI records)				
Ever employed, year 1 (%)	25.7	29.8	-4.1 **	0.015
Average quarterly employment (%)	17.1	19.6	-2.5 **	0.047
Total earnings (\$)	2,677	2,846	-170	0.519
Sample size (total = $2,282$ )	1,146	1,136		
Survey sample				
Ever worked since random assignment (%)	50.4	46.2	4.2 *	0.093
Currently working at the time of the survey (%)	30.1	23.8	6.3 ***	0.005
Sample size (total = 1,440)	725	715		(continued)

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	
High school diploma/GED certificate or higher	Group	Group	(impact)	I - Value	
Full sample (UI records)					
Ever employed, year 1 (%)	65.2	66.4	-1.2	0.314	
Average quarterly employment (%)	57.7	58.5	-0.9	0.383	
Total earnings (\$)	15,662	16,064	-403	0.218	
Sample size (total = $2,864$ )	1,404	1,460			
Survey sample					
Ever worked since random assignment (%)	80.3	76.4	4.0 **	0.012	
Currently working at the time of the survey (%)	68.8	60.2	8.6 ***	0.000	††
Sample size (total = 1,820)	922	898			
No high school diploma/GED certificate					
Full sample (UI records)					
Ever employed (%)	44.2	48.3	-4.1 ***	0.008	
Average quarterly employment (%)	37.0	39.4	-2.4 *	0.052	
Total earnings (\$)	7,002	7,223	-221	0.447	
Sample size (total = 1,960)	1,021	939			
Survey sample					
Ever worked since random assignment (%)	65.9	64.8	1.1	0.657	
Currently working at the time of the survey (%)	46.6	45.5	1.1	0.647	††
Sample size (total = 1,186)	610	576			

#### Table 8.8 (continued)

SOURCES: MDRC calculations using data from the Family Rewards 18-Month Survey and New York State unemployment insurance (UI) wage records.

NOTES: Sample sizes vary because of missing values.

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 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 families and sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

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

A comparison of the two panels shows that non-UI-covered employment is much more prevalent among parents who were not working at the time of random assignment. As an example, only about 30 percent of the control group members who were unemployed at the time of random assignment worked during Year 1 according to UI records, while 46 percent reported on the survey that they had worked since random assignment. Although the two data sources cover somewhat different time periods, these data indicate that one-third of employment for this group is in non-UI work.

Results by education level are shown in the last two panels of Table 8.8. For parents who entered the study with at least a high school diploma or a GED certificate, the program led to a sizable increase in work according to the survey — for example, an increase of 8.6 percentage points in the percent of individuals who were working at the time of the survey. In this case, further analysis (not shown) indicates that this increase represents a small increase in UI-covered work (in the quarter of survey interview) and a larger increase in non-UI-covered employment. For the less educated group, the program led to a reduction in UI-covered employment of 4.1 percentage points and had no effects on employment according to the survey. In this case, the program did lead to an increase in informal work (or work reported on the survey but not in the UI records), but one that was entirely offset by a reduction in UI-covered work. Thus, survey respondents in the program group were no more likely to report being employed than were those in the control group.

In sum, the program appears to have had somewhat different effects for individuals depending on their preparedness for work (based on education and work status at study entry). Although it led to an increase in non-UI employment for all groups, this increase was offset in part or entirely by a reduction in UI-covered work among the less "work-ready" group. For that group, in other words, the program increased informal employment among those who would have otherwise worked in formal jobs. If finding or maintaining a UI-covered job is more challenging for this group, it makes sense that these individuals might either be more likely to take up informal jobs to earn rewards or, feeling more secure with the extra income provided by the program's cash transfers, to take on informal work instead of formal work, perhaps for matters of convenience.<sup>12</sup>

<sup>&</sup>lt;sup>12</sup>Effects across additional dimensions were also examined as part of a more exploratory analysis. These other dimensions include baseline public assistance receipt, public housing status, borough, and race/ethnicity. The results showed little variation in impacts, although there were a few exceptions. For example, effects on survey-reported employment were larger for parents who were living in public or subsidized housing at the time of random assignment, compared with other parents. Effects on survey-reported employment were also larger for parents in two-parent families, compared with their single-parent counterparts, and for parents whose incomes were below 50 percent of the poverty level at the time of random assignment, compared with parents above 50 percent of the poverty level.

## Conclusion

Family Rewards' effects on work are mixed. For the sample as a whole, the program appears to have led to a small increase in employment, largely in non-UI-covered jobs. However, the program also led to a small reduction in UI-covered employment, particularly for more disadvantaged subgroups of the sample. It is difficult to know whether this pattern of effects is a result of the tough economy, where UI-covered jobs may be difficult to obtain, or a result of the other income families obtained from the program — income that may have allowed them to leave UI-covered jobs or not move into them as quickly as they would have otherwise. Both factors may have played a role.

It is also not clear why the program, in contrast to previous work incentives programs, did not lead to larger increases in all types of employment, UI-covered and not.<sup>13</sup> Perhaps families were not focused on the work rewards during the first year of the program, either because they were among many rewards being offered or because these families could and did earn income from the nonwork rewards. Longer-term follow up will be needed to assess how the increased marketing of the workforce rewards in Year 2 by Seedco and the Neighborhood Partner Organizations, coupled with the worsening of the economy at that time, affect these results.

<sup>&</sup>lt;sup>13</sup>For example, effects on UI-covered employment rates in the fourth quarter of follow-up across several "make work pay" programs ranged from 7 percentage points to 14 percentage points (Michalopoulos, 2005). Effects on survey-reported employment were similarly positive.

### Chapter 9

# Conclusion

How do the early results of Family Rewards compare with those of other countries' conditional cash transfer (CCT) programs? Direct comparisons must be made cautiously because of vast differences in the nature of poverty and in broader social and economic conditions in which the programs operate, and because of variations in the programs' designs and target populations. Key among the design differences is the fact that other countries' CCT programs do not generally include rewards for educational achievement or workforce activities. Their incentives schedules are much simpler and not nearly as comprehensive, and the programs are not time-limited. Furthermore, CCT programs in some other countries function as the country's core safety net system, or as a critical part of it, not as an "add-on" program like Family Rewards. With these differences in mind, a number of comparisons can be drawn.

Evaluations of other CCT programs have convincingly shown that such programs can reduce poverty and improve the amount and quality of consumption of goods and services (for example, increased food purchases) among very poor families — their most important objective.<sup>1</sup> The initial results from Family Rewards are generally consistent with those findings. Family Rewards reduced current income poverty among its participants, and the families used some of that extra income to increase their food consumption, meet other daily living expenses, and even increase their savings.

CCT programs in other countries have had more mixed results in terms of their effects on human capital development outcomes. Studies have fairly consistently found positive effects on school enrollment rates, with impacts in the range of 3 to 13 percentage points above control group averages (and sometimes higher), depending on the country. However, these effects may vary by grade level. For example, one study of Mexico's Oportunidades program shows statistically significant increases in students entering sixth grade, the transition point to secondary school when many students typically leave school, but little effect on students in primary school.

Family Rewards has not produced impacts on school enrollment rates, but at each target grade sample (that is, the fourth-, seventh-, and ninth-grade cohorts), the control group enrollment rate was already very high. It remains to be seen whether the control group enrollment rates begin to fall over time, with more students dropping out, particularly among students in the

<sup>&</sup>lt;sup>1</sup>This chapter uses information on other countries' CCT programs from studies summarized in Fiszbein and Schady (2009) and Levy (2006).

high school cohort, and, if so, whether Family Rewards lessens that rate for the program group and eventually increases the likelihood of graduation.

Some studies in Mexico suggest that Oportunidades has reduced dropout rates and rates of repeating a grade. However, studies there and elsewhere have not yet found effects on educational achievement as measured by standardized tests. In this regard, the early positive impacts of Family Rewards on the likelihood that "better-prepared" ninth-grade students would pass Regents exams, along with its impacts on their accumulated high school credits and grade promotion, is an unusual and promising finding. It suggests the potential of a CCT program to increase learning, at least for some students, in the absence of any reforms in teacher or school practices.

CCT programs have generally increased the likelihood of health checkups. A number of studies have shown impacts on health visits, ranging from 6 percentage points to 33 percentage points relative to control group rates, particularly for very young children who were typically the main focus of health care incentives (for example, to encourage parents to take them for checkups to monitor their nutrition, growth, and development). The observed effects of Family Rewards on the use of medical services are smaller, but they are set against a much higher initial use of medical services among the control group than is found in other studies of CCT programs. However, the substantial impacts of Family Rewards on preventive dental care, for which the normal rates among the control group members are much lower than for medical visits, are especially noteworthy. This finding, along with the small, program-induced shifts away from the reliance on hospital emergency rooms and the small increase in parents' likelihood of seeing a medical doctor and of getting treated for a medical condition, provides further evidence that the CCT program can positively influence health care behavior.

The effects of other countries' CCT programs on health status are more mixed. Some evaluations have found positive effects on some health outcomes (such as increased height among very young children and reductions of certain illnesses or risk factors among adults), while other evaluations have found no effects on these outcomes. However, most of the studies have follow-up periods of only one or two years, so the longer-term effects of the programs on health status are uncertain.

CCT programs in other countries have generally not included workforce components and so they have not been expected to boost participation in the labor force in the short term. In fact, some experts feared that adults may have reduced their work effort in the face of cash transfers that were not conditioned on work. However, evaluations have found little reduction in work effort. In the Family Rewards study, the data on employment in jobs covered by the unemployment insurance (UI) system suggest a similar story — at most, there was a small reduction in work effort, with no statistically significant reduction in earnings from those jobs. At the same time, the findings that are based on survey data seem to indicate that the program generated an increase in full-time employment and earnings (in non-UI-covered jobs), suggesting a positive response to the program's work incentives. The survey data also reveal a small increase in parents' acquisition of training credentials or associate's degrees from two-year colleges. Perhaps the extra money they received through Family Rewards helped them pay some of the costs that are associated with the education or training they were close to finishing, or eased their financial strain in a way that helped them complete their courses.

Overall, the initial results from the New York City project lend support to the growing list of studies showing that a CCT approach can both reduce immediate poverty and hardship and promote at least some improvements in families' own human capital investment. The early findings also demonstrate that the CCT concept can be successfully adapted and implemented in the context of a large city in a highly developed country.

The results also have broader relevance when viewed in the context of studies that are testing less ambitious incentives programs that focus on only one domain and do not include the goal of immediate poverty reduction — for example, programs that offer small incentives tied only to education conditions or only to health-related or work-related activities. An increasing number of such studies are showing that, although not all such programs have achieved positive effects, carefully structured rewards have the potential to influence people's efforts and achievements in the areas of education, health care practices, and employment.<sup>2</sup> Family Rewards adds to that list, showing that incentives, while not always effective, do have the potential to influence a variety of behaviors.

Still, it is important not to exaggerate the program's early impacts. So far, it has produced no effects on some important educational outcomes (such as educational achievement for elementary and middle school students and for "less-prepared" high school students) and only small or modest effects in the health and workforce domains. This may raise questions about how big a difference an "incentives-only" strategy might be able to achieve for certain kinds of outcomes, or whether certain modifications in the program's design and operations could boost its effectiveness. For example, reducing the complexity of the program, improving families' understanding of the incentives offer early on, reducing the lag time between meeting conditions and receiving reward payments, and providing more proactive guidance, personal assistance, and extra services from frontline staff might be worth considering were new versions of

<sup>&</sup>lt;sup>2</sup>See Chapter 1 for references to a number of important studies. The results from the evaluation of the Spark program, one of three demonstration projects that are part of Opportunity NYC and that offered schoolbased education incentives to fourth- and seventh-grade students, were not available at the time that this report was written.

the CCT approach to be tested. Of course, the findings that are available so far on Family Rewards cover its start-up phase and extend only until the program had just begun to mature. Thus, most of the story of Family Rewards remains to be written.

The program is continuing for a third and final year (which will end in August 2010). As mentioned previously, a number of changes have been introduced to streamline the incentives offer, simplify program marketing and administration, and reduce the program's costs. Although the discontinuation of some rewards (see Chapter 1) reduces the maximum amount of money that families can earn, the modifications in the incentives offer, with stronger marketing, may help families focus on higher-priority rewards that have a better chance of increasing their human capital. It remains to be seen whether these operational improvements, plus the additional time that the third year allows families to learn about and respond to the incentives offer, increase the magnitude of the program's impacts.

Future evaluation reports will present longer-term findings on the program's operations, families' reactions and experiences, the program's impacts, and its economic costs and benefits. One report, expected to be completed by fall 2010, will provide an in-depth qualitative look at how parents and children communicate about the incentives and the behaviors with which they are linked, and the implications of the incentives for the dynamics of family life. A subsequent report, scheduled for late 2011, will present findings on the program's impacts within three years after random assignment, around the time that the program itself is ending. The final evaluation report, due in 2013, will cover a five-year follow-up period, including two years after the program ends. The post-program follow-up period will allow the evaluation to determine whether any effects that the program achieves while it was operating persist or grow, or perhaps even turn negative for some outcomes, after the incentives are no longer offered. Thus, final judgments about the potential for Family Rewards to achieve its goals and its relevance for government policy for reducing poverty in the United States must be reserved until the longer-term findings are available.

Appendix A

Supplementary Tables for Chapter 2: Characteristics of the Sample

#### **Appendix Table A.1**

#### Characteristics of Families at the Time of Random Assignment, by Research Group

	Program	Control	
Characteristic	Group	Group	Total
One-parent families <sup>a</sup> (%)	80.5	81.4	80.9
Two-parent family with both parents			
enrolled in Family Rewards <sup>b</sup> (%)	6.2	5.1	5.7
Average number of children in household	2.5	2.5	2.5
Number of children in household (%)			
1 child	23.0	22.6	22.8
2 children	33.3	35.2	34.3
3 children	26.6	23.7	25.1
4 children or more	17.1	18.5	17.8
Primary language spoken at home is English (%)	76.9	76.9	76.9
Housing status (%)			
Own home or apartment	6.9	4.8	5.9
Rent apartment or home	86.3	87.9	87.1
Other housing arrangement	6.8	7.3	7.1
Living in public housing (%)	30.4	30.3	30.4
Receiving Section 8 rental assistance (%)	21.7	24.3	23.0
Receiving TANF or Safety Net Assistance <sup>c</sup> (%)	24.8	23.2	24.0
Receiving food stamps (%)	60.8	58.0	59.4
At least one adult covered by public health insurance (%)	70.9	70.9	70.9
Earnings above 130% of federal poverty level <sup>d</sup> (%)	15.4	14.3	14.9
Sample size (total = $4,750$ )	2,377	2,373	

SOURCE: MDRC calculations using data from Baseline Information Forms.

NOTES: In order to assess differences in characteristics across research groups, chi-square tests were used for categorical variables, and t-tests were used for continuous variables.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

Public health insurance measures in this table exclude child information.

<sup>a</sup>This measure includes families with parents who reported their marital status as single, single but living with a boyfriend or girlfriend, separated, divorced, or widowed.

<sup>b</sup>This refers to sample members who enrolled in Family Rewards with their spouse or legal domestic partner.

<sup>c</sup>This measure includes families with child-only cases.

<sup>d</sup>Income information is not available.

## **Appendix Table A.2**

# Characteristics of Parents at the Time of Random Assignment, by Research Group

	Program	Control	
Characteristic	Group	Group	Total
Female (%)	94.7	93.9	94.3
Age (%)			
18-24 years	0.3	0.3	0.3
25-34 years	28.9	28.8	28.9
35-44 years	44.6	45.7	45.1
45-59 years	23.1	22.5	22.8
60 years or more	3.1	2.7	2.9
Average age (years)	40	40	40
U.S. citizen <sup>a</sup> (%)	83.1	83.1	83.1
By birth	68.0	66.8	67.4
By naturalization	15.1	16.4	15.7
Legal permanent resident (%)	16.9	16.9	16.9
Race/ethnicity (%)			
Hispanic/Latino	47.2	46.3	46.7
White, non-Hispanic/Latino	0.6	0.8	0.7
Black, non-Hispanic/Latino	51.0	51.3	51.2
Other	1.1	1.4	1.4
Education (highest degree or diploma earned) (%)			
GED certificate	9.8	12.3	11.1
High school diploma	20.1	22.6	21.3
Associate's degree/2-year college	9.2	8.5	8.9
4-year college or beyond	8.9	8.4	8.7
None of the above	52.0	48.2	50.1
Marital status (%)	(1.0	60 f	(2.4
Single	61.3 2.6	63.6	62.4
Cohabitating Separated, widowed, or divorced	2.6 16.6	2.1 15.7	2.3 16.1
Married or in a legal domestic partnership	10.0	13.7	10.1
Has an account at bank or credit union (%)	46.0	48.0	47.0
Employment measures			
Currently working (%)	52.9	53.2	53.1
Working full time <sup>b</sup> (%)	37.6	36.7	37.1
Average weekly earnings, among those currently working (\$)	394	393	393
During past year, average number of months worked (%)	10	10	10

	Program	Control	
Characteristic	Group	Group	Total
Health measures (%)			
Health insurance coverage			
Public health insurance	70.5	70.4	70.5
Employer health insurance	20.9	20.2	20.6
Other health insurance	3.0	3.0	3.0
Not covered	5.5	6.4	6.0
Had annual medical checkup when not sick			
Within the past year	82.0	82.3	82.1
1-2 years ago	14.3	14.2	14.3
More than 2 years ago	3.5	3.3	3.4
Never	0.2	0.3	0.2
Last medical checkup was at own (regular) doctor's			
office or clinic (%)	93.1	93.9	93.5
Had preventive dental checkup			
Within the past year	64.9	65.0	64.9
1-2 years ago	23.9	23.1	23.5
More than 2 years ago	10.6	11.3	10.9
Never	0.7	0.6	0.7
Self-rated health			
Excellent or very good	42.8	43.1	43.0
Good	37.0	36.8	36.9
Fair or poor	20.2	20.1	20.1
Over the past 2 weeks, had little or no interest			
in doing things	22.9	21.9	22.4
Over the past 2 weeks, had been feeling down,			
depressed, or hopeless	22.4	21.5	21.9
Sample size (total = $4,750$ )	2,377	2,373	

### **Appendix Table A.2 (continued)**

SOURCE: MDRC calculations using data from Baseline Information Forms.

NOTES: In order to assess differences in characteristics across research groups, chi-square tests were used for categorical variables, and t-tests were used for continuous variables.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent. Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

This table excludes information for enrolled second parents in two-parent households (N = 247).

<sup>a</sup>This measure refers to U.S. citizens both by birth and by naturalization.

<sup>b</sup>This measure refers to 30 hours a week or more.

# Appendix Table A.3

# Characteristics of All Children at the Time of Random Assignment, by Research Group

	Program	Control	
Characteristic	Group	Group	Total
Gender (%)			
Female	49.8	50.2	50.0
Male	50.2	49.8	50.0
Age (%)			
0-5 years	14.3	13.1	13.7
6-10 years	31.0	30.2	30.6
11-13 years	25.5	26.9	26.2
14 years or older	29.2	29.8	29.5
Average age (years)	11	11	11
Born in the U.S. (%)	94.0	93.1	93.5
Race/ethnicity (%)			
Hispanic/Latino	47.0	47.0	47.0
White, non-Hispanic/Latino	0.4	0.5	0.4
Black, non-Hispanic/Latino	50.7	50.0	50.4
Other	2.0	2.5	2.2
Type of school child attended in the past year (%)			
Public or charter school	97.7	97.3	97.5
Private or parochial school	2.3	2.7	2.5
Grade <sup>a</sup> (%)			
Not yet in pre-K or kindergarten	7.2	7.1	7.1
Pre-K	2.4	2.4	2.4
Kindergarten	3.0	2.5	2.8
1st grade	3.5	3.6	3.5
2nd grade	4.5	3.9	4.2
3rd grade	4.2	3.4	3.8
4th grade	16.6	16.8	16.7
5th grade	4.0	3.8	3.9
6th grade	4.2	4.5	4.3
7th grade	15.7	16.4	16.1
8th grade	3.7	4.0	3.9
9th grade	18.5	18.7	18.6
10th grade	3.7	4.4	4.1
11th grade	3.5	3.6	3.6
12th grade	3.0	2.9	3.0
College <sup>b</sup>	1.2	1.3	1.2
Not enrolled <sup>c</sup>	1.1	0.7	0.9

Characteristic	Program Group	Control Group	Total
Education measures (%)			
Child's parent attended parent-teacher conference			
during past year			
Never	4.7	5.3	5.0
1-2 times	36.1	34.5	35.3
3-4 times	34.5	35.5	35.0
5-6 times	11.6	12.0	11.8
More than 6 times	13.1	12.7	12.9
Child's parent spoke with teacher about			
grades, tests, or homework during past year			
Not at all	2.8	3.0	2.9
A little	8.1	8.3	8.2
Some	19.9	20.1	20.0
A lot	34.4	34.5	34.5
A great deal	34.9	34.0	34.5
Enrolled in special education in the past school year	15.1	14.7	14.9
Enrolled as an English Language Learner (ELL)			
in the past school year	12.5	13.2	12.9
Child health outcomes (%)			
Health insurance coverage			
Public health insurance	81.1	81.0	81.1
Employer health insurance	15.0	14.0	14.5
Other health insurance	1.3	2.1	1.7
Not covered	2.6	2.9	2.7
Parent's rating of child's health			
Excellent	44.4	42.7	43.5
Very good	31.3	30.9	31.1
Good	21.1	22.6	21.8
Fair	2.9	3.4	3.1
Poor	0.4	0.4	0.4
Had annual medical checkup when not sick			
Within the past year	90.5	91.0	90.7
1-2 years ago	8.5	8.2	8.4
More than 2 years ago	0.8	0.7	0.8
Never	0.2	0.1	0.2
Last annual checkup was at own (regular) doctor's office or clinic	97.8	97.6	97.7
Had preventive dental checkup:			
Within the past year	73.9	75.4	74.6
1-2 years ago	18.1	16.2	17.2
More than 2 years ago	2.9	3.2	3.1
Never	5.1	5.2	5.1

# Appendix Table A.3 (continued)

### **Appendix Table A.3 (continued)**

Characteristic	Program Group	Control Group	Total
Has physical problem that limits activities	9.3	9.7	9.5
Has an emotional or mental health problem that limits activities	6.1	6.5	6.3
Sample size (total = $11,331$ )	5,680	5,651	

SOURCE: MDRC calculations using data from Baseline Information Forms.

NOTES: In order to assess differences in characteristics across research groups, chi-square tests were used for categorical variables, and t-test were used for continuous variables.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

<sup>a</sup>Grades 4, 7, and 9 are "target grades" for the Family Rewards program. Therefore all enrolled families had to have a child in grade 4, 7, or 9.

<sup>b</sup>College students who were under the age of 18 were enrolled in Family Rewards. They were not eligible for any reward payments.

<sup>c</sup>The "not enrolled" category includes school-age children who are no longer attending or have graduated before the age of 18.

## Appendix Table A.4

## Characteristics of Families at the Time of Random Assignment, by Community District (CD)

	Bronx		Brooklyn		Manhattan	
Characteristic	CD 5	CD 6	CD 5	CD 16	CD 10	CD 11
One-parent family (%) <sup>a</sup>	83.2	81.1	79.0	79.1	81.3	82.1
Two-parent family with both parents enrolled in Family Rewards <sup>b</sup> (%)	5.0	8.5	5.6	5.0	4.3	5.1
Average number of children in household	3	3	3	2	2	2
Number of children in household (%) 1 child 2 children 3 children 4 children 5 children or more	21.3 33.8 28.7 16.2	17.3 33.7 29.5 19.5	22.7 34.9 22.7 19.8	24.4 33.1 23.1 19.4	29.4 33.2 21.2 16.2	24.0 36.1 24.6 15.3
Primary language spoken at home is English (%)	54.2	63.7	82.8	93.1	89.0	81.3
Housing status (%) Own home or apartment Rent apartment or home Other housing arrangement	3.0 86.7 10.3	3.3 90.8 5.8	8.1 86.8 5.1	3.9 92.2 3.9	5.7 86.1 8.1	10.0 80.6 9.4
Living in public housing (%)	17.6	12.0	24.7	40.4	37.1	50.9
Receiving Section 8 rental assistance (%)	25.1	40.7	19.5	16.8	19.7	15.6
Receiving TANF or Safety Net Assistance <sup>c</sup> (%)	36.3	18.7	24.6	19.6	21.8	23.1
Receiving food stamps (%)	75.0	61.4	55.1	56.2	51.7	56.4
At least one adult covered by public health insurance (%)						
Earnings above 130% of federal poverty level <sup>d</sup> (%)	5.7	14.0	22.1	22.1	10.3	8.7
Sample size (total = $4,750$ )	755	843	918	743	555	936

### **Appendix Table A.4 (continued)**

SOURCE: MDRC calculations using data from Baseline Information Forms.

NOTES: Sample sizes may vary because of missing values. Rounding may cause slight discrepencies in calculating sums.

Public health insurance measures in this table exclude child information.

This table excludes information for enrolled second parents in two-parent households (N = 247).

<sup>a</sup>This measure includes families with parents who reported their marital status as single, single but living with a boyfriend or girlfriend, separated, divorced, or widowed.

<sup>b</sup>This measure refers to sample members who enrolled in Family Rewards with their spouse or legal domestic partner.

<sup>c</sup>This measure includes families with child-only cases.

<sup>d</sup>Income information is not available.

# **Appendix Table A.5**

## Characteristics of Parents at the Time of Random Assignment, by Community District (CD)

	Bronx		Brook	yn	Manhatt	nhattan	
Characteristic	CD 5	CD 6	CD 5	CD 16	CD 10	CD 11	
Female (%)	94.2	96.0	94.2	96.1	93.5	92.2	
Age (%)							
18-24 years	0.1	0.2	0.7	0.1	0.0	0.3	
25-34 years	30.5	30.2	31.8	30.1	23.1	25.9	
35-44 years	46.0	46.6	43.7	45.0	46.8	43.7	
45-59 years	22.6	20.8	21.4	22.1	24.9	25.6	
60 years or more	0.8	2.1	2.5	2.7	5.2	4.5	
Average age (years)	39	39	39	40	41	41	
U.S. citizen <sup>a</sup> (%)	72.1	80.1	84.3	83.6	89.4	89.4	
Race/ethnicity (%)							
Hispanic/Latino	71.3	68.2	35.9	15.1	20.7	59.0	
White, non-Hispanic/Latino	0.1	1.4	0.4	0.1	0.7	1.1	
Black, non-Hispanic/Latino	27.3	29.0	62.0	83.8	76.9	38.2	
Other	1.2	1.3	1.6	0.9	1.6	1.7	
Education (highest degree or diploma earned) (%)							
GED certificate	7.9	10.3	9.4	11.1	12.9	14.9	
High school diploma	16.0	25.0	19.0	28.1	22.0	18.5	
Associate's degree/2-year college	6.3	8.6	12.5	7.8	9.3	8.2	
4-year college or beyond	6.7	8.9	8.5	9.1	12.9	7.6	
None of the above	63.1	47.2	50.6	43.9	42.9	50.8	
Marital status (%)							
Single	62.8	61.7	58.5	62.2	64.5	65.7	
Cohabitating	1.9	3.2	2.7	0.9	2.5	2.6	
Separated, widowed, or divorced	18.5	16.3	17.8	16.0	14.2	13.8	
Married or in a legal domestic partnership	16.8	18.9	21.0	20.9	18.7	17.9	

Appendix Table	e A.5	(continued)
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Characteristic	Bronx		Brooklyn		Manhattan	
	CD 5	CD 6	CD 5	CD 16	CD 10	CD 11
Has an account at bank or credit union (%)	30.8	44.4	57.0	48.9	56.5	45.3
Employment measures						
Currently working (%)	49.3	53.3	54.0	55.3	56.8	50.9
Working full time <sup>b</sup> (%)	28.1	41.8	43.1	42.9	36.6	30.1
Average weekly earnings, among those currently working	300	350	434	440	404	407
During past year, average number of months worked	10	10	10	11	10	10
Health measures (%)						
Health insurance coverage						
Public health insurance	85.8	75.4	65.4	67.9	59.5	67.0
Employer health insurance	7.0	15.6	25.8	24.2	30.6	22.3
Other health insurance	2.5	2.2	2.5	1.9	5.1	4.1
Not covered	4.7	6.8	6.3	6.0	4.8	6.6
Had annual medical checkup when not sick						
Within the past year	88.9	83.4	82.0	79.8	79.6	78.8
1-2 years ago	9.0	14.8	15.0	16.7	14.3	15.3
More than 2 years ago	1.8	1.8	2.7	3.5	5.9	5.3
Never	0.3	0.0	0.2	0.0	0.2	0.7
Last medical checkup was at own (regular) doctor's						
office or clinic	92.9	95.1	95.0	97.2	93.1	87.9
Had preventive dental checkup						
Within the past year	73.3	65.6	61.2	59.8	68.4	63.2
1-2 years ago	18.0	24.6	26.3	27.7	21.0	22.2
More than 2 years ago	7.6	9.7	11.8	12.0	10.1	13.6
Never	1.1	0.1	0.7	0.5	0.5	1.0

## **Appendix Table A.5 (continued)**

Characteristic	Bronx	Bronx		Brooklyn		Manhattan	
	CD 5	CD 6	CD 5	CD 16	CD 10	CD 11	
Self-rated health							
Excellent or very good	40.8	40.5	38.6	52.8	46.2	41.4	
Good	38.9	41.9	41.1	30.9	31.9	34.4	
Fair or poor	20.3	17.6	20.3	16.3	21.9	24.2	
Over the past 2 weeks, had little or no interest							
in doing things	29.4	21.4	19.0	14.7	23.3	27.0	
Over the past 2 weeks, had been feeling down,							
depressed, or hopeless	28.3	21.7	20.1	16.3	21.4	23.9	
Sample size (total = $4,750$ )	755	843	918	743	555	936	

SOURCE: MDRC calculations using data from Baseline Information Forms.

NOTES: This table excludes information for second parents in two-parent families (N = 247).

Sample sizes may vary because of missing values. Rounding may cause slight discrepencies in calculating sums.

<sup>a</sup>This measure includes U.S. citizens both by birth and by naturalization.

<sup>b</sup>This refers to 30 hours a week or more.

Appendix B

Family Rewards Verification and Payment Processes

As a first step in creating the verification system for Family Rewards, Seedco developed a detailed list of payment rules that centered on the broader list of activities that the program designers had established. There were initially 22 different conditions for claiming rewards, and each one required programmatic decisions to address both normal and "atypical" circumstances. These rules specified the types of documents that are sufficient to record attendance at charter or parochial schools, and to excuse absences for health reasons; they also described what is needed to document full-time, informal work, such as child care, or work that is irregular, as is often the case for home health aides. As a result of these efforts to define work, Seedco created both a "coupon" and a "form." The type of activity is noted on the coupon, and the form is used to document the activity that is presented on the coupon. Participants are required to submit the coupons and forms for the activities they have completed during a particular two-month "activity period" by the end of that period.

Seedco's next task was to establish a system for verifying the information on the coupons. The volume of coupons that are received for every payment cycle also suggests the extensiveness of this task — on average, about 6,200 coupons are received every two months during a three-week window. For example, for a September 15 coupon deadline, the payment file, with all decisions about these coupons, needs to be released by October 7 to ensure payment on October 15. Given the number and variety of coupons, forms, and associated documentation received, the verification system is highly complex and involves many steps. First, participants mail in coupons and forms in pre-addressed, postage-paid envelopes. The mail is picked up from a post office box, and when it reaches Seedco's back office, which is staffed by approximately 20 workers across different shifts, the contents and date are logged into an Excel spreadsheet. Folders are then prepared for coupons, supporting forms, and other documentation — one folder for each condition that is documented. The folders are verified to make sure that the documentation is correct and complete, with staff marking on a "control sheet" whether it is approved, rejected, or requires further review. After review (if needed), another worker does a quality assurance check before payments can be logged. This system evolved over time. During the first cycle, the review was done manually by temporary staff and numerous permanent staff members, up to the vice president of Seedco. Over time, however, the system became much more efficient, with information technology playing a greater role. The lag between submission of documentation and approval between Year 1 and Year 2 was cut approximately in half, from 13.4 days to 6.8 days on average.

One important aspect of the verification system is that Seedco, cognizant of some of the administrative demands on participants, attempted to conduct what they sometimes called "verification with a heart." That is, while Seedco was strict about authorizing payments only if conditions were met, it searched actively for ways to verify those conditions and make the associated payments. For example, workers were observed searching for pay stubs that had been submitted during a previous payment cycle and had been rejected because they had covered the

wrong cycle, but now could be applied to the current one. Staff also sometimes called a school to verify the hours and dates of a training program when a transcript was not clear, and they spent many hours telephoning physicians who did not provide their license number on annual medical visits. As one Seedco worker said of these outreach attempts, "We do realize the program is very complex....Let's say [most] of the participants here are single-parent households, right?...The person is working, goes home, cooks for the children, looks after the children, and then you expect them to complete this kind of documentation? It is difficult."

In addition to coupons, Seedco processed automatically verified rewards, by establishing a sophisticated data exchange system with public agencies. Although this system resulted in the ability to pay participants for attendance, test scores, and public health insurance (before the reward was discontinued), creating the system presented its own challenges and represented another obstacle that Seedco had to overcome to make the program operational. For example, electronic test score files from the NYC Department of Education took months to arrive and then still had to be checked — well after the parents and children had learned about the scores. Attendance data sometimes also needed to be cleaned, with the result that some students who were owed payments were not recognized as such during the payment cycle in question. Medicaid information was also sometimes difficult to process, with files transferred to Seedco on a semi-annual basis, even though payment schedules were semi-monthly. For many of these automatically verified payments, Seedco reported that electronic files required extensive data cleaning and follow-up in order to pay participants successfully for meeting reward conditions.

Combining manually verified and auto-verified information, Opportunity NYC software has records of accepted and rejected reward claims, account information, and payment status. After verification, this information permits Seedco's information technology department to send a final file with automatically verified and coupon-based activities to GrantsPlus, a payment management service that is part of the Research Division of the City University of New York, which processes the payment. After payment funds are transferred, GrantsPlus sends Seedco an acceptance or rejection report; the acceptance report is the "payment report," and indicates all payments that were made successfully, while the rejection report indicates any payments that bounced back because of incorrect or insufficient bank account information, or as a result of technical problems with the transfer. Appendix C

Supplementary Tables for Chapter 4: Reward Amounts Earned and Paid

### **Appendix Table C.1**

#### Summary of Rewards Earned by Families in Program Years 1 and 2 Combined, by Community District (CD)

	Bronx		Brooklyn		Manhattan	
Outcome	CD5	CD6	CD5	CD16	CD10	CD11
Family earned any reward (%)	99.5	99.5	99.4	99.7	100.0	99.6
Automatically verified rewards only (%)	15.6	11.1	8.4	12.4	9.8	12.8
Any automatically verified rewards (%)	99.2	99.1	98.9	99.5	98.9	98.7
Coupon book rewards only (%)	0.3	0.5	0.4	0.3	1.1	0.9
Any coupon book rewards (%)	83.9	88.4	90.9	87.3	90.2	86.8
Automatically verified and coupon book rewards (%)	83.6	87.9	90.5	87.0	89.1	85.9
Family earned at least one (%):						
Education reward	96.0	97.2	98.9	97.6	96.7	98.1
Health reward	97.9	97.6	97.6	98.4	97.5	97.0
Workforce reward	41.5	52.5	54.6	49.5	45.1	45.0
Average reward amount earned <sup>a</sup> (\$)	\$5,768	\$6,516	\$7,027	\$6,077	\$6,085	\$5,662
Average number of activity periods during which rewards were earned	10.9	11.0	11.1	11.0	10.9	11.0
Continuity in earnings over time (%)						
Earned rewards every activity period	65.2	64.9	69.3	64.0	63.6	64.0
Earned rewards in 6 or more activity periods	97.3	96.9	97.6	96.5	94.9	97.2
Earned rewards in Year 1 but not Year 2	1.1	2.9	1.5	1.4	1.5	1.3
Earned rewards in Year 2 but not Year 1	0.3	0.0	0.0	0.3	0.0	0.0
Earned rewards in Year 1 and Year 2	98.7	97.2	98.5	98.4	98.6	98.7
Sample size (total = $2,377$ )	378	423	462	370	275	469

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

NOTES: The first program year covers activities that occurred from September 2007 though August 2008, and the second program year covers activities that occurred from September 2008 through August 2009.

The following NPOs opporated the Family Rewards program in each of the community districts: Groundwork, Inc., in Brooklyn CD5, Brownsville Multi-Service Center in Brooklyn CD16, BronxWorks in Bronx CD5, Urban Health Plan in Bronx CD6, Catholic Charities Community Services in Manhattan CD10, and Union Settlement Association in Manhattan CD11.

<sup>a</sup>Reward amounts are calculated only for families who earned any rewards.

#### **Appendix Table C.2**

#### **Supplementary Information on Patterns of Reward Receipt**

			Years 1 and 2
Outcome	Year 1	Year 2	Combined
Family earned (%)			
Health, education, and workforce rewards	41.3	39.4	47.8
Health rewards only	2.7	5.3	1.9
Education rewards only	3.7	3.3	1.6
Workforce rewards only	0.0	0.0	0.0
Health and education rewards	50.8	48.2	47.8
Health and workforce rewards	0.3	1.2	0.2
Education and workforce rewards	0.6	0.6	0.3
Sample size			2,377
Difference between amount paid and amount earned <sup>a,b</sup> (%)			
\$500 or higher overpayment	1.4	0.6	1.3
\$300 to \$499 overpayment	1.6	0.5	1.1
\$100 to \$299 overpayment	13.6	1.7	5.9
\$1 to \$99 overpayment	26.6	1.1	8.4
Amount earned $=$ amount paid	48.8	50.3	66.7
\$1 to \$99 earned but not paid	1.4	22.8	2.3
\$100 to \$299 earned but not paid	1.4	10.3	2.8
\$300 to \$499 earned but not paid	1.1	2.8	1.7
\$500 or higher earned but not paid	3.5	9.8	9.9
Sample size			2,367

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

NOTES: The first program year covers activities that occurred from September 2007 through August 2008, and the second program year covers activities that occurred from September 2008 through August 2009. Payment data updated through June 15, 2009, for both program years are included in these tables. "Sample size" refers to the number of families with rewards earnings.

<sup>a</sup>Because of the way the raw payment data are structured, the earnings measures that are used to match family earnings to family payments are calculated using validation date ranges, which reflect when a reward was approved as "earned" by Seedco rather than when an activity eligible for a reward was completed. "Year 1 earnings" for these measures includes rewards that were approved for payments as of November 6, 2008. "Year 2 earnings" includes all rewards approved after November 6, 2008. As a result, some rewards that were earned toward the end of Year 1 may appear as Year 2 earnings in this analysis. These yearly earnings totals differ slightly from the other yearly earnings totals presented in the report, which better reflect the time a required activity was completed.

<sup>b</sup>The primary reason that families were not paid for rewards they earned was because of problems with their bank accounts. Opportunity NYC makes backpayments to families when accurate account information is provided.

Appendix D

Response Analysis for the 18-Month Survey

The Family Rewards 18-Month Survey provides information about Family Rewards sample members on topics such as participation in employment and education activities, health care, employment and job characteristics, household composition, and child outcomes. As the survey was administered to a subset of the Family Rewards sample, it is necessary to assess the reliability of impact results for the survey sample along two dimensions. First, the results for the survey sample may or may not generalize to (or be representative of) the full sample because (1) only a subset of the full Family Rewards sample was selected to be interviewed; and (2) individuals who responded to the survey may be different from those who were chosen for the survey but did not respond. Second, the failure of some families to respond to the survey may compromise the validity of the impact estimates, particularly if response rates differ by research group. This appendix presents a description of the survey fielding effort and assesses the survey in terms of its generalizability to the full sample and its validity for estimating program impacts. Overall, the results suggest that the survey sample provides valid estimates of the program's effects that can be generalized to the full research sample.

## Sample Selection and Survey Administration

The research sample includes 4,750 families, 3,750 of whom were selected to be interviewed for the survey, or to be in the fielded sample.<sup>1</sup> (See Appendix Box D.1 for definitions of the four sample types: research, fielded, respondent, and nonrespondent.) The selection process occurred in two steps. First, only families who entered the study by October 31, 2007, were eligible to be in the survey sample. Columns 1 and 2 of Appendix Table D.1 show baseline characteristics for the research sample (4,750 families) and the subsample of this group that was eligible for survey selection (4,093 families). (Tables for this Appendix begin on page 292.) Overall, the group that was randomly assigned by October 31 is very similar to the full sample. However, there are small differences, of a few percentage points, on three related characteristics: Hispanic origin, community district, and English as the primary language spoken at home. Separate analyses (not shown) indicate that the early cohort differed significantly from the later cohort on these three measures. Among the early cohort, for example, 79 percent of families spoke English as their primary language, compared with only 65 percent of families in the late cohort, for a significant difference of 14 percentage points. Differences by community district and Hispanic origin are similarly large. These differences reflect the strong effort later in the intake period to enroll families from the two community districts in the Bronx, both largely Hispanic areas.

<sup>&</sup>lt;sup>1</sup>The unit of selection for the fielded sample was families, and the interview was administered to one adult family member. As shown in Chapter 2, only 5.7 percent of the research sample families had two adult participants. In those cases, the adult family member who completed the Baseline Information Form first, usually the female, was contacted for the survey interview.

#### Appendix Box D.1

#### Sample Definitions

**Research Sample:** The research sample includes all 4,750 families who were randomly assigned during the sample intake period, which extended from July 2007 through January 2008.

**Fielded Sample:** Among the 4,093 families who were randomly assigned by October 31, 2007, 3,750 families were chosen for the survey. Families were divided into three groups, based on the grade of the target child, and then selected at random for the survey.

**Respondent Sample:** The respondent sample was made up of the fielded sample members who completed the Family Rewards 18-Month Survey.

**Nonrespondent Sample:** The nonrespondent sample contained fielded sample members who did not complete the Family Rewards 18-Month Survey for various reasons — for example, because they were not located or because they refused to be interviewed.

From the sample that was randomly assigned by October 31, 2007, a subsample of 3,750 families, as noted above, was selected for interviewing (the fielded sample). In order to ensure adequate representation of families with children in each of the three target grades (the fourth, seventh, and ninth grades), families were chosen to be in the survey sample such that one-third of the sample had a child in each target grade. That is, 1,250 of the fielded sample members were selected from among families with a child in the fourth grade; 1,250 were selected from among those with a child in the seventh grade; and 1,250 were selected from among those with a child in the research sample and the sample that was randomly assigned by October 31, 2007, are both weighted somewhat more heavily toward families with ninth-graders (representing 36 percent of the sample). Thus, the sampling strategy for the survey involved somewhat undersampling families with ninth-graders and oversampling families with younger children. An additional selection criterion

<sup>&</sup>lt;sup>2</sup>Selection of the fielded sample was optimized by selected background characteristics. Repeated samples of the target fielded sample size were drawn. The samples were evaluated based on how similar the research groups were on a set of baseline characteristics. The sample that resulted in the smallest difference on these characteristics was chosen. Specifically, a distance measure was created that summarized the standardized distance between the program and control groups on a set of background characteristics. The sample that minimized this distance measure was chosen as the fielded sample.

was that the participating adult in the family either spoke English well or very well, or spoke primarily English or Spanish in the home.

A comparison of the last two columns of the table shows that the fielded sample differs from the nonfielded sample in a few ways, some of which were expected. For example, there are differences between the two samples in the grades of the target children, with the fielded sample split evenly among the three grades. An unexpected difference, however, is for English as the primary language — 79.8 percent of families in the fielded sample spoke English as their primary language, compared with 67.9 percent of families in the sample that was not fielded. This difference, in turn, appears to be related to differences by race and citizenship status. The reason for these differences is not clear. However, because the nonfielded sample is a small percentage of the eligible sample, the fielded sample (third column) looks, on average, very similar to the eligible sample (second column) and to the full research sample (first column).

The survey instrument consisted of 13 modules, some of which were designated as core and were administered to the entire fielded sample, and others that were designated as non-core and were administered to a randomly chosen subset of the fielded sample. This design strategy was chosen to preserve the breadth of the survey topics, while also being sensitive to the time burden placed on participants. Fielded sampled members were randomly distributed into three mutually exclusive groups, each of which completed a predefined set of the non-core survey modules. Some of the non-core modules were administered to more than one subsample. In addition, a survey module concerning program experiences and perceptions was administered to a subsample of program group respondents.

Fielding of the survey began in December 2008. Members of the fielded sample were initially contacted by a letter that introduced the survey and solicited their participation. Individuals were offered \$30 for completing the survey, which was administered over the telephone to those who agreed to participate. As fielding progressed, it became evident that individuals in the program group were responding at a higher rate than those in the control group and that response rates varied by community district. At that point, survey outreach efforts began to be targeted to address these imbalances. Survey interviews concluded in July 2009. Respondents were interviewed anywhere from 16 to 24 months after they were randomly assigned. Because of the initial imbalance in response rates by research group, control group members were interviewed, on average, nearly one month later (relative to random assignment) than were program group members, at 18.3 months versus 17.5 months.

## Characteristics of Respondents and Nonrespondents within the Fielded Sample

Among the 3,750 families who were chosen to be surveyed, 3,082 completed a survey interview, for a response rate of 82.2 percent. The response rate was 84 percent for the program group and 80.4 percent for the control group.<sup>3</sup>

Appendix Table D.2 presents selected baseline characteristics for survey respondents and nonrespondents. Some differences are to be expected, given that individuals who respond to surveys tend to be different, usually less disadvantaged, from those who do not. The table illustrates these types of differences. A higher fraction of the respondent sample, for example, speaks English as the primary language at home. Similarly, U.S. citizens by birth were more likely to have responded to the survey than were naturalized citizens and noncitizens.

These differences were also tested in a regression model, in which the probability of response was regressed on a range of baseline covariates. The results are shown in Appendix Table D.3. Many of the statistically significant differences shown in Table D.2 remain statistically significant. In addition, the full model is statistically significant. The differences between the two groups suggest that some caution is warranted when generalizing the survey findings to the research sample. However, because the response rates were fairly high (nonrespondents represent less than 20 percent of the fielded sample), the respondent sample still looks similar to the fielded sample. As an example, 95.1 percent of respondents and 94.5 percent of the fielded sample are female (Table D.2).

Finally, the top row of Table D.2 shows that individuals in the program group were more likely to respond to the survey than were those in the control group, given that program group members are underrepresented among nonrespondents, making up only 45 percent of the sample. Although it is possible that program group respondents are different from control group respondents, even with similar response rates between the two groups, this issue becomes more of a concern with differential response rates. Differences in characteristics between the program and control groups, in turn, lead to the possibility that impact estimates may be biased, or invalid. Although the difference shown in Table D.2 is not large (51.1 percent versus 45.1 percent), this difference remains statistically significant in the regression model (Table D.3).

<sup>&</sup>lt;sup>3</sup>Response rates for the three subsamples that were chosen to receive the various non-core modules were 83.3 percent, 81.4 percent, and 81.9 percent.

## Comparison Between the Research Groups in the Survey Respondent Sample

Selected baseline characteristics for program and control group survey respondents are shown in Appendix Table D.4. Although the two groups are similar across most dimensions, there are a few exceptions. For example, a higher fraction of program group respondents are in two-parent families, compared with control group respondents. The program group is also less likely to receive Section 8 rental assistance. In addition, children in program group families scored somewhat higher on the prior year's English language arts test than did control group children. Although most of these differences are small, a notable difference between the two groups is for earnings in the prior year, based on unemployment insurance (UI) records. Program group respondents earned about \$1,590 more than did control group respondents in the year prior to random assignment.

These differences are also estimated in a regression framework, in which the likelihood of being in the program group is regressed on a range of baseline characteristics (Appendix Table D.5). Although most of the differences found in Table D.4 remain statistically significant in the full model, the model as a whole is not statistically significant. While these differences do suggest caution when interpreting survey impacts, all of the characteristics for which there are differences between the research groups are included in the impact regression models.

## Consistency of Impacts

The previous sections suggested some caution in interpreting the results from the survey for two reasons. First, the results for the survey sample may not be generalizable to the full research sample, given the difference between the late cohort (not eligible for survey fielding) and the early cohort on English language use and related characteristics, and given the differences on these same characteristics between individuals who responded to the survey and those who did not. Second, although accounted for in the impact regression model, there were a few differences in characteristics between program and control group respondents.

This section helps to put the survey results in context, by comparing impacts estimated from administrative data for the research, fielded, and respondent samples. Impacts for the research sample represent the best estimate of the program's effects, given that they use the full program group and control group, and not a potentially nonrandom subset of survey respondents. Thus, finding similar impacts for the survey sample and the larger research sample would give more credibility to the survey analysis. Appendix Tables D.6 and D.7 present the results, showing impacts for employment outcomes, using UI records data, and education outcomes, using data from NYC Department of Education records.

Data for employment outcomes (Table D.6) show a roughly similar story for the three samples, although the impacts tend to be a bit more negative for the research sample than for the survey sample.<sup>4</sup> For example, the effect on "ever employed" for the research sample is -2.3 percentage points and statistically significant, compared with -1.4 percentage points and not statistically significant for the survey sample. Recall that program group survey respondents had higher UI-based earnings in the year prior to random assignment than did control group respondents, although this difference is controlled for in the impact regression model. Nonetheless, the data in Table D.6 suggest that findings for the survey sample are generally representative of the larger sample, although perhaps a bit less negative.

Table D.7 presents impacts on education outcomes for the research, fielded, and survey respondent samples. The first two panels, for fourth- and seventh-graders, show that the results are similar for the various samples, showing small and statistically insignificant differences across a range of outcomes. The final panel presents impacts for ninth-graders. In general, impacts are somewhat larger for the survey respondent sample than for the research and fielded samples, although the overall story is the same across all samples.

## Sensitivity Test: Weighting

The impacts for the respondent sample using administrative records data are similar to impacts for the full sample. Nonetheless, given the differences between the respondent and other samples on factors such as race, citizenship status, and English language use, the sensitivity of the survey results was assessed by reweighting the survey sample to better match the full research sample. In particular, the probability of survey response for the research sample was regressed on a range of characteristics, including age, sex, race/ethnicity, education level, community district, citizenship status, and English language use. Survey weights were constructed as the inverse of the predicted probability of response.

Weighted impacts for selected tables from the report are shown in Appendix Tables D.8 through D.12. Overall, the impact estimates across the range of outcomes are not highly sensitive to weighting. For example, the weighted results, compared with those presented in the main report, show similar effects on financial well-being and food security (Table D.8), similar effects on parental engagement in children's schooling (Table D.9), and similar effects on employment at the time of the survey interview (Table D.12). A few of the health status impacts do appear to be somewhat sensitive to weighting (Table D.11), suggesting differential effects of the program for groups that may have been underrepresented in the survey. Nonetheless, given the

<sup>&</sup>lt;sup>4</sup>The research sample includes all participating adults in the research families, while the fielded and respondent samples include only the primary adult.

similarity of results across the wide range of outcomes that are presented in this report, weighting the data does not alter the general conclusions about the program's effects.

## Conclusion

Overall, the variety of tests that were conducted and the results that are presented suggest that the survey sample provides valid estimates of the program's effects and these effects are representative of those that would have been obtained for the full research sample. Although the survey sample differed from the full sample in terms of English language use and other related variables, the administrative records impacts for the survey sample are similar to those for the full research sample. In addition, reweighting the survey data to represent the research sample does not change the overall story.

## Appendix Table D.1

## Characteristics of the Fielded Survey Sample at the Time of Random Assignment, Compared with Those Not Selected for the Survey

	Res	earch Sample		
	All Sample	Those Assigned by	Selected for	Not Selected for
Characteristic	Members	October 31, 2007	Fielded Sample	Fielded Sample
Family baseline measures				
Two-parent family <sup>a</sup> (%)	19.1	18.9	18.9	19.5
Two parents enrolled in Family Rewards <sup>b</sup> (%)	5.7	5.8	5.8	6.4
Number of children in household (%)				
1	22.8	22.9	22.7	25.1
2	34.3	34.0	34.1	32.5
3 or more	42.9	43.2	43.2	42.4
Primary language spoken at home is English (%)	76.9	78.8	79.8	67.9 **
Family living in public housing (%)	30.4	31.2	31.4	29.0
Family receiving Section 8 rental assistance (%)	23.0	23.2	23.1	24.8
Family receiving TANF or Safety Net Assistance <sup>c</sup> (%)	24.0	23.7	23.7	23.7
Family receiving food stamps (%)	59.4	58.9	58.9	57.9
Earnings above 130% of federal poverty level <sup>d</sup> (%)	14.9	15.0	15.0	15.6
Community District (%)				
Bronx 5	15.9	13.7	13.6	14.9
Bronx 6	17.7	16.1	16.0	17.5
Brooklyn 5	19.3	20.7	20.8	19.5
Brooklyn 16	15.6	16.6	16.8	14.6
Manhattan 10	11.7	11.3	11.6	8.5
Manhattan 11	19.7	21.5	21.2	25.1

	Rese	earch Sample			
	All Sample	Those Assigned by	Selected for	Not Selected for	
Characteristic	Members	October 31, 2007	Fielded Sample	Fielded Sample	
Parents' baseline measures					
Female (%)	94.3	94.2	94.5	90.9	***
Age (%)					
18-34	29.1	29.4	29.6	27.1	
34-44	45.1	44.9	44.9	44.6	
45-54	20.5	20.4	20.1	22.7	
55 or older	5.2	5.4	5.4	5.5	
Citizenship (%)					
U.S. citizen by birth	67.4	68.7	69.4	61.2	***
Naturalized U.S. citizen	15.7	15.1	14.8	18.7	
Legal Permanent Resident	16.9	16.1	15.8	20.1	
Race/ethnicity (%)					
Hispanic/Latino	46.7	44.4	44.0	48.2	
Black, non-Hispanic/Latino	51.2	53.5	54.1	47.9	
Other, non-Hispanic/Latino	2.1	2.1	1.9	3.8	
Education (highest degree or diploma earned) (%)					
Less than high school diploma/GED certificate	40.2	40.0	40.0	40.1	
High school diploma or GED certificate	26.0	26.0	25.7	29.2	
More than high school diploma/GED certificate	33.8	34.0	34.3	30.7	
Currently working (%)	53.1	52.6	52.9	50.0	
Working full time <sup>e</sup> (%)	37.1	37.6	37.7	36.7	
Covered by public health insurance (%)	70.5	70.2	70.0	72.0	
Self-rated health is good, very good, or excellent (%)	79.9	79.9	79.7	81.5	
Has a physical or mental condition that limits work (%)	23.3	23.7	23.8	22.3	
Over the past 2 weeks, Had little or no interest in doing things and/or					
had been feeling down, depressed, or hopeless (%)	30.9	31.2	31.3	29.8	

## Appendix Table D.1 (continued)

	Rese	earch Sample			
Characteristic	All Sample Members	Those Assigned by October 31, 2007	Selected for Fielded Sample	Not Selected for Fielded Sample	
Target children's baseline measures					
Born in the United States (%)	92.8	93.1	93.4	89.7	**
Race/ethnicity (%) Hispanic/Latino Black, non-Hispanic/Latino Other, non-Hispanic/Latino	47.0 50.5 2.4	44.8 52.7 2.5	44.6 53.1 2.3	46.2 48.8 5.0	
Attended public school in past year (%)	98.5	98.4	98.4	99.1	
Grade <sup>f</sup> (%) 4th grade 7th grade 9th grade	32.8 31.4 35.8	32.6 31.7 35.7	33.3 33.3 33.3	24.8 13.7 61.5	
Covered by public health insurance (%)	79.1	78.7	78.5	81.3	
Has a physical or mental condition that limits work (%)	14.1	14.3	14.6	11.3	*
Parent's rating of child's health is good, very good, or excellent (%)	96.6	96.7	96.7	96.5	
Administrative data measures					
UI earnings in the year prior to random assignment (\$)	10,810	10,832	10,893	10,157	
TANF payments in the year prior to random assignment (\$)	2,332	2,322	2,330	2,233	
Food stamp payments in the year prior to random assignment (\$)	2,323	2,308	2,319	2,193	
Medicaid coverage in the 3 quarters prior to random assignment (%)	66.2	65.3	65.1	67.0	
Percentage of target children proficient on ELA test, 2007 Percentage of target children proficient on math test, 2007	38.5 55.4	38.4 55.3	38.5 56.2	36.7 44.9	
Sample size	4,750	4,093	3,750	343	

## Appendix Table D.1 (continued)

#### **Appendix Table D.1 (continued)**

SOURCES: MDRC calculations using Family Rewards Baseline Information Forms and administrative records from New York State.

NOTES: In order to assess differences in characteristics between the fielded and nonfielded samples, chi-square tests were used for categorical variables, and t-tests were used for continuous variables. Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

<sup>a</sup>Families with parents who reported their marital status as single, single but living with a boyfriend or girlfriend, separated, divorced, or widowed are considered single-parent families; those with parents who reported their marital status as married or legal domestic partnership are considered two-parent families.

<sup>b</sup>This refers to sample members who enrolled in Family Rewards with their spouse or legal domestic partner.

<sup>c</sup>This includes families with child-only cases.

<sup>d</sup>Income information is not available.

<sup>e</sup>This refers to 30 hours or more per week.

<sup>f</sup>Grades 4, 7, and 9 are "target grades" for the Family Rewards program, and so all families have a child in grade 4, 7, or 9.

## Appendix Table D.2

## Characteristics of the Fielded Survey Sample at the Time of Random Assignment, by Response Status

Characteristic	Survey Respondents	Non- Respondents	Fielded Sample	
Assigned to program group (%)	51.1	45.1	50.0	***
Family baseline measures	0111	1011	2010	
Two-parent family <sup>a</sup> (%)	18.4	21.0	18.9	
Two parents enrolled in Family Rewards <sup>b</sup> (%)	5.7	6.1	5.8	
Number of children in household (%)				
1	23.4	19.2	22.7	*
2 3 or more	33.7 42.9	35.8 45.0	34.1 43.2	
Primary language spoken at home is English (%)	80.6	76.3	79.8	**
		26.1		***
Family living in public housing (%)	32.6		31.4	
Family receiving Section 8 rental assistance (%)	24.0	19.0	23.1	***
Family receiving TANF or Safety Net Assistance <sup>c</sup> (%)	23.1	26.2	23.7	*
Family receiving food stamps (%)	59.3	57.1	58.9	
Earnings above 130% of federal poverty level <sup>d</sup> (%)	15.0	14.8	15.0	
Community District (%)				
Bronx 5	13.5	14.1	13.6	
Bronx 6	15.4	18.7	16.0	
Brooklyn 5	20.8	20.8	20.8	**
Brooklyn 16 Manhattan 10	16.6	17.5	16.8	
Manhattan 10 Manhattan 11	12.4 21.3	7.9 21.0	11.6 21.2	
Parents' baseline measures				
Female (%)	95.1	91.6	94.5	***
Age (%)				
18-34	28.7	33.7	29.6	*
35-44	45.3	42.8	44.9	
45-54	20.6	18.0	20.1	
55 or older	5.4	5.5	5.4	
Citizenship (%)				
U.S. citizen by birth	70.7	63.3	69.4	***
Naturalized U.S. citizen	14.4	16.8	14.8	
Legal Permanent Resident	14.9	19.9	15.8	
Race/ethnicity (%)	12.6	46.0	44.0	**
Hispanic/Latino Black, non-Hispanic/Latino	43.6 54.8	40.0 50.8	44.0 54.1	
Other, non-Hispanic/Latino	1.7	3.2	1.9	
Education (%)				
Less than high school diploma/GED certificate	39.5	42.5	40.0	
High school diploma or GED certificate	25.8	25.0	25.7	
More than high school diploma/GED certificate	34.7	32.5	34.3	
			(conti	nued)

Characteristic	Survey Respondents	Non- Respondents	Fielded Sample	
Currently working (%)	52.6	54.1	52.9	
Working full time <sup>e</sup> (%)	37.3	39.2	37.7	
Covered by public health insurance (%)	70.6	67.3	70.0	
Self-rated health is good, very good, or excellent (%)	79.8	79.6	79.7	
Has a physical or mental condition that limits work (%)	24.4	21.1	23.8 *	k
Over the past 2 weeks, Had little or no interest in doing things and/or had been feeling down, depressed, or hopeless (%)	31.4	31.1	31.3	
Target children's baseline measures				
Born in the United States (%)	93.8	91.6	93.4 *	**
Race/ethnicity (%) Hispanic/Latino Black, non-Hispanic/Latino Other, non-Hispanic/Latino	44.1 53.8 2.1	47.3 49.5 3.2	44.6 * 53.1 2.3	k
Attended public school in past year (%)	98.6	97.4	98.4 *	**
Grade <sup>f</sup> (%) 4th grade 7th grade 9th grade	33.0 33.6 33.4	34.9 31.8 33.3	33.3 33.3 33.3	
Covered by public health insurance (%)	78.6	77.9	78.5	
Has a physical or mental condition that limits work (%)	14.7	14.2	14.6	
Parent's rating of child's health is good, very good, or excellent (%)	96.6	97.3	96.7	
Administrative data measures				
UI earnings in the year prior to random assignment (\$)	10,912	10,806	10,893	
TANF payments in the year prior to random assignment (\$)	2,255	2,679	2,330 *	*
Food stamp payments in the year prior to random assignment (\$)	2,315	2,336	2,319	
Medicaid coverage in the 3 quarters prior to random assignment (%)	65.6	62.9	65.1	
Percentage of target children proficient on ELA test, 2007 Percentage of target children proficient on math test, 2007	38.3 55.9	39.7 57.8	38.5 56.2	
Sample size	3,082	668	3,750 (contin	

## Appendix Table D.2 (continued)

#### **Appendix Table D.2 (continued)**

SOURCES: MDRC calculations using Family Rewards Baseline Information Forms and administrative records from New York State.

NOTES: In order to assess differences in characteristics between respondents and nonrespondents, chisquare tests were used for categorical variables, and t-tests were used for continuous variables. Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

<sup>a</sup>Families with parents who reported their marital status as single, single but living with a boyfriend or girlfriend, separated, divorced, or widowed are considered single-parent families; those with parents who reported their marital status as married or legal domestic partnership are considered two-parent families.

<sup>b</sup>This refers to sample members who enrolled in Family Rewards with their spouse or legal domestic partner.

<sup>c</sup>This includes families with child-only cases.

<sup>d</sup>Income information is not available.

<sup>e</sup>This refers to 30 hours or more per week.

<sup>f</sup>Grades 4, 7, and 9 are "target grades" for the Family Rewards program, and so all families have a child in grade 4, 7, or 9.

## **Appendix Table D.3**

#### Estimated Regression Coefficients for the Probability of Being a Respondent to the Family Rewards 18-Month Survey

	Fielded Sa	mple
	Parameter	
Variable	Estimate	P-Value
Family baseline measures		
Assigned to program group	0.248	0.005
Target children proficient on ELA test, 2007	-0.056	0.595
Target children proficient on math test, 2007	-0.039	0.710
Community District Bronx 5	0.162	0.338
Community District Bronx 6	-0.123	0.432
Community District Brooklyn 5	0.124	0.386
Community District Manhattan 10	0.545	0.003
Community District Manhattan 11	0.072	0.640
Number of children in household	-0.056	0.103
Primary language spoken at home is English	0.096	0.505
Two-parent family	0.004	0.970
High school diploma, GED certificate, or above	0.133	0.164
Currently working	-0.006	0.951
Randomly assigned after September 2008	-0.085	0.447
Black, non-Hispanic/Latino	0.583	0.034
Hispanic/Latino	0.615	0.027
U.S. citizen by birth	0.217	0.055
Age	0.009	0.090
Family living in public housing or receiving Section 8	0.447	< 0.0001
Family receiving TANF or Safety Net Assistance	-0.269	0.017
Covered by public health insurance	0.237	0.030
Likelihood ratio	110.8	< 0.0001
Wald statistic	106.5	< 0.0001
Sample size	3,750	

SOURCES: MDRC calculations using Family Rewards Baseline Information Forms and New York City Department of Education administrative records.

## The Opportunity NYC Demonstration: Family Rewards Appendix Table D.4

## Characteristics of the Survey Respondents at the Time of Random Assignment, by Research Group

· · · ·	-			
	Program	Control		
	Group	Group	All	
Characteristic	Respondents	Respondents	Respondents	
Family baseline measures				
Two-parent family <sup>a</sup> (%)	19.8	16.9	18.4	**
Two parents enrolled in Family Rewards <sup>b</sup> (%)	6.8	4.5	5.7	***
Number of children in household (%)				
1	23.8	23.0	23.4	
2 3 or more	32.8 43.3	34.7 42.4	33.7 42.9	
Primary language spoken at home is English (%)	80.2	81.0	80.6	
Family living in public housing (%)	32.7	32.4	32.6	
Family receiving Section 8 rental assistance (%)	21.8	26.3	24.0	***
Family receiving TANF or Safety Net Assistance <sup>c</sup> (%)	23.3	22.9	23.1	
Family receiving food stamps (%)	59.6	59.1	59.3	
Earnings above 130% of federal poverty level <sup>d</sup> (%)	15.7	14.4	15.0	
Community District (%)				
Bronx 5	13.1	13.9	13.5	
Bronx 6	15.1	15.8	15.4	
Brooklyn 5	20.6	21.0	20.8	
Brooklyn 16	16.6	16.6	16.6	
Manhattan 10	12.4	12.3	12.4	
Manhattan 11	22.2	20.4	21.3	
Parents' baseline measures				
Female (%)	95.2	95.0	95.1	
Age (%)				
18-34	27.3	30.2	28.7	**
35-44	44.2	46.5	45.3	
45-54 55 or older	22.4	18.7	20.6 5.4	
	6.0	4.6	5.4	
Citizenship (%) U.S. citizen by birth	70.4	71.1	70.7	
Naturalized U.S. citizen	14.6	14.1	14.4	
Legal Permanent Resident	15.0	14.8	14.9	
Race/ethnicity (%)				
Hispanic/Latino	44.4	42.7	43.6	
Black, non-Hispanic/Latino	54.2	55.3	54.8	
Other, non-Hispanic/Latino	1.3	2.0	1.7	
Education (%)				
Less than high School diploma/GED certificate	39.8	39.1	39.5	
High school diploma or GED certificate More than high school diploma/GED certificate	24.2 36.0	27.5	25.8 34.7	
More than high school upfolla/OED certificate	50.0	33.4		inued)

Characteristic	Program Group Respondents	Control Group Respondents	Survey Respondents	
Currently working (%)	53.2	52.0	52.6	
Working full time <sup>e</sup> (%)	38.2	36.5	37.3	
Covered by public health insurance (%)	70.0	71.1	70.6	
Self-rated health is good, very good, or excellent (%)	79.3	80.2	79.8	
Has a physical or mental condition that limits work (%)	25.0	23.8	24.4	
Over the past 2 weeks, Had little or no interest in doing things and/or had been feeling down, depressed or hopeless (%)	30.8	32.0	31.4	
Target children's baseline measures				
Born in the United States (%)	94.1	93.5	93.8	
Race/ethnicity (%) Hispanic/Latino Black, non-Hispanic/Latino Other, non-Hispanic/Latino	44.8 53.2 2.0	43.3 54.4 2.3	44.1 53.8 2.1	
Attended public school in past year (%)	98.7	98.5	98.6	
Grade <sup>f</sup> (%) 4th grade 7th grade 9th grade	32.5 34.2 33.4	33.6 33.1 33.4	33.0 33.6 33.4	
Covered by public health insurance (%)	78.5	78.8	78.6	
Has a physical or mental condition that limits work (%)	13.3	16.1	14.7	**
Parent's rating of child's health is good, very good, or excellent (%)	97.3	95.9	96.6	**
Administrative data measures				
UI earnings in the year prior to random assignment (\$)	11,691	10,101	10,912	***
TANF payments in the year prior to random assignment (\$)	2,272	2,236	2,255	
Food stamp payments in the year prior to random assignment (\$)	2,282	2,350	2,315	
Medicaid coverage in the 3 quarters prior to random assignment (%)	64.4	67.0	65.6	
Percentage of target children proficient on ELA test, 2007 Percentage of target children proficient on math test, 2007	39.8 57.3	36.6 54.4	38.3 55.9	*
Sample size (total = $3,082$ )	1,574	1,508		

## Appendix Table D.4 (continued)

#### **Appendix Table D.4 (continued)**

SOURCES: MDRC calculations using Family Rewards Baseline Information Forms and administrative records from New York State.

NOTES: In order to assess differences in characteristics across research groups, chi-square tests were used for categorical variables, and t-tests were used for continuous variables. Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

<sup>a</sup>Families with parents who reported their marital status as single, single but living with a boyfriend or girlfriend, separated, divorced, or widowed are considered single-parent families; those with parents who reported their marital status as married or legal domestic partnership are considered two-parent families.

<sup>b</sup>This refers to sample members who enrolled in Family Rewards with their spouse or legal domestic partner. <sup>c</sup>This includes families with child-only cases.

<sup>d</sup>Income information is not available.

<sup>e</sup>This refers to 30 hours per week or more.

<sup>f</sup>Grades 4, 7, and 9 are "target grades" for the Family Rewards program, and so all families have a child in grade 4, 7, or 9.

## **Appendix Table D.5**

## Estimated Regression Coefficients for the Probability of Being a Program Group Respondent to the Family Rewards 18-Month Survey

	Respondent	Sample
	Parameter	
Variable	Estimate	P-Value
Family baseline measures		
Target children proficient on ELA test, 2007	0.100	0.248
Target children proficient on math test, 2007	0.096	0.256
Community District Bronx 5	-0.113	0.427
Community District Bronx 6	-0.062	0.648
Community District Brooklyn 5	-0.059	0.625
Community District Manhattan 10	-0.027	0.848
Community District Manhattan 11	0.065	0.612
Number of children in household	-0.009	0.763
Primary language spoken at home is English	0.001	0.993
Two-parent family	0.179	0.071
High school diploma, GED certificate, or above	-0.068	0.394
Currently working	0.077	0.356
Randomly assigned after September 2008	-0.013	0.891
Black, non-Hispanic/Latino	0.433	0.141
Hispanic/Latino	0.504	0.089
U.S. citizen by birth	0.058	0.557
Age	0.010	0.022
Family living in public housing or receiving Section 8	-0.169	0.031
Family receiving TANF or Safety Net Assistance	0.100	0.297
Covered by public health insurance	0.009	0.920
Likelihood ratio	30.4	0.444
Wald statistic	29.8	0.473
Sample size	3,082	

SOURCES: MDRC calculations using Family Rewards Baseline Information Forms and New York City Department of Education administrative records.

#### **Appendix Table D.6**

#### Year 1 Impacts on UI-Covered Employment and Earnings for the Research, Fielded, and Respondent Samples

	Program	Group	Control (	Group	Difference	
Outcome	Average	Total	Average	Total	(Impact)	P-Value
Ever employed (%)						
Research sample	56.2	2,513	58.5	2,481	-2.3 **	0.011
Fielded sample		1,873		1,875	-2.1 *	0.051
Respondent sample	57.2	1,572	58.6	1,508	-1.4	0.222
Average quarterly employment (%)						
Research sample	49.0	2,513	50.3	2,481	-1.3 *	0.091
Fielded sample	49.5	1,873	50.3	1,875	-0.8	0.377
Respondent sample	50.0	1,572	50.0	1,508	0.0	0.982
Employed 4 consecutive quarters (%)						
Research sample	40.8	2,513	41.8	2,481	-1.0	0.252
Fielded sample	41.2	1,873	41.7	1,875	-0.5	0.648
Respondent sample	41.9	1,572	42.1	1,508	-0.2	0.888
Total earnings (\$)						
Research sample	12,114	2,513	12,354	2,481	-240	0.284
Fielded sample	12,170		12,105	1,875	65	0.801
Respondent sample	12,332	1,572	12,089	1,508	243	0.399

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

NOTES: 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 families or sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

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

unemployment insurance (UI) program. It does not inlcude employment outside New York or in jobs not covered by UI (for example, "off the book" jobs and federal government jobs).

Year 1 covers October 2007 through September 2008 for sample members randomly assigned before October 2007. For sample members randomly assigned on or after October 1, 2007, Year 1 covers January 2008 through December 2008.

The research sample includes both adults in two-parent families. The fielded and respondent samples include only the adult who was fielded.

## **Appendix Table D.7**

# Impacts on Attendance, Test Scores, and Credits for the Research, Fielded, and Respondent Samples

<b>4th-graders at random assignment</b> Attendance is 95% or higher, Year 1 Research sample Fielded sample Respondent sample Attendance is 95% or higher, Year 2 Research sample	43.2 41.6 43.2 44.5	Total 862 698 577	Average 43.3 43.6 44.4	Total 864 703	-0.1 -2.1	P-Value 0.973
Attendance is 95% or higher, Year 1 Research sample Fielded sample Respondent sample Attendance is 95% or higher, Year 2 Research sample	41.6 43.2	698	43.6		0.1-	
Research sample Fielded sample Respondent sample Attendance is 95% or higher, Year 2 Research sample	41.6 43.2	698	43.6		0.1-	
Fielded sample Respondent sample Attendance is 95% or higher, Year 2 Research sample	41.6 43.2	698	43.6		0.1-	
Respondent sample Attendance is 95% or higher, Year 2 Research sample	43.2			703	2.1	
Attendance is 95% or higher, Year 2 Research sample		577	44.4		-2.1	0.430
Research sample	44.5			564	-1.2	0.682
	44.5					
E. 1 1 1 1	1.110	862	41.6	864	2.9	0.225
Fielded sample	42.3	698	40.7	703	1.6	0.540
Respondent sample	44.4	577	40.6	564	3.9	0.189
Percentage proficient on ELA test, Year 2						
Research sample	67.6	793	68.1	803	-0.4	0.828
Fielded sample	68.0	641	68.0	654	0.0	0.998
Respondent sample	67.3	542	68.0	533	-0.8	0.765
Percentage proficient on Math test, Year 2						
Research sample	80.3	790	78.6	804	1.7	0.345
Fielded sample	80.2	638	77.2	656	3.1	0.126
Respondent sample	79.7	538	77.4	536	2.3	0.306
7th-graders at random assignment						
Attendance is 95% or higher, Year 1						
Research sample	43.5	823	43.1	848	0.4	0.876
Fielded sample	43.0	692	43.1	687	-0.1	0.972
Respondent sample	44.6	592	44.3	540	0.3	0.927
Attendance is 95% or higher, Year 2						
Research sample	36.6	823	34.9	848	1.6	0.472
Fielded sample	36.4	692	34.9	687	1.5	0.551
Respondent sample	37.8	592	37.1	540	0.8	0.786
Percentage proficient on ELA test, Year 2						
Research sample	46.5	765	46.0	802	0.5	0.824
Fielded sample	47.0	639	45.5	652	1.6	0.484
Respondent sample	47.8	557	45.9	522	1.9	0.452
Percentage proficient on Math test, Year 2						
Research sample	61.9	763	63.5	793	-1.6	0.414
Fielded sample	61.2	637	62.4	646	-1.2	0.599
Respondent sample	61.7	555	61.0	518	0.7	0.769

	Program (	Group	Control C	Group	Difference		
Outcome	Average	Total	Average	Total	(Impact)	P-Value	
9th-graders at random assignment							
Attendance is 95% or higher, Year 1							
Research sample	34.0	988	31.6	991	2.5	0.226	
Fielded sample	33.9	745	31.4	743	2.5	0.290	
Respondent sample	34.7	620	30.9	599	3.8	0.145	
Attendance is 95% or higher, Year 2							
Research sample	28.8	988	23.7	991	5.2 ***	0.006	
Fielded sample	28.8	745	23.6	743	5.2 **	0.018	
Respondent sample	29.3	620	23.3	599	6.0 **	0.013	
Attempted 11 or more credits, Year 1							
Research sample	87.8	988	83.9	991	3.9 ***	0.006	
Fielded sample	88.3	745	82.6	743	5.7 ***	0.000	
Respondent sample	90.1	620	83.8	599	6.3 ***	0.000	
Attempted 11 or more credits, Year 2							
Research sample	80.5	988	77.9	991	2.6	0.126	
Fielded sample	80.2	745	77.7	743	2.5	0.205	
Respondent sample	83.2	620	77.4	599	5.8 ***	0.007	

#### **Appendix Table D.7 (continued)**

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

NOTES: 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 family or sample members.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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 group arose by chance.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcome for both groups combined.

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

Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively.

## **Appendix Table D.8**

## Weighted Impacts on Material Hardship and Financial Strain

	Program	Control	Difference	
Outcome	Group	Group	(Impact)	P-Value
Any housing/utilities material hardship in the				
past 12 months (%)	49.9	58.4	-8.4 ***	0.000
Did not pay full rent or mortgage	39.0	41.5	-2.5	0.233
Evicted from home for not paying rent or mortgage	2.7	4.5	-1.9 **	0.015
Did not pay full utility bill <sup>a</sup>	23.3	29.6	-6.3 ***	0.002
Utility was turned off <sup>a</sup>	0.8	9.4	-8.6 ***	0.000
Phone service was disconnected <sup>b</sup>	15.0	26.2	-11.2 ***	0.000
Financial well-being <sup>c</sup> $(4 = low; 16 = high)$	9.3	8.7	0.6 ***	0.000
Strongly or somewhat agree with the following (%)				
Financial situation is better than last year	66.3	43.9	22.4 ***	0.000
Don't worry about having enough money in future	14.1	20.7	-6.6 ***	0.000
Can generally afford to buy needed things	73.3	63.2	10.1 ***	0.000
Sometimes have enough money to buy something or go	22.6			
somewhere just for fun	33.6	26.1	7.5 ***	0.000
Family finances usually work out to have the following at end of month (%)				
Some money left over	6.7	12.7	-6.1 ***	0.000
Just enough to make ends meet	58.5	45.4	13.1 ***	0.000
Not enough to make ends meet	34.9	41.9	-7.0 ***	0.001
Food security <sup>d</sup> $(1 = low; 4 = high)$	3.4	3.2	0.2 ***	0.000
Insufficient food <sup>e</sup> (%)	14.9	22.3	-7.4 ***	0.000
Did not get needed medical care because of cost in				
past 12 months <sup>f</sup> (%)	6.5	10.4	-3.9 ***	0.000
Did not fill prescription because of cost in past 12 months (%)	13.6	15.8	-2.1 *	0.096
Sample size (total $= 2,060$ )	1,051	1,009		
	,	,	(c	ontinued)

#### **Appendix Table D.8 (continued)**

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: The items in this section of the survey were administered to a random subsample (N = 2,060) of the survey respondents.

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 families or sample members.

Rounding may cause slight discrepancies in calculating sums and differnces.

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.

<sup>a</sup>Utilities include gas, oil, and electricity.

<sup>b</sup>This includes cellular or land service.

<sup>c</sup>Components of the financial well-being scale have been coded such that a lower score implies being worse-off and a higher score implies being better-off. The scale is calculated by summing responses to the four component questions. Thus, the financial well-being scale presented here ranges from 4 to 16 points.

<sup>d</sup>The food security question describes food eaten by the family in the prior month: 1 = Often not enough to eat; 2 = S ometimes not enough to eat; 3 = E nough to eat but not always the kinds of food desired; 4 = E nough to eat of the kinds of food desired.

<sup>e</sup>Insufficient food is defined as "sometimes" or "often times" not having enough food to eat. <sup>f</sup>This excludes prescriptions.

#### **Appendix Table D.9**

#### Weighted Impacts on Parents' Engagement in Focal Child's Schooling and on Allowance Payments: Elementary School Students

	Program	Control	Difference		Effect
Outcome	Group	Group	(Impact)	P-Value	Size
Parent-teacher interactions since random assignment (%)					
Respondent attended parent-teacher conference	98.0	97.3	0.8	0.436	
Respondent talked with teacher about grades, tests, or homework <sup><math>a</math></sup>	95.1	93.8	1.3	0.389	
School contacted respondent because of a problem	37.6	39.4	-1.8	0.575	
Parent-child interactions in past month (%)					
Respondent has done the following (1 = never; 4 = several times per week) Talked with child about school Helped child with homework Checked to see child's homework was complete Helped child prepare for test	3.9 3.6 3.9 3.3	3.9 3.6 3.9 3.1	0.0 0.1 0.0 0.2 ***	0.242 0.240 0.156 0.006	$0.048 \\ 0.046 \\ 0.060 \\ 0.092$
Allowance payments					
Child receives an allowance (%)	64.6	58.5	6.1 *	0.051	
Child does something to earn the allowance (%)	50.4	46.2	4.2	0.201	
Average weekly allowance amount (\$)	6.39	5.85	0.54	0.306	
Among those who received allowance, average weekly amount (\$)	10.09	10.07			
Sample size (total = 911)	468	443			

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: This table presents outcomes only for focal children who were living in the household and were in elementary school at the time of the interview and at random assignment. Nearly all were in the fourth-grade target group.

Italic type indicates comparisions that are nonexperimental. Statistical tests were not performed. Sample sizes vary because of missing values.

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 families or sample members.

Rounding may cause slight discrepancies in calculating sums and diffences.

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.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcome for both groups combined.

<sup>a</sup>This excludes discussions at formal parent-teacher conferences.

## Appendix Table D.10

### Weighted Impacts on Families' Health Insurance Coverage and Parents' Receipt of Health Care Services

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Health insurance in previous month (%)	1	1			
Respondent had health insurance Publicly funded Privately, but not publicly, funded <sup>a</sup>	95.8 74.2 21.5	92.2 70.4 21.9	3.6 *** 3.8 ** -0.4	0.003 0.013 0.705	
All dependent children had health insurance <sup>b</sup> All children covered by public health insurance only <sup>c</sup> All children covered by private health insurance only <sup>c</sup>	94.5 78.7 11.2	93.7 75.4 16.8	0.8 3.3 * -5.6 ***	0.367 0.063	
Health insurance coverage since random assignment (%)	11.2	10.0	5.0	0.000	
Respondent had a period with no coverage	16.4	20.8	-4.4 ***	0.006	
Some or all of respondent's children had a period with no coverage	14.7	18.2	-3.5 ***	0.009	
Respondent's health care utilization (%)					
Has a usual source of health care Clinic or health center Doctor's office Hospital emergency room Hospital outpatient department Other	94.8 62.0 19.2 3.8 9.8 0.1	91.5 53.1 22.2 5.1 11.0 0.1	3.3 *** 8.9 *** -3.0 * -1.3 * -1.2 0.0		
Has a personal doctor or health care provider	94.3	93.5	0.8	0.302	
Saw a personal doctor in the past 12 months	85.2	82.3	2.9 **	0.023	
Had a health checkup since random assignment	92.8	90.3	2.5 *	0.063	
Had a dental checkup since random assignment At least 2 checkups	85.0 61.3	84.5 58.6	0.5 2.7	0.748 0.142	
Stayed in hospital overnight since random assignment <sup>d</sup>	16.8	18.3	-1.5	0.523	
<u>Unmet health needs</u> Did not get needed medical care because of cost in past 12 months <sup>e</sup>	1.3	12.9	-11.7 ***	0.000	
Did not fill prescription because of cost in last 12 months	8.1	16.7	-8.6 ***	0.000	
Received help finding a dentist or health care provider from any NPO	5.0	9.8	-4.8 ***	0.001	
Respondent's health care satisfaction					
Average patient satisfaction score <sup>f</sup> $(1 = low; 5 = high)$ General satisfaction <sup>g</sup> Communication <sup>h</sup>	3.7 3.6 4.0	3.7 3.6 4.0	0.0 * 0.0 0.0	0.088 0.419 0.301	0.014 0.018 0.003

310

	Program	Control	Difference		Effect
Outcome	Group	Group	(Impact)	P-Value	Size
Technical quality <sup>i</sup>	4.0	3.8	0.1 ***	0.001	0.017
Time spent with doctor <sup>j</sup>	3.6	3.6	0.0	0.349	0.021
Accessibility and convenience <sup>k</sup>	3.5	3.5	0.0	0.905	0.001
Sample size (total = 3,082)	1,574	1,508			

#### **Appendix Table D.10 (continued)**

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: Sample sizes vary because of missing values.

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 families or sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcome for both groups combined.

<sup>a</sup>Respondents with public coverage were not asked whether they have private coverage; therefore, it is not possible to estimate whether they also had private coverage. Seedco's program data indicate that 5 percent of families in the program group earned rewards for having both private and public insurance. Even more families may have had both public and private insurance but did not actively submit coupons for private coverage and, therefore, are not captured in the program data.

<sup>b</sup>Child health-related health insurance measures were calculated for sample members with at least one child at the time of the survey.

<sup>c</sup>The percentages of all children covered by public insurance and all covered by private insurance does not add up to the percentage of all children covered by any insurance because some families reported having children covered by both types of insurance.

<sup>d</sup>The items in this section of the survey were administered to a random subsample (N = 1,022) of the survey respondents.

<sup>e</sup>This excludes prescriptions.

<sup>f</sup>The items in this section of the survey were administered to a random subsample (N = 2,043) of the survey respondents. The five RAND Patient Satisfaction subscales are based on 10 items from the PSQ-18. Higher values (maximum = 5) reflect more satisfaction with medical care, whereas lower values (minimum = 1) reflect more dissatisfaction (http://www.rand.org/health/surveys\_tools/psq/index.html). The average patient satisfaction score is the average of the five subscale scores.

<sup>g</sup>The "general satisfaction" subscale is an average of the responses to two questions about agreement with the following statements: "The medical care I have been receiving is just about perfect" and "I am dissatisfied with some things about the medical care I receive."

<sup>h</sup>The <sup>"</sup>communication" subscale is based on agreement with the following statement: "Doctors I go to are good about explaining the reasons for medical tests."

<sup>i</sup>The "technical quality" subscale is based on agreement with the following statement: "When I go for medical care, they are careful to check everything when treating and examining me."

<sup>j</sup>The "time spent with doctor" subscale is an average of the responses to two questions about agreement with the following statements: "Doctors usually spend enough time talking with me about my medical condition or treatment" and "Those who provide my medical care sometime hurry too much when they treat me."

<sup>k</sup>The "accessibility and convenience" subscale is an average of the responses to four questions about agreement with the following statements: "Where I get medical care, I have to wait too long for emergency treatment," "I find it hard to get an appointment for medical care right away," "I have easy access to the medical specialist(s) I need," and "I am able to get medical care when I need it."

## Appendix Table D.11

## Weighted Impacts on Parents' Health Outcomes

	Program	Control	Difference		Effect
Outcome	Group	Group	(Impact)	P-Value	Size
Health status					
Average self-rated health $(1 = poor; 5 = excellent)$	3.1	3.1	0.0	0.694	-0.001
Excellent (%)	10.4	14.5	-4.1 ***	0.002	
Very good (%)	26.8	21.7	5.1 ***	0.001	
Good (%)	33.3	33.7	-0.4	0.790	
Fair (%)	22.6	22.0	0.5	0.698	
Poor (%)	7.0	8.1	-1.1	0.216	
Health conditions and risks					
Has any medical condition <sup>a</sup> (%)	49.2	52.9	-3.7 **	0.028	
Asthma	12.2	16.8	-4.6 ***	0.001	
High blood pressure/hypertension	19.0	24.5	-5.5 ***	0.000	
High cholesterol/high LDL	5.2	12.6	-7.3 ***	0.000	
Diabetes	6.0	7.8	-1.8	0.189	
Currently being treated for any medical condition <sup>a</sup> (%)	43.1	43.9	-0.8	0.674	
Asthma	9.8	14.5	-4.7 ***	0.000	
High blood pressure/hypertension	18.0	20.5	-2.5	0.117	
High cholesterol/high LDL	4.2	9.5	-5.4 ***	0.000	
Diabetes	5.5	6.9	-1.5	0.286	
Average Body Mass Index (BMI)	30.6	30.3	0.2	0.333	0.009
Underweight <sup>b</sup> (%)	1.0	1.1	-0.1	0.746	
Normal weight (%)	21.9	20.5	1.3	0.364	
Overweight (%)	31.3	35.1	-3.9 **	0.044	
Obese (%)	45.9	43.2	2.7	0.186	
Number of cigarettes smoked per day (%)					
0	76.2	76.1	0.1	0.970	
1-5	12.1	10.8	1.4	0.235	
6-10	8.6	10.0	-1.5	0.158	
More than 10	3.2	3.1	0.1	0.934	
Psychosocial well-being					
Psychological Distress Scale $(K10)^{c}$ (10 = low; 50 = high)	18.9	19.4	-0.5	0.154	-0.007
Experienced serious psychological distress					
in the past month <sup>c</sup> (%)	12.7	13.2	-0.4	0.765	
Average score on "state of hope" scale $(6 = low; 24 = high)^{c}$	<sup>1</sup> 17.5	17.3	0.2	0.179	0.009
Sample size (total $=$ 3,082)	1,574	1,508			

#### Appendix Table D.11 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: Sample sizes vary because of missing values.

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 families or sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

<sup>a</sup>The four most commonly reported conditions are listed.

<sup>b</sup>Weight categories are from the National Institute of Health. Underweight is defined as having a BMI of less than 18.5. Normal weight is defined as having a BMI between 18.5 and 24.9. Overweight is defined as having a BMI between 25.0 and 25.9. Obesity is defined as having a BMI at least 30.0. Five percent of the sample are excluded from this analysis because of missing data.

<sup>c</sup>This item measures the score on Kessler's Psychological Distress Scale (K10), a 10-item questionnaire intended to yield a global measure of distress based on questions about anxiety and depressive symptoms that a person has experienced in the most recent four-week period. See Kessler et al. (2002). A randomly selected subsample (N = 2,043) was asked these questions.

<sup>d</sup>The "state of hope" scale measures the level of ongoing goal-directed thinking. The response codes (1 to 4) of the six items for each person are summed, with lower values representing less goal-directed thinking and higher values representing more. The scale is taken from Snyder et al. (1996). A randomly selected subsample of survey respondents (N = 2,043) was asked these questions.

## Appendix Table D.12

## Weighted Impacts on Job Characteristics

	Program		Difference	
Outcome	Group	Group	(Impact)	P-Value
Employment status (%)				
Currently employed at time of survey	60.7	55.6	5.1 ***	0.003
Characteristics of current job <sup>a</sup>				
Average hourly wage (\$)	13.09	12.82		
Less than \$7.00 (%)	7.9	7.8	0.1	0.955
\$7.00 - \$8.99 (%)	9.9	7.8	2.1 **	0.029
\$9.00 or more (%)	37.5	31.5	6.0 ***	0.000
Not reported (%)	5.4	8.5	-3.1 ***	0.001
Hours worked per week (%)				
1-19	4.4	3.0	1.4 **	0.030
20-29	7.5	7.4	0.0	0.964
30-34	8.9	6.3	2.7 ***	0.003
35 or more	39.0	37.6	1.4	0.394
Not reported	0.9	1.3	-0.5	0.181
Worked at least 30 hours per week (%)	48.2	44.5	3.7 **	0.030
Average weekly earnings(\$)	445	440		
Usual work schedule (%)				
Regular daytime shift	44.6	42.3	2.2	0.202
Regular evening/night shift	7.1	6.8	0.4	0.670
Rotating or split shift	5.2	4.2	1.0	0.179
Irregular shift	2.8	1.6	1.3 **	0.015
Other	0.9	0.6	0.3	0.413
Self-employed (%)	6.5	6.7	-0.3	0.837
Employer-provided benefits <sup>b</sup> (%)				
Paid sick days	34.9	31.3	3.7 ***	0.005
Paid vacation days	37.9	34.7	3.2 **	0.015
Paid holidays, including Christmas and New Year's Day	37.8	34.9	2.9 **	0.030
Dental benefits	27.8	27.1	0.7	0.610
A retirement plan	29.2	26.4	2.8 **	0.039
A health or medical insurance plan	31.3	29.0	2.2 *	0.089
Enrolled in a work-related health or medical				
insurance plan	23.3	22.4	0.9	0.450
•				(continued)

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Employment search (%)				
Looked for work in previous 4 weeks	26.8	26.9	-0.1	0.948
Received help finding a job from a	10.8	14.2	-3.4 ***	0.009
Program or agency <sup>c</sup>	5.3	9.4	-4.1 ***	0.000
Unemployment agency	1.0	1.0	0.0	0.943
Job center	1.0	0.7	0.3	0.356
Temp agency	0.5	0.7	-0.2	0.438
Work Force One Center or One-Stop	1.7	1.3	0.4	0.374
Community organization	0.6	0.1	0.5 **	0.016
Other	1.0	5.8	-4.8 ***	0.000
Sample size (total $=$ 3,082)	1,574	1,508		

#### **Appendix Table D.12 (continued)**

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: Sample sizes vary because of missing values.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent. Italic type indicate comparisons that are nonexperimental. Statistical tests were not performed.

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

Rounding may cause slight discrepancies in calculating sums and differences.

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.

<sup>a</sup>If a respondent currently works multiple jobs, then only the primary job is reported. (The job at which the respondent works the most hours is considered primary.)

<sup>b</sup>This includes benefits that are or eventually will be offered, regardless of whether the respondent receives them.

<sup>c</sup>Percentages for finding help through specific programs or agencies do not add up to the percentage who found help from a program or agency because several sample members did not know the exact source of help or refused to answer.

Appendix E
Supplementary Tables for Chapter 5

## **Appendix Table E.1**

### Impacts on Income and Material Well-Being, by Employment Status at the Time of Random Assignment

	C	1 5100	
	Progra	ol Difference	D V 1
ıp Grou	ttcome Gro	p (Impact)	P-Value
	e of random assignment		
.9 1,88	Rewards payments <sup>a</sup> (\$) 1,9	3 36	0.635
8 1,88	Isehold income in prior month Rewards payments <sup>b,c</sup> (\$) 2,2	4 364 ***	· 0.000
.4 58.	nilies with household income at or below ty level <sup>b,c</sup> 46	3 -11.9 ***	· 0.000
	income in prior year as a percentage of the $evel^{a,b}(\%)$		
	37 15	8 0.3	<ul><li>0.000</li><li>0.939</li><li>0.759</li></ul>
	38		
	nd debt (\$)		
54 54	7	5 209	0.164
6 7,13	8,2	2 1,075	0.155
	ip and financial strain		
.7 43. .4 3. .3 29. .7 8.	l utility bill <sup>f</sup> 28	$\begin{array}{cccc} 0 & -3.3 \\ 5 & -1.1 \\ 9 & -1.5 \\ 8 & -3.1 \end{array} *$	0.141 0.276 0.282 0.578 0.051 • 0.003
.3 8.			
.5 20. .6 64.	uation is better than last year63about having enough money in future20y afford to buy needed things71nave enough money to buy something or go71	3 0.1 9 6.7 **	0.959 0.018
.5 29.	e just for fun 31 Isually work out to have the following at end	6 1.9	0.508
.8 48.	eft over 14 make ends meet 54 make ends meet 30	4 6.4 **	0.577 0.037 0.008
.8	eft over 14 make ends meet 54	48.	

	Program		Difference	D.U. I
Subgroup and Outcome	Group	Group	(Impact)	P-Value
Food security <sup>i</sup> $(1 = low; 4 = high)$	3.4	3.3	0.1 ***	0.009
Insufficient food <sup>j</sup> (%)	12.7	19.9	-7.2 ***	0.001
Sample size (total = $1,081$ )	558	523		
Not employed at random assignment				
Income				
Average total household income in prior month				
excluding Family Rewards payments <sup>a</sup> (\$)	1,379	1,238	140 **	0.024
Average total household income in prior month				
including Family Rewards payments <sup>b,c</sup> (\$)	1,612	1,238	374 ***	0.000
Percentage of families with household income at or below				
the federal poverty level <sup>b,c</sup>	72.3	82.4	-10.1 ***	0.000
Total household income in prior year as a percentage of the				
federal poverty level <sup>a,b</sup> (%)				
Less than 50% 50% - 100%	25.0 47.3	39.0 43.4	-14.0 *** 3.9	0.000 0.270
101% - 129%	47.3	43.4	3.9 4.7 **	0.270
130% or more	14.3	8.9	5.4 **	0.013
Family savings and debt (\$)				
Average savings <sup>d</sup>	385	160	225 **	0.020
Average debt <sup>e</sup>	5,869	5,477	392	0.563
Material hardship and financial strain				
Any housing/utilities material hardship in past 12 months (%)	55.9	56.1	-0.3	0.932
Did not pay full rent or mortgage	37.6	40.0	-2.4	0.448
Evicted from home for not paying rent or mortgage	2.9	5.5	-2.6 *	0.051
Did not pay full utility bill <sup>f</sup>	30.6	26.0	4.6	0.112
Utility was turned off <sup>f</sup>	5.6	8.4	-2.9 *	0.081
Phone service was disconnected <sup>g</sup>	20.4	23.5	-3.1	0.241
Financial well-being <sup>h</sup> $(4 = low; 16 = high)$	9.0	8.7	0.3 **	0.023
Strongly or somewhat agree with the following (%)				
Financial situation is better than last year	62.4	40.6	21.9 ***	0.000
Don't worry about having enough money in future	17.0	19.8	-2.8	0.272
Can generally afford to buy needed things Sometimes have enough money to buy something or go	67.1	62.8	4.3	0.173
somewhere just for fun	25.5	24.5	1.0	0.719
Family finances usually work out to have the following at end				
of month (%)				
Some money left over	9.4	10.2	-0.9	0.664
Just enough to make ends meet	52.0	44.0	8.0 **	0.014
Not enough to make ends meet	38.6	45.7	-7.1 **	0.024
Food security <sup>i</sup> $(1 = low; 4 = high)$	3.4	3.2	0.2 ***	0.001
Insufficient food <sup>j</sup> (%)	16.9	24.2	-7.2 ***	0.005
Sample size (total = $952$ )	476	476		

## Appendix Table E.1 (continued)

#### **Appendix Table E.1(continued)**

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: The items in this section of the survey were administered to a random subsample (N = 2,033) of the survey respondents.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent. Differences in impacts across subgroups were tested for statistical significance. Statistical significance levels are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

<sup>a</sup>Monthly household income amounts equal to or greater than \$10,000 were excluded from this calculation.

<sup>b</sup>Family Rewards payments are based on Seedco's Family Rewards data from program Year 2, which include activities completed in September 2008 through August 2009. The monthly Family Rewards payment amount is calculated by dividing the annual reward amount by 12. The payment data do not include bonus payments that some families received for opening new bank accounts.

<sup>c</sup>Annual household income is calculated by multiplying by 12 income in the month prior to the survey interview. For program group members, it includes Family Rewards payments received during Year 1.

<sup>d</sup>A total of 7 percent of the sample are excluded from this analysis due to missing data.

<sup>e</sup>Debt amounts equal to or greater than \$100,000 were excluded from these calculations. The survey questions on savings and debt are largely framed around family finances; thus, it is most likely that participants are reporting debt accumulated by the family. A total of 9 percent of the sample are excluded from this analysis because of missing or out-of-range values.

<sup>f</sup>Utilities include gas, oil, and electricity.

<sup>g</sup>This includes cellular or land service.

<sup>h</sup>Components of the financial well-being scale have been coded such that a lower score implies being worse-off and a higher score implies being better-off. The scale is calculated by summing responses to the four component questions. Thus, the financial well-being scale presented here ranges from 4 to 16 points.

<sup>1</sup>The food security question describes food eaten by the family in the prior month: 1 = Often not enough to eat; 2 = Sometimes not enough to eat; 3 = Enough to eat but not always the kinds of food desired; 4 = Enough to eat of the kinds of food desired.

<sup>j</sup>Insufficient food is defined as "sometimes" or "often times" not having enough food to eat.

#### **Appendix Table E.2**

#### Impacts on Household Composition and Housing Status, by Parent's Employment Status at the Time of Random Assignment

	Program	Control	Difference	
Subgroup and Outcome (%)	Group	Group	(Impact)	P-Value
Employed at random assignment				
Family composition				
Current marital status				
Single, never married	42.1	47.1	-5.1 **	0.020
Married and living with spouse	21.4	16.8	4.5 ***	0.002
Separated or living apart from spouse	17.7	20.3	-2.6	0.195
Divorced	16.7	13.4	3.3 *	0.061
Widowed	2.2	2.4	-0.2	0.789
Housing status <sup>a</sup>				
Currently lives in public or subsidized housing	62.6	66.0	-3.4	0.203
Moved since time of random assignment	10.1	14.1	-4.0 **	0.045
Sample size (total = 1,599)	823	776		
Not employed at random assignment				
Family composition				
Current marital status				
Single, never married	49.6	53.6	-4.1 *	0.075
Married and living with spouse	16.8	14.0	2.8 **	0.034
Separated or living apart from spouse	14.9	15.2	-0.3	0.882
Divorced	13.3	11.1	2.3	0.188
Widowed	5.4	6.1	-0.7	0.570
Housing status <sup>a</sup>				
Currently lives in public or subsidized housing	77.3	79.3	-2.0	0.444
Moved since time of random assignment	11.4	16.2	-4.8 **	0.032
Sample size (total = $1,440$ )	725	715		

SOURCE: MDRC calculations using data from the Family Rewards 18-Month Survey.

NOTES: Sample sizes vary because of missing values.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Differences in impacts across subgroups were tested for statistical significance. Statistical significance levels are indicated as follows:  $\dagger \dagger \dagger = 1$  percent;  $\dagger = 5$  percent;  $\dagger = 10$  percent.

<sup>a</sup>The items in this section of the survey were administered to a random subsample (N = 2,060) of survey respondents.

### **Appendix Table E.3**

### First-Year Impacts on Temporary Assistance for Needy Families (TANF) or Safety Net Assistance (SNA) and Food Stamp Receipt and Payment, by Parent's Employment and Education Level at the Time of Random Assignment

	Program	Control	Difference	
Subgroup and Outcome	Group	Group	(Impact)	P-Value
Employed at random assignment				
Quarters 2-5				
Ever received TANF/SNA (%)	19.6	19.9	-0.3	0.777
Amount of TANF/SNA received (\$)	1,017	901	116	0.145
Ever received food stamps (%)	51.0	51.4	-0.5	0.777
Amount of food stamps received (\$)	1,753	1,826	-72	0.344
Sample size (total = 2,614)	1,313	1,301		
Not employed at random assignment				
Quarters 2-5				
Ever received TANF/SNA (%)	53.8	55.9	-2.2 *	0.085
Amount of TANF/SNA received (\$)	3,441	3,371	71	0.637
Ever received food stamps (%)	82.0	81.9	0.1	0.938
Amount of food stamps received (\$)	3,179	3,100	80	0.396
Sample size (total = $2,274$ )	1,143	1,131		
<u>High school diploma or GED certificate</u> <u>at random assignment</u>				
Quarters 2-5				
Ever received TANF/SNA (%)	29.1	29.8	-0.8	0.485
Amount of TANF/SNA received (\$)	1,637	1,590	47	0.619
Ever received food stamps (%)	58.4	58.1	0.3	0.829
Amount of food stamps received (\$)	2,059	2,078	-19	0.802
Sample size (total = $2,852$ )	1,400	1,452		
<u>No high school diploma or GED certificate</u> <u>at random assignment</u>				
Quarters 2-5				
Ever received TANF/SNA (%)	46.6	46.7	-0.1	0.954
Amount of TANF/SNA received (\$)	2,962	2,681	281 *	0.057
Ever received food stamps (%)	76.7	77.0	-0.3	0.836
Amount of food stamps received (\$)	2,965	2,926	40	0.687
Sample size (total = 1,946)	1,012	934		
				(continued)

323

#### **Appendix Table E.3 (continued)**

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

NOTES: 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 are indicated as follows:  $\dagger\dagger\dagger=1$  percent;  $\dagger\dagger=5$  percent,  $\dagger=10$  percent.

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

Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between outcomes for the program and control groups. The p-value indicates the likelihood that differences between the program and control groups arose by chance.

Dollar averages include zero values for sample members who are not receiving TANF or food stamps.

TANF/SNA and food stamp receipt and payment data are available for four quarters of follow-up after the quarter of random assignment. Thus, this table presents impacts for the first year of program participation.

Appendix F

Supplementary Tables for Chapter 6: Elementary and Middle School Subgroup Impacts Related to Education

### **Appendix Table F.1**

### Impacts on School Outcomes for Elementary School Students at the Time of Random Assignment, by Performance in Prior Year

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value
	Group	Group	(impact)	1 - v alue
<u>Scored at or above proficiency level</u>				
<u>on annual math test in prior year<sup>a</sup></u>				
Attendance rate 95% or higher, Year 1 (%)	49.2	47.1	2.1	0.412
Attendance rate 95% or higher, Year 2 (%)	48.8	45.4	3.4	0.180
Percentage proficient on ELA test, Year 1	61.4	63.3	-1.9	0.396
Percentage proficient on ELA test, Year 2	77.2	76.5	0.7	0.749
Percentage proficient on math test, Year 1	86.9	86.2	0.7	0.666
Percentage proficient on math test, Year 2	90.7	87.7	3.0 *	0.057
Sample size (total = 1,552)	803	749		
Scored below proficiency level				
on annual math test in prior year <sup>a</sup>				
Attendance rate 95% or higher, Year 1 (%)	33.0	34.1	-1.2	0.782
Attendance rate 95% or higher, Year 2 (%)	36.5	29.3	7.2 *	0.079
Percentage proficient on ELA test, Year 1	21.0	17.9	3.1	0.360
Percentage proficient on ELA test, Year 2	34.3	38.1	-3.8	0.360
Percentage proficient on math test, Year 1	29.0	26.2	2.9	0.468
Percentage proficient on math test, Year 2	39.1	39.2	-0.1	0.977
Sample size (total = 557)	264	293		

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

NOTES: 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 are indicated as follows:  $\dagger\dagger\dagger=1$  percent;  $\dagger\dagger=5$  percent;  $\dagger=10$  percent.

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

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

Years 1 and 2 cover the 2007-2008 school year and the 2008-2009 school year, respectively.

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

### **Appendix Table F.2**

### Impacts on School Outcomes for Elementary School Students at the Time of Random Assignment, by Parent's Education

	Program	Control	Difference						
Subgroup and Outcome	Group	Group	(Impact)	P-Value					
Parent earned at least a high school diploma/GED certificate									
Attendance rate 95% or higher, Year 1 (%)	47.7	46.4	1.4	0.583					
Attendance rate 95% or higher, Year 2 (%)	45.4	42.3	3.1	0.200					
Percentage proficient on ELA test, Year 1	55.4	53.0	2.4	0.290 ††					
Percentage proficient on ELA test, Year 2	68.3	66.0	2.3	0.284					
Percentage proficient on math test, Year 1	76.5	74.4	2.1	0.285					
Percentage proficient on math test, Year 2	82.0	79.2	2.8	0.112					
Sample size (total = 2,065)	1,010	1,055							
Parent did not earn at least a high school diplor	na/GED certif	icate_							
Attendance rate 95% or higher, Year 1 (%)	37.4	33.7	3.7	0.195					
Attendance rate 95% or higher, Year 2 (%)	38.2	34.8	3.4	0.239					
Percentage proficient on ELA test, Year 1	40.5	45.4	-4.9 *	0.078 ††					
Percentage proficient on ELA test, Year 2	55.0	55.8	-0.9	0.755					
Percentage proficient on math test, Year 1	67.9	67.0	1.0	0.701					
Percentage proficient on math test, Year 2	74.4	71.8	2.6	0.269					
Sample size (total = 1,512)	818	694							

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

NOTES: In most cases, the subgroup for parent's education level is based on the mother's education level. Father's education level is used in male-only households.

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 are indicated as follows:  $\dagger \dagger \dagger = 1$  percent;  $\dagger \dagger = 5$  percent;  $\dagger = 10$  percent.

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

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

Years 1 and 2 cover the 2007-2008 school year and the 2008-2009 school year, respectively.

Year 1 test scores are for grades 3 through 5, and Year 2 scores are calculated for grades 2 through 5.

### Appendix Table F.3

### Impacts on School Outcomes for Elementary School Students at the Time of Random Assignment, by School Environment

	Program	Control	Difference		
School Ranking and Outcome	Group	Group	Impact	P-Value	Sig.
Students in lower-ranking schools					
Attendance rate 95% or higher, Year 1 (%)	40.4	42.3	-1.9	0.563	†
Attendance rate 95% or higher, Year 2 (%)	38.9	40.3	-1.4	0.670	
Percentage proficient on ELA test, Year 1	45.2	43.7	1.5	0.628	
Percentage proficient on ELA test, Year 2	60.6	58.2	2.4	0.439	
Percentage proficient on math test, Year 1	67.1	64.6	2.5	0.378	
Percentage proficient on math test, Year 2	73.7	69.8	3.9	0.175	
Sample size (total = 927)	465	462			
Students in medium-ranking schools					
Attendance rate 95% or higher, Year 1 (%)	40.8	39.7	1.1	0.693	†
Attendance rate 95% or higher, Year 2 (%)	43.4	38.2	5.2 *	0.070	
Percentage proficient on ELA test, Year 1	45.9	47.5	-1.5	0.585	
Percentage proficient on ELA test, Year 2	60.1	60.4	-0.3	0.910	
Percentage proficient on math test, Year 1	71.3	69.5	1.8	0.493	
Percentage proficient on math test, Year 2	78.1	75.4	2.7	0.231	
Sample size (total = $1,382$ )	699	683			
Students in higher-ranking schools					
Attendance rate 95% or higher, Year 1 (%)	48.5	40.2	8.3 **	0.011	†
Attendance rate 95% or higher, Year 2 (%)	44.4	38.3	6.1 *	0.055	
Percentage proficient on ELA test, Year 1	59.1	60.5	-1.4	0.683	
Percentage proficient on ELA test, Year 2	69.9	69.2	0.7	0.829	
Percentage proficient on math test, Year 1	81.9	84.4	-2.4	0.339	
Percentage proficient on math test, Year 2	86.0	84.6	1.4	0.542	
Sample size (total = $1,082$ )	556	526			
				(cont	inued)

### **Appendix Table F.3 (continued)**

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

NOTES: School environment is measured as the average ELA and math test scores by grade in the 2005-2006 and 2006-2007 school years. Higher-ranking schools have a pass rate of 84 percent or higher; medium-ranking schools have a pass rate of 73 percent to 83 percent; and lower-ranking schools have a pass rate of 72 percent or lower.

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 are indicated as follows:  $\dagger \dagger \dagger = 1$  percent;  $\dagger = 5$  percent;  $\dagger = 10$  percent.

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

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively.

Year 1 test scores and proficiency are shown for grades 3 through 5 at random assignment. Year 2 test scores are shown for grades 2 through 5 at random assignment.

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

### **Appendix Table F.4**

### Impacts on School Outcomes for Middle School Students at the Time of Random Assignment, by Performance in Prior Year

Subgroup and Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Scored at or above proficiency level on annual math test in prior year <sup>a</sup>			-	
Attendance rate 95% or higher, Year 1 (%)	52.0	50.1	1.9	0.490
Attendance rate 95% or higher, Year 2 (%)	44.0	40.8	3.2	0.246
Percentage proficient on ELA test, Year 1	64.4	66.0	-1.5	0.506
Percentage proficient on ELA test, Year 2	71.4	69.6	1.8	0.488
Percentage proficient on math test, Year 1	84.6	84.6	0.0	1.000
Percentage proficient on math test, Year 2	86.7	88.6	-1.9	0.348
Sample size (total = 1,293)	659	634		
<u>Scored below proficiency level</u> on annual math test in prior year <sup>a</sup>				
Attendance rate 95% or higher, Year 1 (%)	31.8	29.2	2.6	0.343
Attendance rate 95% or higher, Year 2 (%)	27.9	22.8	5.0 *	0.052
Percentage proficient on ELA test, Year 1	22.0	20.4	1.6	0.473
Percentage proficient on ELA test, Year 2	26.6	25.0	1.6	0.539
Percentage proficient on math test, Year 1	29.7	27.5	2.3	0.383
Percentage proficient on math test, Year 2	38.8	37.8	0.9	0.773
Sample size (total = 1,194)	565	629		

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

NOTES: 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 are indicated as follows:  $\dagger \dagger \dagger = 1$  percent;  $\dagger = 5$  percent;  $\dagger = 10$  percent.

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

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively.

Year 1 test scores and proficiency are shown for the grades 6 through 8 at random assignment. Year 2 test scores are shown for grades 6 and 7 at random assignment.

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

### **Appendix Table F.5**

at the Time of Random Assignment, by Parent's Education						
	Program	Control	Difference			
Subgroup and Outcome	Group	Group	(Impact)	P-Value		
Parent earned at least a high school diploma/GE	D certificate					
Attendance rate 95% or higher, Year 1 (%)	47.1	43.7	3.4	0.207		
Attendance rate 95% or higher, Year 2 (%)	40.9	35.6	5.3 **	0.045		
Percentage proficient on ELA test, Year 1	51.0	51.9	-0.9	0.677		
Percentage proficient on ELA test, Year 2	56.5	56.1	0.3	0.889		
Percentage proficient on math test, Year 1	65.2	61.6	3.6 *	0.094		
Percentage proficient on math test, Year 2	68.7	71.2	-2.5	0.282		
Sample size (total = 1,401)	694	707				
Parent did not earn at least a high school diplom	a/GED certifi	icate				
Attendance rate 95% or higher, Year 1 (%)	36.6	34.2	2.4	0.421		
Attendance rate 95% or higher, Year 2 (%)	29.5	28.1	1.5	0.602		
Percentage proficient on ELA test, Year 1	35.7	34.3	1.4	0.565		
Percentage proficient on ELA test, Year 2	43.1	40.2	2.9	0.290		
Percentage proficient on math test, Year 1	50.4	49.9	0.5	0.843		
Percentage proficient on math test, Year 2	58.6	57.2	1.4	0.608		
Sample size (total = 1,091)	529	562				

#### Impacts on School Outcomes for Middle School Students at the Time of Random Assignment, by Parent's Education

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

NOTES: In most cases, the subgroup for parent's education level is based on the mother's education level. Father's education level is used in male-only households.

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 are indicated as follows:  $\dagger \dagger \dagger = 1$  percent;  $\dagger \dagger = 5$  percent;  $\dagger = 10$  percent.

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

multiple observations per family.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively.

Year 1 test scores and proficiency are shown for grades 6 through 8 at random assignment. Year 2 test scores are shown for grades 6 and 7 at random assignment.

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

### **Appendix Table F.6**

### Impacts on School Outcomes for Middle School Students at the Time of Random Assignment, by School Environment

	Program	Control	Difference		
School Ranking and Outcome	Group	Group	Impact	P-Value	Sig.
Students in lower-ranking schools					
Attendance rate 95% or higher, Year 1 (%)	32.1	35.0	-3.0	0.384	†
Attendance rate 95% or higher, Year 2 (%)	28.2	26.9	1.3	0.692	
Percentage proficient on ELA test, Year 1	35.7	29.7	6.0 **	0.028	†
Percentage proficient on ELA test, Year 2	34.8	35.5	-0.7	0.829	
Percentage proficient on math test, Year 1	45.1	47.6	-2.5	0.413	
Percentage proficient on math test, Year 2	50.8	53.5	-2.7	0.444	
Sample size (total = 821)	392	429			
Students in medium-ranking schools					
Attendance rate 95% or higher, Year 1 (%)	37.0	35.6	1.3	0.697	†
Attendance rate 95% or higher, Year 2 (%)	36.4	29.8	6.6 **	0.045	
Percentage proficient on ELA test, Year 1	42.4	41.9	0.5	0.844	†
Percentage proficient on ELA test, Year 2	52.4	50.2	2.2	0.505	
Percentage proficient on math test, Year 1	59.3	55.4	3.9	0.171	
Percentage proficient on math test, Year 2	66.5	63.5	2.9	0.362	
Sample size (total = 836)	389	447			
Students in higher-ranking schools					
Attendance rate 95% or higher, Year 1 (%)	55.0	46.0	9.0 **	0.023	†
Attendance rate 95% or higher, Year 2 (%)	42.8	37.6	5.2	0.174	
Percentage proficient on ELA test, Year 1	59.0	62.3	-3.3	0.315	†
Percentage proficient on ELA test, Year 2	62.9	61.3	1.6	0.628	
Percentage proficient on math test, Year 1	73.4	70.4	3.0	0.278	
Percentage proficient on math test, Year 2	76.6	80.0	-3.4	0.221	
Sample size (total = $639$ )	336	303			
				(conti	inued)

#### **Appendix Table F.6 (continued)**

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

NOTES: School environment is measured as the average ELA and math test scores by grade in the 2005-2006 and 2006-2007 school years. Higher-ranking schools have a pass rate of 84 percent or higher; medium-ranking schools have a pass rate of 73 percent to 83 percent; and lower-ranking schools have a pass rate of 72 percent or lower.

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 are indicated as follows:  $\dagger \dagger \dagger = 1$  percent;  $\dagger = 5$  percent;  $\dagger = 10$  percent.

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

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

Years 1 and 2 cover the 2007-2008 and 2008-2009 school years, respectively.

Year 1 test scores and proficiency are shown for grades 6 through 8 at random assignment. Year 2 test scores are shown for grades 6 and 7 at random assignment.

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

Appendix G

Supplementary Tables for Chapter 7: Impacts on Health Care and Health Outcomes

### **Appendix Table G.1**

# Impacts on Child Medicaid Receipt, by Temporary Assistance for Needy Families (TANF) or Safety Net Assistance (SNA) Status at the Time of Random Assignment

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
	Group	Group	(impact)	i vulue
<u>Medicaid coverage among children not</u> receiving TANF/SNA at random assignment				
Quarter of random assignment (%)	59.5	58.9	0.5	0.606
Quarter 2	60.7	61.4	-0.8	0.523
Quarter 3	61.9	60.9	1.0	0.418
Quarter 4	62.0	60.4	1.6	0.207
Quarter 5	62.4	59.7	2.7 **	0.043
Quarter 6	61.5	59.1	2.4 *	0.077
Quarter 7	60.4	59.7	0.8	0.592
Covered by Medicaid in all 7 quarters from				
time of random assignment (%)	45.7	44.9	0.8	0.562
Average number of quarters covered by Medicaid	3.7	3.6	0.1	0.216
Sample size (total = $8,040$ )	4,001	4,039		
Medicaid coverage among children				
receiving TANF/SNA at random assignment				
Quarter of random assignment (%)	88.9	87.4	1.5	0.291
Quarter 2	87.9	85.9	2.0	0.281
Quarter 3	85.0	83.9	1.1	0.583
Quarter 4	84.5	81.1	3.4 *	0.088
Quarter 5	82.0	79.1	2.9	0.176
Quarter 6	79.7	76.2	3.5	0.117
Quarter 7	80.1	77.2	2.9	0.187
Covered by Medicaid in all 7 quarters from				
time of random assignment (%)	61.5	60.0	1.5	0.585
Average number of quarters covered by Medicaid	5.0	4.8	0.2 *	0.063
Sample size (total $= 2,897$ )	1,466	1,431		
Medicaid coverage among all children				
Quarter of random assignment (%)	67.6	66.9	0.6	0.451
Quarter 2	68.2	68.4	-0.2	0.803
Quarter 3	68.1	67.4	0.8	0.482
Quarter 4	68.1	66.2	1.9 *	0.080
Quarter 5	67.6	65.1	2.5 **	0.025
Quarter 6	66.5	64.1	2.4 **	0.037
Quarter 7	65.7	64.8	0.9	0.454
Covered by Medicaid in all 7 quarters from				
time of random assignment (%)	50.2	49.1	1.1	0.398
Average number of quarters covered by Medicaid	4.0	4.0	0.1	0.109
		5,624		

#### **Appendix Table G.1 (continued)**

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

NOTES: Because reliable data on start and end dates are not available, Medicaid receipt in a given quarter is measured using the recipient's status on the first day of that quarter.

The sample excludes 67 members randomly assigned between January and March 2008.

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 families or sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differences.

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.

### **Appendix Table G.2**

### Impacts on Parents' Health Status, by Respondent's Education Level at the Time of Random Assignment

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
High school diploma/GED certificate					
Average self-rated health $(1 = poor; 5 = excellent)$	3.3	3.2	0.1 *	0.087	0.070
Has any medical condition (%)	51.2	49.8	1.3	0.547	
Currently being treated for any medical condition <sup>a</sup> (%)	44.2	41.8	2.4	0.268	
Experienced serious psychological distress in the past month <sup>a</sup> (%)	9.6	11.5	-1.9	0.279	
Sample size (total = 1,820)	922	898			
No high school diploma/GED certificate					
Average self-rated health $(1 = poor; 5 = excellent)$	3.1	3.0	0.1 *	0.067	0.098
Has any medical condition <sup>a</sup> (%)	56.1	54.2	1.9	0.480	
Currently being treated for any medical condition <sup>a</sup> (%)	51.0	48.7	2.3	0.402	
Experienced serious psychological distress in the past month <sup>a</sup> (%)	17.3	15.0	2.2	0.405	
Sample size (total = 1,186)	610	576			

SOURCE: MDRC calculations from responses to the Family Rewards 18-Month Survey.

NOTES: Sample sizes vary because of missing values.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent. Differences in impacts across subgroups were tested for statistical significance. Statistical significance levels are indicated as follows:  $\dagger \dagger \dagger = 1$  percent;  $\dagger \dagger = 5$  percent;  $\dagger = 10$  percent.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcome for both groups combined.

<sup>a</sup>This item measures the score on Kessler's Psychological Distress Scale (K10), a 10-item questionnaire intended to yield a global measure of distress based on questions about anxiety and depressive symptoms that a person has experienced in the most recent four-week period. See Kessler et al. (2002). A randomly selected subsample of survey respondents (N = 2,043) were asked these questions.

### Appendix Table G.3

### Impacts on Family's Health Insurance Coverage and Parents' Receipt of Health Care, by Employment Status at the Time of Random Assignment

	Program	Control	Difference	DVI
Outcome (%)	Group	Group	(Impact)	P-Value
Employed				
Health insurance coverage in previous month				
Respondent had coverage <sup>a</sup>	95.4	93.1	2.2 *	0.058
All dependent children had coverage <sup>b,c</sup>	94.5	93.0	1.5	0.239
Health insurance coverage since random assignment				
Respondent had a period with no coverage	17.6	20.6	-3.0	0.130
Some or all of respondent's children had a period with no coverage <sup><math>b</math></sup>	15.7	19.3	-3.6 *	0.068
Respondent's health care utilization				
Had a health checkup since random assignment	93.7	92.0	1.7	0.178
Had at least 1 dental visit since random assignment Had at least 2 visits	87.1 69.3	84.0 58.5	3.1 * 10.8 ***	0.089 0.000
Unmet health needs				
Did not get needed medical care because of cost in past 12 months <sup>d</sup>	6.6	10.7	-4.1 ***	0.003
Did not fill prescription because of cost in past 12 months	14.8	17.9	-3.2 *	0.088
Sample size (total = 1,599)	823	776		
Not employed				
Health insurance coverage in previous month				
Respondent had coverage <sup>a</sup>	95.9	94.5	1.3	0.236
All dependent children had coverage <sup>b,c</sup>	95.2	94.1	1.1	0.382
Health insurance coverage since random assignment				
Respondent had a period with no coverage	14.6	18.2	-3.6 *	0.066
Some or all of respondent's children had a period with no coverage <sup>b</sup>	12.7	16.2	-3.6 *	0.063
				(continued

Outcome (%)	Program Group	Control Group	Difference (Impact)	P-Value
Respondent's health care utilization				
Had a health checkup since random assignment	92.5	91.6	0.9	0.551
Had at least 1 dental visit since random assignment Had at least 2 visits	85.3 65.4	82.4 57.6	3.0 7.8 ***	0.134 0.003
Unmet health needs				
Did not get needed medical care because of cost in past 12 months <sup>d</sup>	6.3	10.1	-3.8 ***	0.008
Did not fill prescription because of cost in past 12 months	12.5	13.9	-1.4	0.434
Sample size (total = 1,440)	725	715		

### Appendix Table G.3 (continued)

SOURCE: MDRC calculations from responses to the Family Rewards 18-Month Survey.

NOTES: Sample sizes vary because of missing values.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent. Differences in impacts across subgroups were tested for statistical significance. Statistical significance levels are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

<sup>a</sup>The percentage of sample members who have any type of health insurance coverage may not necessarily equal the sum of those with public coverage and private coverage because of missing values.

<sup>b</sup>Child-related health insurance measures were calculated for sample members with at least one child at the time of the survey interview.

<sup>c</sup>The percentages of all children covered by public insurance and all covered by private insurance do not add up to all covered by any insurance because some families with multiple children may have some covered by public and others covered by private insurance.

<sup>d</sup>This excludes prescriptions.

### **Appendix Table G.4**

### Impacts on Parents' Medicaid Receipt, by Respondent's Employment Status at the Time of Random Assignment

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Employed at enrollment				
Covered by Medicaid in all 7 quarters from time of random assignment (%)	37.0	34.8	2.2	0.159
Average number of quarters covered by Medicaid	3.1	3.0	0.1	0.143
Sample size (total = $2,614$ )	1,313	1,301		
Not employed at enrollment				
Covered by Medicaid in all 7 quarters from time of random assignment (%)	62.9	59.3	3.6 *	0.053
Average number of quarters covered by Medicaid	4.9	4.8	0.1	0.164
Sample size (total = 2,274)	1,143	1,131		

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

NOTES: Because reliable data on start and end dates were not available, Medicaid receipt in a given quarter is measured using the recipient's status on the first day of that quarter.

The sample excludes 30 members randomly assigned between January and March 2008.

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 familes and sample members. Standard errors were adjusted to account for multiple observations per family.

Rounding may cause slight discrepancies in calculating sums and differnces.

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.

Differences across subgroup impacts were tested for statistical significance. Statistical significance levels are indicated as follows:  $\dagger \dagger \dagger = 1$  percent;  $\dagger = 5$  percent;  $\dagger = 10$  percent.

Appendix H

Family Rewards Sample Earnings Statement for Participants



Dora Vela U1600 White House, 17th Floor New York, NY 10010 Dora Vela Page: 1

#### Family ID: 003531

family rewards

### **Earnings Statement**

Summary of Rewards Earned	Earned for November-December Activity Period
	Rewards Earned this period
Dora Vela	\$575.00
Total Rewar	rds Earned: \$575.00



As a participant in Opportunity NYC, the income you receive will not affect either your eligibility for, or benefit amount under, the Family Assistance, Food Stamp Program, Medicaid programs, and other benefits including child care subsidies and public housing. In addition, money received through Opportunity NYC is considered a gift and should not be counted as income for tax purposes.

To receive the rewards you have earned, you should have submitted complete bank account information. Making changes to this information will cause a delay in payment.

003531



Dora Vela Page: 2

Family ID: 00353

### Details of Rewards Earned

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Client Name / Client ID	Activity	Reward Value	Activity Period	Activity Completed	Rewards Earned This Period
Christopher Vela 00353111	Middle School (6-8) - Child attends school	\$50.00	Nov/ 2007- Dec/ 2007	Yes	\$50.00
Naomi Vela 00353111	Middle School (6-8) - Parent Teacher Conference	\$25.00	Sep/ 2007- Dec/ 2007	Yes	\$25.00
					\$75.00

### **HEALTH Activities**

Client Name / Client ID	Activity	Reward Value	Activity Period	Activity Completed	Rewards Earned This Period
Dora Vela 00353101	Public Health Insurance - ADULT	\$40.00	Sep/ 2007- Oct/ 2007	No Activity Not Completed	\$0.00
Dora Vela 00353101	Public Health Insurance - ADULT	\$40.00	Nov/ 2007- Dec/ 2007	No Activity Not Completed	\$0.00
Dora Vela 00353101	Private Health Insurance - ADULT	\$100.00	Nov/ 2007- Dec/ 2007	Yes	\$100.00
Dora Vela 00353101	Public Health Insurance - ALL CHILDREN	\$40.00	Nov/ 2007- Dec/ 2007	No Activity Not Completed	\$0.00
Dora Vela 00353101	Private Health Insurance - ALL CHILDREN	\$100.00	Nov/ 2007- Dec/ 2007	Yes	\$100.00
					\$200.00

### WORK Activities

Client Name / Client ID	Activity	Reward Value	Activity Period	Activity Completed	Rewards Earned This Period
Dora Vela 00353101	Full-time Work (30hrs / week)	\$300.00	Nov/ 2007- Dec/ 2007	Yes	\$300.00
					\$300.00

#### If you have any questions, please call the Customer Service Hotline: (212) 994-4528

As a participant in Opportunity NYC, the income you receive will not affect either your eligibility for, or benefit amount under, the Family Assistance, Food Stamp Program, Medicaid programs, and other benefits including child care subsidies and public housing. In addition, money received through Opportunity NYC is considered a gift and should not be counted as income for tax purposes.

To receive the rewards you have earned, you should have submitted complete bank account information. Making changes to this information will cause a delay in payment.

Dora Vela Page: 3



Family ID:003531

Total Rewards Paid \$575.00

Eligible Reward \$695.00

If you have any questions, please call the Customer Service Hotline: (212) 994-4528

As a participant in Opportunity NYC, the income you receive will not affect either your eligibility for, or benefit amount under, the Family Assistance, Food Stamp Program, Medicaid programs, and other benefits including child care subsidies and public housing. In addition, money received through Opportunity NYC is considered a gift and should not be counted as income for tax purposes.

To receive the rewards you have earned, you should have submitted complete bank account information. Making changes to this information will cause a delay in payment.

003531

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## About MDRC

MDRC is a nonprofit, nonpartisan social 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 exoffenders 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 Child Development
- Improving Public Education
- Promoting Successful Transitions to Adulthood
- 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.