

The Accelerated Benefits Demonstration and Evaluation Project

Impacts on Health and Employment at Twelve Months

Volume 1

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Overview

In 2006, the Social Security Administration funded the Accelerated Benefits (AB) Demonstration to test whether early access to health care and related services would improve outcomes for new Social Security Disability Insurance (SSDI) beneficiaries. Under current law, most beneficiaries are not eligible for Medicare for a period of 24 months after they are entitled to receive cash benefits. Many SSDI beneficiaries in this “waiting period” have serious health care needs, and health insurance may provide the medical care needed to stabilize their health conditions.

AB included about 2,000 new SSDI beneficiaries without insurance. Individuals were randomly assigned to one of three research groups: (1) the AB group, which had access to health care benefits designed for the project; (2) the AB Plus group, which had access to the same health care benefits as well as voluntary services delivered by telephone to help them navigate the health care system and return to work; and (3) a control group, which could not receive AB health care benefits or AB Plus services but could obtain health insurance on their own.

Key Findings

- **Participants made extensive use of program services.** Almost all members of the AB and AB Plus groups used AB health benefits during the first year, most commonly for doctor visits, diagnostic testing, and prescription medications. Program group members averaged \$19,265 in AB health benefit claims during the year. In addition, about two-thirds of the AB Plus group participated in key telephonic services.
- **AB health care benefits increased health care use and reduced reported unmet medical needs.** In addition, members of the AB and AB Plus groups reported spending less of their own money on health care. There were few differences in these outcomes between the AB and AB Plus groups, suggesting that AB’s health care benefits were responsible for these improvements.
- **AB Plus services encouraged people to look for work but did not increase employment levels in the first year.** Members of the AB Plus group were more likely to use vocational rehabilitation and other job preparation services and were more likely to look for work than either the AB group or the control group. Despite this promising intermediate result, the three groups had similar employment rates in the first year.

These results are promising, but they reflect short-term impacts partway through the intervention. It will be important to continue to track outcomes to assess whether long-term employment gains and reduced need for health care result in future savings for the federal government. Despite these limitations, AB provides perhaps the most rigorous information to date suggesting that health care benefits can improve the health of a medically needy group.

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Preface

When Medicare was extended to Social Security Disability Insurance (SSDI) beneficiaries in 1972, an important gap in health care coverage was introduced: beneficiaries were not eligible for Medicare until two years after they were entitled to receive SSDI cash benefits. Introduced to keep spending low by targeting health care benefits to those with long-term disabilities, this “waiting period” now leaves many individuals without health insurance during an especially vulnerable time, soon after they have suffered an event that has left them too disabled to work.

Although it is intended to reduce costs, the waiting period might increase costs in the long run. If lack of health insurance discourages new beneficiaries from seeking care, their health might deteriorate, worsening the condition that landed them on the rolls. Individuals who could have been helped off the rolls with the right care in the short term would then receive SSDI benefits for many years, possibly adding billions of dollars to the costs of Social Security programs.

Although it seems intuitive that the cost of health care would discourage the uninsured from receiving care and that the lack of care would result in worsened health, there is little rigorous evidence to support that intuition. Instead, past research has relied on comparisons of people with insurance and those without insurance, and the differences in health care and health outcomes between these groups might be due to other, unobserved characteristics of the two groups. For that reason, a well-cited review of the evidence written by Helen Levy and David Meltzer concluded that many studies that claim to show the effects of health insurance on health are not convincing.

The Accelerated Benefits Demonstration provides the most rigorous evidence to date on the link between health care benefits, health care use, and health outcomes for a high-needs group of health care users. Conceived and funded by the Social Security Administration, the study included about 2,000 new SSDI beneficiaries without insurance, half of whom were randomly chosen to receive a comprehensive set of health care benefits. A subset of this group also was eligible for services to help them navigate the health care system and return to work.

Results from the project not only will inform SSA’s attempts to help SSDI beneficiaries return to work but also will provide crucial information to help understand the likely effects of recently passed health care reform, since individuals who would have remained uninsured during the waiting period now will be required to obtain health insurance — many of them, through state Medicaid programs or state health exchanges.

Gordon L. Berlin
President

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The Accelerated Benefits (AB) Demonstration was a large and complex project, and this report resulted from the collaboration of many people and organizations.

A number of experts in the field contributed advice and insights in designing AB health benefits and AB Plus services. These include John F. Burton, Walt Francis, Larry Fricks, Jay Himmelstein, John Kemp, Joseph Newhouse, Mary Beth Senkewicz, and Michael Sullivan. Professors Himmelstein and Newhouse also commented on an early draft of this final report, while Professor Sullivan met regularly with the research team to monitor the delivery of services for the Progressive Goal Attainment Program (PGAP). A few experts played central roles in designing AB Plus services, reviewing evaluation plans, and providing technical assistance to staff throughout the demonstration. Finally, Robert Solow, Larry Katz, Jan Blustein, and Sylvia Smuller reviewed some of the results contained in this report.

A smaller group played a more ongoing role in both designing AB Plus services and modifying them to the needs of the project. These include Gregory Simon and Michael Von Korff at Group Health Cooperative and Richard Luecking of TransCen, Inc. We are also grateful to Heather Adams of the University Centre for Research on Pain and Disability — co-founder of PGAP along with Dr. Sullivan — and to Tamra Ellis, of the University Centre for Rehabilitation and Health, who adapted the program to fit the demonstration.

The evaluation would not be possible without the program managers and staff at POMCO, American Health Holdings (formerly CareGuide), and TransCen, Inc., who rose to the challenge of developing and running a new program and participating in a complex research project. POMCO's Vanessa Flynn worked with MDRC to design the AB health plan; among her staff, Roberta Adydan, Tracey Koskowski, Jennifer Sarro, Jaimee Smith, and Sandy Valerio managed the implementation of the plan. The team of coaches, nurses, and employment and benefits counselors were invaluable in bringing the AB Plus program model to life: The coaches included Sandy Bennett, Susan Bravard, Vanessa Cochran, Mary Hays, Kathy Hausmann, Annette Karnak, Martha Melloy, and Christa Watson; the nurses included Teresa Stimpson, Sandy Thornton, and Deborah Wantland; the employment and benefits counselors included Andrea Cetera Jines, Susan Klein, Janice Johnson, Rebecca Smith, and Dale Verstegen. Amy Dwyre, James Kenney, Beth Matthies, and Noel Wyatt worked tirelessly with MDRC to supervise AB Plus operations. We appreciate everyone's willingness to participate in various activities related to the study, including interviews with MDRC staff during the process study.

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claims each month. Sara Hooper and James Kenney from American Health Holdings aided the timely collection of data from the program's management information system.

We also wish to acknowledge the contributions of Mathematica's team of interviewers, locators, survey operations supervisors, and monitors who collected the high-quality data on which this report is based. Amy Raduzycki oversaw this team at the Survey Operations Center. Barbara Kolln oversaw the IT work on this project. We thank her and her team of programmers. The survey research team included Julita Milliner-Waddell, Rebecca Weiner, and Stacie Feldman. We thank them for their important contributions to this study.

At MDRC, the report benefited greatly from the hard work of many programmers and research staff. Natasha Piatnitskaia processed the AB health claims, Social Security Administration administrative data, and 12-month survey data. Sonya Williams processed data from the AB Plus management information system and also contributed to the 12-month survey processing effort. Reanin McRoberts helped monitor the implementation of the AB health plan and created many exhibits using the AB health claims. Alla Chaplygina transmitted, collected, and logged administrative and survey data files.

Many MDRC staff members also contributed to the project. David Butler directed all aspects of the project. Peter Baird helped design AB Plus and directed the AB Plus team during implementation. Rachel Pardoe helped monitor the implementation of AB Plus services, created many exhibits using AB Plus participation data, and coordinated the production of all AB publications. John Lewison provided invaluable guidance on the design and administration of the health plan and ensured that all demonstration staff were screened and cleared by the Social Security Administration. Jesús Amadeo oversaw all financial, legal, and data security matters. Lorraine Karlen, Mahendra Budhram, Lina Litvin, Anne Fenton, and Amor Aquino administered AB health plan payments. Joel Gordon and Angelica Manigbas advised the project about data security. Marjorie Singer and her team reviewed challenging legal questions. Karen Paget and the MDRC Institutional Review Board ensured the protection of human subjects. This report received comments from several MDRC reviewers from outside the team, including Gordon Berlin, Dan Bloom, and Sue Kim. John Hutchins and Robert Weber edited the report, and it was prepared for publication by David Sobel and Stephanie Cowell.

Finally, we extend our deep appreciation to the participants in the AB research sample, without whom this work would not have been possible.

The Authors

Executive Summary

Many Social Security Disability Insurance (SSDI) beneficiaries have serious health care needs, but, under current law, most are not eligible for federally funded health care benefits through Medicare for a period of 24 months after they are entitled to receive cash benefits. During this “waiting period,” most beneficiaries have poor health and limited functioning, but many lack health insurance. In 1999, Congress provided the Social Security Administration (SSA) the authority to examine the effect of changing the waiting period. The result was the Accelerated Benefits (AB) Demonstration, a five-year study of whether a short-term investment in health care and related services for newly entitled SSDI beneficiaries leads to improved health, increased employment, and reduced reliance on SSDI benefits. MDRC led the design and evaluation of AB in collaboration with Mathematica Policy Research, Inc. This final report from the project describes all activities to date, including a summary of impacts one year following recruitment into the study. In addition to helping SSA design policies to help SSDI beneficiaries, results from AB have broader policy implications as the first random assignment study of the efficacy of providing health care benefits to a high-needs population.

Two versions of AB were tested. Both provided health care benefits to new SSDI beneficiaries who did not have health insurance during the Medicare waiting period. The second version of AB — called “AB Plus” — added three voluntary services delivered by telephone to help individuals navigate the health care system and to help them return to work.

New SSDI beneficiaries without health insurance who consented to be part of the study were assigned at random to one of the three research groups: (1) the AB group, which had access to the program’s health care benefits; (2) the AB Plus group, which had access to the health care benefits and could use the other services delivered by telephone; or (3) a control group, which could not receive AB health care benefits or AB Plus services but could obtain health insurance on their own. Random assignment ensures that any differences among the three groups when participants entered the study were due to chance and that any systematic differences that later emerged were most likely due to the program services being studied.

Recruitment and Characteristics of Sample Members

The study targeted uninsured new SSDI beneficiaries, since they were most likely to benefit from AB’s health care benefits. Sample members also had to meet the following criteria: (1) have at least 18 months until they were eligible for Medicare, so they would receive AB services soon after the onset of their disability; (2) be between 18 and 54 years old, so there was a reasonable expectation of returning to work; and (3) live in one of the 53 metropolitan statistical areas with the most new SSDI beneficiaries. There was a strong interest in participating in

services among beneficiaries who met these criteria: of the 12 percent of new SSDI beneficiaries who were without health insurance, over 99 percent completed a baseline interview and enrolled in the demonstration. From October 2007 through January 2009, 2,005 individuals meeting these criteria consented to be in the study and were randomly assigned. Subsequently, seven individuals were later determined by SSA to have been ineligible for the SSDI program and therefore ineligible for the study, and an eighth person was removed because it was later determined that she was insured at the time of randomization and therefore ineligible for the study. The study sample thus consists of 1,997 individuals assigned to the control group (986 individuals), the AB group (400 individuals), or the AB Plus group (611 individuals).

At random assignment, the participating sample members had diverse impairment characteristics, were in very poor health, and reported high rates of unmet medical needs. They had a range of impairments, including mental disorders (22 percent) and diseases of the musculoskeletal system (19 percent), nervous system (17 percent), or circulatory system (12 percent); and neoplasm (usually cancer; 8 percent). Reflecting their disability status, nearly all participants were limited in performing such activities as preparing meals, taking medications, and using the telephone. In addition, nearly three in ten reported very serious limitations that prevented them from performing basic daily activities, such as getting in or out of a bed or chair, using the toilet, or eating. Although a majority of sample members reported being uninsured for more than six months, most had seen or talked with a doctor in the preceding six months. In terms of demographic characteristics, sample members were 47 years old, on average, at the time of random assignment, and nearly 80 percent of them possessed at least a high school diploma or its equivalent.

The AB Health Plan

AB and AB Plus group members could use the AB health plan from the day of random assignment until they became entitled for Medicare. In addition to covering basic health care needs, such as hospitalizations and physician visits, the AB health plan covered some rehabilitation supports and treatment for mental health problems and chemical dependency. The plan gave program group members access to a network that included 450,000 providers nationwide, and it required modest copayments when network providers were used. Compared with Medicare, the AB health plan had lower copayments, provided greater reimbursement to health care providers, and paid for some durable equipment rehabilitation therapies not covered by Medicare. At the same time, individuals were limited to \$100,000 in health care until they became eligible for Medicare.

Almost all program group members used the AB health benefit during the year after random assignment — most commonly for doctor visits, diagnostic testing, and prescription medications. Program group members averaged \$19,265 in paid AB health benefit claims during

the first year, but less healthy individuals used more: those with a primary diagnosis of neoplasm (cancer) used \$39,698, on average. As is typical with health insurance, a minority of members accounted for a large share of the costs: 12.3 percent had payments of more than \$50,000, accounting for 53 percent of costs, and about 4 percent reached the benefit limit of \$100,000.

AB Plus Services

AB Plus included three voluntary services delivered by telephone, the first two of which were designed to help participants return to work:

- **A behavioral motivation program called the “Progressive Goal Attainment Program” (PGAP).** PGAP is a 10-module program designed to incrementally increase participants’ activity levels and change daily routines to be consistent with holding employment (for example, waking up at a regular time). PGAP also tries to reduce participants’ perceptions of disability and to help them better manage pain and discomfort. The staff who administered PGAP — all of whom had social work backgrounds — also coordinated AB Plus services and acted as participants’ primary point of contact during the demonstration.
- **Employment and public assistance benefits counseling.** Employment counselors helped participants develop and achieve employment goals. For example, they helped participants prepare résumés, identify work or training opportunities, and make use of local services. AB Plus benefits counselors identified participants’ benefits concerns and provided information on how work would affect their SSDI status and other benefits. Benefits counselors also helped participants make the transition to Medicare, helped those who had hit the plan’s \$100,000 cap find ways to pay for health care, and helped financially strapped individuals receive assistance paying bills.
- **Medical case management.** Nurses helped participants address short-term health problems that might be barriers to using the two employment-related services above. One nurse handled individuals who had mental health needs, developing simple care plans, reviewing medications, and occasionally making referrals to mental health providers. Other nurses handling physical health problems helped participants navigate the health plan, particularly following a hospital stay. PGAP coaches also provided some basic disease-specific education as part of medical case management.

During the year after random assignment, 84.9 percent of the AB Plus group completed an intake, during which AB Plus services were explained and the participant was assessed for health care needs and the ability to participate in PGAP. In addition, 73.8 percent had at least one additional session with AB Plus staff following intake. About one-third participated in each of the employment-related services. Participants averaged 8.7 contacts with AB Plus staff, lasting a total of 4.2 hours. However, there was substantial variation in the degree to which people used different services. While about one-third used PGAP, for example, only about one-sixth of that group completed all ten modules, and half completed at least four. The one-third of the AB Plus group who used employment and benefits counseling averaged six telephone sessions, for a total of 2.5 hours.

Estimated Effects of AB and AB Plus

Estimated short-term effects of AB health benefits and AB Plus services are shown in Table ES.1 and are summarized below. Results are based primarily on a survey administered about 12 months after random assignment.

- **AB health care benefits increased health care use and reduced unmet needs.** Although most control group members had a regular source of health care, both AB and AB Plus groups were about 13 percentage points more likely to have a regular source of care and to have made three or more doctor visits. In addition, program group members were substantially less likely to report delaying or not getting needed care. Both program groups also had lower out-of-pocket expenditures on health care costs, although AB led to greater reductions than AB Plus. These effects should be interpreted in light of the fact that about 40 percent of control group members obtained health insurance during the year (not shown in the table).
- **AB health care benefits improved health outcomes.** Increased use of health care and AB Plus medical case management were intended in part to improve health and functioning. The second panel of Table ES.1 shows that higher proportions of the AB and AB Plus groups than of the control group reported that their health was good or better than good. Results presented in the report confirm a range of positive effects on health from AB's health care benefits.
- **AB Plus services encouraged people to look for work but did not increase employment levels in the first year.** Members of the AB Plus group were more likely to use vocational rehabilitation and other job preparation services and were more likely to look for work than either the AB group or the control group. This was not true for the AB group. Despite this promising

The Accelerated Benefits Demonstration

Table ES.1

Summary of Estimated Effects Across Domains During the First Year of Follow-Up

Outcome	AB Plus Group	AB Control Group	AB Plus-Control		AB-Control		AB Plus-AB		
			Difference (Impact)	P-Value	Difference (Impact)	P-Value	Difference (Impact)	P-Value	
Direct outcomes									
Had a regular source of care (%)	89.2	90.7	77.7	11.5***	0.000	13.0***	0.000	-1.5	0.552
Had 3 or more visits	83.0	82.1	69.9	13.1***	0.000	12.2***	0.000	0.9	0.774
Had any unmet medical needs (%)	52.5	50.2	70.1	-17.7***	0.000	-20.0***	0.000	2.3	0.504
Total out-of-pocket medical expenditures (%)									
Less than \$1,000	47.5	56.8	35.4	12.1***	0.000	21.4***	0.000	-9.3**	0.012
\$1,000 to less than \$5,000	39.2	28.8	37.6	1.6	0.585	-8.9**	0.015	10.5***	0.004
\$5,000 or more	13.3	14.4	26.9	-13.7***	0.000	-12.5***	0.000	-1.2	0.687
Number of doctor visits	22.7	22.4	17.2	5.5***	0.000	5.2***	0.003	0.3	0.862
Mediating outcomes									
Good, very good, or excellent self-reported health (%)	28.0	31.7	21.3	6.6***	0.007	10.4***	0.001	-3.8	0.209
Received employment or vocational rehabilitation services (%)	9.0	3.6	4.9	4.1***	0.005	-1.3	0.468	5.4***	0.003
Ever looked for work (%)	15.5	10.5	12.5	3.0	0.142	-2.0	0.433	5.0**	0.046
Ultimate outcome									
Ever employed (%)	10.5	10.7	9.3	1.2	0.507	1.4	0.522	-0.2	0.921
Sample size (total = 1,360)	548	274	538						

(continued)

Table ES.1 (continued)

Outcome	AB Plus Group	AB Control Group	AB Plus-Control		AB-Control		AB Plus-AB		
			Difference (Impact)	P-Value	Difference (Impact)	P-Value	Difference (Impact)	P-Value	
<u>Died since random assignment^a (%)</u>	5.2	5.2	3.5	1.8	0.109	1.7	0.203	0.0	0.973
Sample size (total = 1,531)	611	305	615						

SOURCES: Calculations from responses to the Accelerated Benefits 12-month follow-up survey and Social Security Administration administrative data.

NOTE: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. For each comparison, a two-tailed t-test was applied to differences between outcomes for research groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Sample sizes may vary because of missing data.

^aThis measure is based on Social Security Administration administrative data and includes survey respondents (N = 1,360) and nonrespondents (N = 171). It shows only deaths that occurred within the one-year follow-up period.

intermediate result, the three groups had similar employment rates in the first year. Since looking for work is the first step toward returning to work, impacts on employment might emerge after the evaluation has ended. In addition, since the study period coincided with one of the deepest recessions in recent U.S. history, impacts on employment might emerge as the economy grows stronger.

- **Death rates were somewhat higher for program group members than control group members.** One note of caution is that, compared with the control group, more sample members in the AB and AB Plus groups died. In particular, 5.2 percent of the AB and AB Plus groups died within a year of random assignment, compared with 3.5 percent of the control group, although the study's sample size is too small for this difference to be statistically significant. Neither the demonstration's logic model nor prior evidence suggest that AB would increase death rates, and further analyses did not find an association between specific AB or AB Plus services and death. For these reasons, the research team concludes that the important difference in death rates between the AB and AB Plus groups and the control group is unlikely to represent a true effect of the AB interventions.
- **SSA's short-term investments might produce long-term savings, but it is too early to estimate these potential effects.** The AB health plan is projected to cost \$31,370 per program group member, and AB Plus services are projected to be over \$3,000 per AB Plus member. While the impacts described above are not substantial enough to cover these costs in the short term, they have the potential to generate cost savings in the future. Improved health and reduced unmet medical needs might result in savings for the Medicare and Medicaid programs once individuals leave the 24-month waiting period. Short-term improvements in health and increases in work preparation and job search might result in increases in long-term employment that reduce the cost of SSDI benefits. It is too early to know whether or how much will be saved through these avenues, but outcomes for study participants should continue to be followed so that those effects can be estimated.

Summary and Policy Implications

The results described above are promising. Health benefits not only substantially increased health care use but improved health, providing the most rigorous information to date on the link between health benefits and health. Employment-focused services delivered by tele-

phone increased the number of people preparing for work or looking for work by a substantial degree, given the low rates of employment among SSDI beneficiaries.

Nevertheless, some caution is in order because the results cover only the first year of the intervention, even though individuals were eligible for services for about 21 months, on average. This final report is being published before the program has ended in order to coincide with the end of the contracted evaluation led by MDRC and Mathematica. It will be important to use administrative records and follow the sample members beyond the demonstration period to determine whether there are long-term effects on employment that lead to reductions in SSDI benefits and whether increased health care use and improved health during the demonstration period result in reduced Medicare use later on. Such long-term effects could help recoup the costs of the program. In addition, administrative data should be used to track the death rates of sample members, to confirm that AB did not increase mortality.

It is also important to remember that AB Plus services were delivered by telephone. This was done because the research sample in any one location was too small to support the delivery of services at each location. Other interventions, including tests of care management and PGAP, have found stronger effects for other target populations when they were delivered in person, and it is possible that in-person delivery would have led to larger effects.

Finally, it is not clear how these results relate to what will happen under health care reform or if Congress votes to end the Medicare waiting period. It is likely that the effects of Medicare or Medicaid eligibility on health care use for the AB target population would be smaller than under AB, since those programs cover fewer services and often provide more limited access to health care. In addition, Medicare and Medicaid typically reimburse providers less than AB did, so costs might be lower than under AB, although neither Medicare nor Medicaid has a cap on benefit payments, as AB did. At the same time, the costs under AB likely understate the true costs of providing health care benefits to new SSDI beneficiaries, since the costs ignore the possibility that some individuals would drop private insurance if they could receive public insurance during the waiting period. Finally, it is important to remember that AB systematically excluded some key groups of SSDI beneficiaries. In particular, individuals receiving both SSDI and Supplemental Security Income were excluded, since most are insured through Medicaid, and limiting the study to individuals who had at least 18 months remaining in the Medicare waiting period left out those who take longer to be approved to receive SSDI benefits. Results presented in this report at best reflect what might happen to the group that was targeted for the study.

Despite these limitations, AB provides perhaps the most rigorous information to date suggesting that health care benefits can improve the health of a medically needy group. Longer-term follow-up would be needed to understand whether these effects last or translate into later effects on employment, SSDI benefits, and health care.

Chapter 1

Introduction and Policy Background

Many Social Security Disability Insurance (SSDI) beneficiaries have serious health care needs, but, under current law, most are not eligible for federally funded health care benefits through Medicare for a period of 24 months after they are entitled to cash benefits. During this “waiting period,” most beneficiaries have poor health and limited functioning, and their demand for health care is high: according to data from the 1994-1996 National Health Interview Survey, the average SSDI beneficiary makes 22 doctor visits and spends seven days hospitalized in the year after they begin receiving SSDI benefits.¹ Despite the need for health care, more than one in five new beneficiaries lack health insurance during this waiting period, and their health might suffer as a consequence.² In 1999, Congress provided the Social Security Administration (SSA) the authority to examine the effect of changing the waiting period. The result was the Accelerated Benefits (AB) Demonstration, a five-year study of whether a short-term investment in health care and related services for newly entitled SSDI beneficiaries leads to improved health, increased employment, and reduced reliance on SSDI benefits. MDRC led the evaluation of AB in collaboration with Mathematica Policy Research, Inc. This final report from the project describes all activities to date, including a summary of impacts one year following recruitment into the study.

Two versions of AB were tested. Both provided health care benefits to new SSDI beneficiaries who were without health insurance until they established eligibility for Medicare, which was generally 18 to 24 months. The second version of AB — called “AB Plus” — added three voluntary services delivered by telephone to help individuals navigate the health care system and to help them return to work if their health improved.

To measure the effects of the two interventions on outcomes for beneficiaries, AB used a rigorous random assignment research design. New SSDI beneficiaries without health insurance who consented to be part of the study were assigned at random to one of the following three research groups:

1. The AB group, which had access to the program’s health care benefits
2. The AB Plus group, which had access to the AB health care benefits and could use the other services delivered by telephone

¹Livermore, Stapleton, and Claypool (2009).

²Livermore, Stapleton, and Claypool (2009).

3. A control group, which could not receive AB health care benefits or AB Plus services but could obtain health insurance on their own

Random assignment ensures that any differences among the three groups when participants entered the study were due to chance and that any systematic differences that later emerged were most likely due to the program services being studied. Assigning individuals to three groups allows for three comparisons. First, comparing outcomes for the AB group and the control group provides an estimate of the effects of access to health benefits during the Medicare waiting period, because only one group was eligible for AB health benefits. Second, comparing outcomes for the AB Plus group and the control group provides an estimate of the effect of combining health benefits with AB Plus services. Finally, comparing outcomes for the AB Plus group and the AB group provides an estimate of the incremental effects of AB Plus services, above and beyond the effects of health care benefits.

As noted above, the primary purpose of AB is to determine whether the approach helps SSDI beneficiaries improve their health and return to work. At the same time, AB is the first random assignment study of the efficacy of providing health benefits and, therefore, has important implications for national disability and health policy. In particular, the recently passed federal health care reform (the Patient Protection and Affordable Care Act) is intended to greatly reduce the number of people without health insurance, in part by expanding Medicaid benefits to a higher income range. However, there is great uncertainty about how this will affect health care use or improve health outcomes. This is because prior studies of the effects of health insurance have used nonexperimental evidence, such as comparing outcomes for those with and without insurance. Because individuals with and without insurance might differ in many other respects, corresponding estimates have varied widely across studies.³ AB will inform policymakers by providing rigorous estimates of the effects of health care benefits for a group with substantial health care needs whose future counterparts are likely to qualify for Medicaid under the expansions implemented as part of health care reform.

A policy brief published in April 2010 describes the program's effects on study participants' health care use and unmet needs through six months.⁴ Through six months, AB health benefits substantially increased the use of a wide range of health care, including primary care, prescription medications, hospitalization, and emergency room use. In addition, AB health benefits significantly reduced the proportion of people reporting that they delayed or went without needed care. There were no significant differences in health care use between the AB and AB Plus groups, suggesting that AB Plus services did not substantially change health care use. Because the six-month survey included only 30 percent of the AB sample,

³Congressional Budget Office (2008).

⁴Wittenburg, Warren, Peikes, and Freedman (2010).

however, only very large differences between the AB and AB Plus groups would have been detected at six months.

The current report updates these results using a survey conducted about 12 months after individuals entered the study, and it shows the short-term effects of AB and AB Plus on health and functioning, preparation for work, and employment and other economic outcomes. Because it might take longer than a year for changes in employment to develop, however, the focus of the report is on health care use and health outcomes. In addition to describing the effects of the AB interventions, the report describes the implementation of AB health care benefits and AB Plus services, and it estimates the cost of providing the intervention.

This chapter sets the framework for the report by reviewing the background on employment among SSDI beneficiaries, giving an overview of the benefits and services provided under the demonstration, briefly describing how AB is being evaluated, and introducing the questions addressed by this report.

Work and SSDI

Although the core of AB is a test of health care benefits, the hope is that improved health will be a means of helping beneficiaries return to work. This is an important goal because 44 percent of the 7.8 million disabled workers who are receiving benefits⁵ — a number that more than doubled between 1993 and 2009 — would like to return to work.⁶ Although SSA has sought a range of methods to help beneficiaries reach that goal, the 2006 National Beneficiary Survey found that only 13 percent of SSDI beneficiaries work at all in a given year.⁷ Likewise, less than one-half of 1 percent of SSDI beneficiaries had their benefits terminated due to work in 2009, and only about 4 percent had their benefits terminated due to work within 10 years of beginning to receive SSDI.⁸ The hope underlying AB is that providing health care benefits soon after individuals suffer a disabling condition will help them obtain vital health care services that might improve their conditions or keep them from deteriorating. If AB can improve beneficiaries' health, then employment-related services provided through AB Plus might help them return to work and, ultimately, leave the SSDI rolls. Because returning to work is the ultimate goal of AB, this section provides some background on SSA's efforts to help beneficiaries return to work.

⁵Social Security Administration (2010a).

⁶Livermore, Stapleton, and Roche (2009).

⁷Livermore, Stapleton, and Roche (2009).

⁸Social Security Administration (2010a); Liu and Stapleton (2010).

Efforts to Encourage Work Among SSDI Beneficiaries

Because many beneficiaries would like to return to work but few do, SSA and others have tested a number of approaches to help people return to work. In the 1980s, the Structured Training and Employment Transitional Supports (STETS) and the Transitional Employment Training Demonstration (TETD) — which included large samples of SSDI and SSI beneficiaries — found that transitional employment supports increased employment and earnings among youth with disabilities, especially those with mental health disorders.⁹ To understand whether these types of supports would help a broader base of adult beneficiaries, SSA sponsored Project NetWork and the State Partnership Initiatives (SPI) in the 1990s. Project NetWork found that case management for SSDI beneficiaries who were interested in returning to work had modest effects on earnings that disappeared after two years.¹⁰ SPI tested return-to-work models that emphasized combining vocational approaches, work incentives, and improved information on work incentives. Four of the SPI demonstration projects were rigorously evaluated using a random assignment design, but only one project significantly increased employment.¹¹

In 1999, policymakers passed the Ticket to Work (TTW) program, which is a return-to-work program that targeted the vast majority of SSA disability beneficiaries. At the end of program rollout in September 2004, SSA had mailed Tickets to more than 11 million disability beneficiaries. TTW provides beneficiaries more choices for obtaining employment-related services and offers employment-support service providers new financial incentives to serve beneficiaries effectively and to help them leave the SSDI rolls. The initial findings from TTW indicate that the impacts on earnings and benefit amounts in the first year were small at best, in part because few beneficiaries used TTW services.¹²

As part of the Ticket to Work and Work Incentives Improvement Act of 1999, SSA recently initiated several return-to-work demonstration projects in addition to AB. Other projects in this group include the following:

⁹Kerachsky and Thornton (1987); Decker and Thornton (1995).

¹⁰Kornfeld, Wood, Orr, and Long (1999).

¹¹In total, there were four projects in three states (New York, New Hampshire, and Oklahoma) that included random assignment and targeted a mixture of SSI and SSDI program groups. The differences in the intervention approaches, target populations, and sample sizes make it difficult to directly compare the interventions across sites. In New York, one intervention included benefits counseling, and a second one included benefits counseling and employment supports). In the Oklahoma project, the intervention included benefits counseling, vocational services, and consumer control of services. Finally, in New Hampshire, the intervention included intensive benefits counseling, case management, and consumer direction of services. Peikes Orzoi, Moreno, and Paxton (2005) showed that projects in New York and Oklahoma had positive employment effects, though only the New York site that provided benefits counseling and employment services had statistically significant impacts. The New Hampshire site, which had a very limited sample (113 control group and treatment group members) had negative estimated impacts that are statistically significant.

¹²Thornton et al. (2007).

- The **Benefit Offset National Demonstration (BOND)** is testing the effects of a financial incentive combined with Work Incentive Counseling on employment and earnings of SSDI beneficiaries. Benefits are lost entirely under current rules if earnings exceed substantial gainful activity (SGA) for a long enough period. In 2010, SGA was \$1,000 per month for most SSDI beneficiaries. Under BOND, benefits will be reduced by \$1 with every \$2 of earnings beyond the SGA level. The target population will include SSDI beneficiaries in 10 sites across the country, and the demonstration is expected to start in spring 2011.¹³
- The **Mental Health Treatment Study (MHTS)** is testing the effects of supported employment and mental health treatments for SSDI beneficiaries with a primary diagnosis of schizophrenia or affective disorder in a select number of service areas. Recruitment of participants began in September 2006. The study remained in the field for three and a half years, and a final report is expected in spring 2011.¹⁴
- The **Youth Transition Demonstration (YTD)** is testing the effects of providing intervention services to youth with disabilities. The demonstration started in 2003 with seven projects in six states, and three of these projects were selected for a random assignment evaluation. During 2007, SSA added three new sites for random assignment evaluation. The target population for this study includes SSI beneficiaries and other at-risk youth ages 14 to 25. Fraker and Rangarajan provide a full summary of the planned evaluation and timeline.¹⁵

Why Health Care Benefits Might Help Individuals Return to Work

AB is one part of SSA's agenda to find interventions to assist people with disabilities in returning to work. The demonstration is unique in that it targets beneficiaries as they enter the program and it tests the provision of health care benefits. AB is motivated in part by a concern that being uninsured inhibits new SSDI beneficiaries from seeking care soon after they have suffered a disabling condition, which might cause their health to deteriorate. Immediate access to health care benefits might help them recover enough from their disability that they can return to work and reduce their need for SSDI benefits.

¹³For updates on BOND, see Social Security Administration (2010b).

¹⁴For updates on the MHTS, see Social Security Administration (2010c).

¹⁵Fraker and Rangarajan (2009); for updates on YTD, see Social Security Administration (2010d).

Although little is known about how the lack of health insurance affects SSDI beneficiaries, a growing body of evidence on other groups indicates that health care coverage can affect health care use and health status. More than one-third of the uninsured with serious health care needs (such as diabetes or hypertension) postponed or did not receive needed care.¹⁶ Becoming eligible for Medicare at age 65 increased the number of routine doctor visits and the use of preventive care for the previously uninsured.¹⁷ This is not to suggest that the uninsured do not use care, though. A summary of the evidence by the Congressional Budget Office estimates that they receive 60 percent as much care as people with health insurance.¹⁸

Unfortunately, it is difficult to conclude that health insurance improves health, since so few randomized trials have investigated this question. The RAND Health Insurance Experiment of the 1970s is often cited in this regard, but it assessed the effect of insurance generosity, not the effect of having any insurance at all. Additionally, beginning in 2008, the Oregon Health Study randomized Medicaid coverage to uninsured, low-income adults on a waiting list for one of its state programs, but it is too early to learn the effects of this insurance expansion.¹⁹

There is also evidence from previous nonexperimental studies that providing health care benefits can improve health outcomes, but drawing inferences from these studies is difficult because the insured and the uninsured may differ in many ways that are not affected by health insurance status.²⁰ The best studies have relied on variation in insurance status that is not affected by individual behavior. For example, 41 percent of patients who were terminated from regular outpatient care by the Seattle Veterans Affairs system reported being in much worse health afterward, compared with 8 percent of those who were not terminated.²¹ Using the fact that individuals become eligible for Medicare when they reach age 65, studies comparing individuals just under and over age 65 have found that Medicare has resulted in improved health, particularly among those with cardiovascular disease and diabetes.²² Highlighting the difficulty in accepting results from nonexperimental studies, other studies using different methods suggest that Medicare coverage for the elderly might or might not have significantly reduced mortality. For example, one study compared individuals just below and just above age 65 and found a 20 percent drop in seven-day mortality for elderly individuals admitted to the hospital,²³ while a second

¹⁶Cunningham and Kember (1998); Ayanian et al. (2000).

¹⁷Card, Dobkin, and Maestas (2008).

¹⁸Congressional Budget Office (2008).

¹⁹Allen et al. (2010).

²⁰Levy and Meltzer (2008). The alternative argument is made as well, albeit less frequently. For example, Fisher (2003) argues in an editorial piece that reducing highly invasive hospital care results in lower-quality care and that hospital-based care is dangerous if not necessary. Also, Gawande (2010) describes a study in which Medicare recipients with pancreatic cancer, lung cancer, or congestive heart failure lived several weeks longer, on average, if they chose hospice care rather than intensive hospital treatments.

²¹Fihn and Wicher (1988).

²²McWilliams, Meara, Zaslavsky, and Ayanian (2007).

²³Card, Dobkin, and Maestas (2007).

study found no evidence of a significant drop in age-adjusted mortality among the elderly overall, compared with the near-elderly in the 10 years after Medicare was introduced in 1965.²⁴ Despite the potential drawbacks of prior research, Levy and Meltzer conclude that “convincing evidence demonstrates that health insurance can improve health measures of some population subgroups,” although they also caution that those results might not generalize to other groups.²⁵

Overview of AB Benefits and Services

As noted above, the AB Demonstration is testing two versions of the intervention. AB included a health plan that covered up to \$100,000 in costs for health care services until participants were eligible for Medicare.²⁶ Through the health plan, participants had access to a network that included more than 450,000 health care professionals and 4,000 facilities, with providers in every state. In most cases, the health plan paid all costs for providers who were in the plan’s network of physicians and hospitals, after a copayment (that was, for example, \$12 for a doctor visit). The health benefit also covered specialized therapy and rehabilitation supports tailored to adults with disabilities.

AB Plus provided three additional sets of voluntary services delivered by telephone to help people return to work and to help them navigate the health care system. A *behavioral motivation program* called the “Progressive Goal Attainment Program” (PGAP) is a 10-week structured curriculum designed to change daily routines incrementally to increase the likelihood of undertaking a range of activities, including returning to work. *Employment and benefits counseling* helped individuals explore career options, prepare for work, and understand SSA work incentives. *Medical case management* helped AB Plus members navigate the health care system and obtain appropriate referrals to health care resources.

Overview of the Evaluation Design

The AB evaluation has three components: an implementation study, an impact analysis, and a cost analysis.

- The **implementation analysis** describes how the AB health plan and AB Plus services were implemented, including recruitment, engagement, service use, and operational challenges.

²⁴Finkelstein and McKnight (2008).

²⁵Levy and Meltzer (2008), p. 399.

²⁶AB developed its own health care plan rather than enrolling individuals in Medicare to encourage health care use by offering lower cost-sharing and to cover rehabilitation supports that might help individuals return to work.

- The **impact analysis** estimates the effects of the AB and AB Plus interventions on sample members' use of health services, health, employment, disability benefits, and quality of life.
- The **cost analysis** examines the costs to SSA of providing the AB and AB Plus interventions. Because the benefits of AB might extend far into the future, a full cost-benefit analysis is not presented in this report.

Target Population

The study was targeted to those who were most likely to benefit from AB. To focus on a group with the greatest need for health care benefits, study participants could not have health insurance at the time of random assignment. To provide benefits as soon as possible after the onset of their disability, individuals had to have at least 18 months from the time they entered the study until they were eligible for Medicare.²⁷ To focus on a group who were most likely to return to work, they had to be between 18 and 54 years old. Finally, to ensure that enough study participants could be recruited for the study and could be provided the full AB program before the study's end, individuals were recruited from the 53 metropolitan statistical areas with the most new SSDI beneficiaries. From October 2007 through January 2009, 1,997 individuals meeting these criteria consented to be in the study and were assigned to the control group (986 individuals), the AB group (400 individuals), or the AB Plus group (611 individuals).²⁸

Overview of Expected Effects

AB health benefits and AB Plus services were expected to affect a number of outcomes. As shown in Figure 1.1, these outcomes can be divided into the direct targets of the intervention, mediating outcomes that might lead to longer-term effects, and the ultimate goals related to employment and SSDI benefits.

- **Direct outcomes.** AB should have immediately increased the percentage of study participants who had health care coverage, which, in turn, should have helped them use health care, reduced reported unmet medical needs, and reduced out-of-pocket expenses for health care. AB Plus medical case management could also have altered the use of health care and reduced unmet

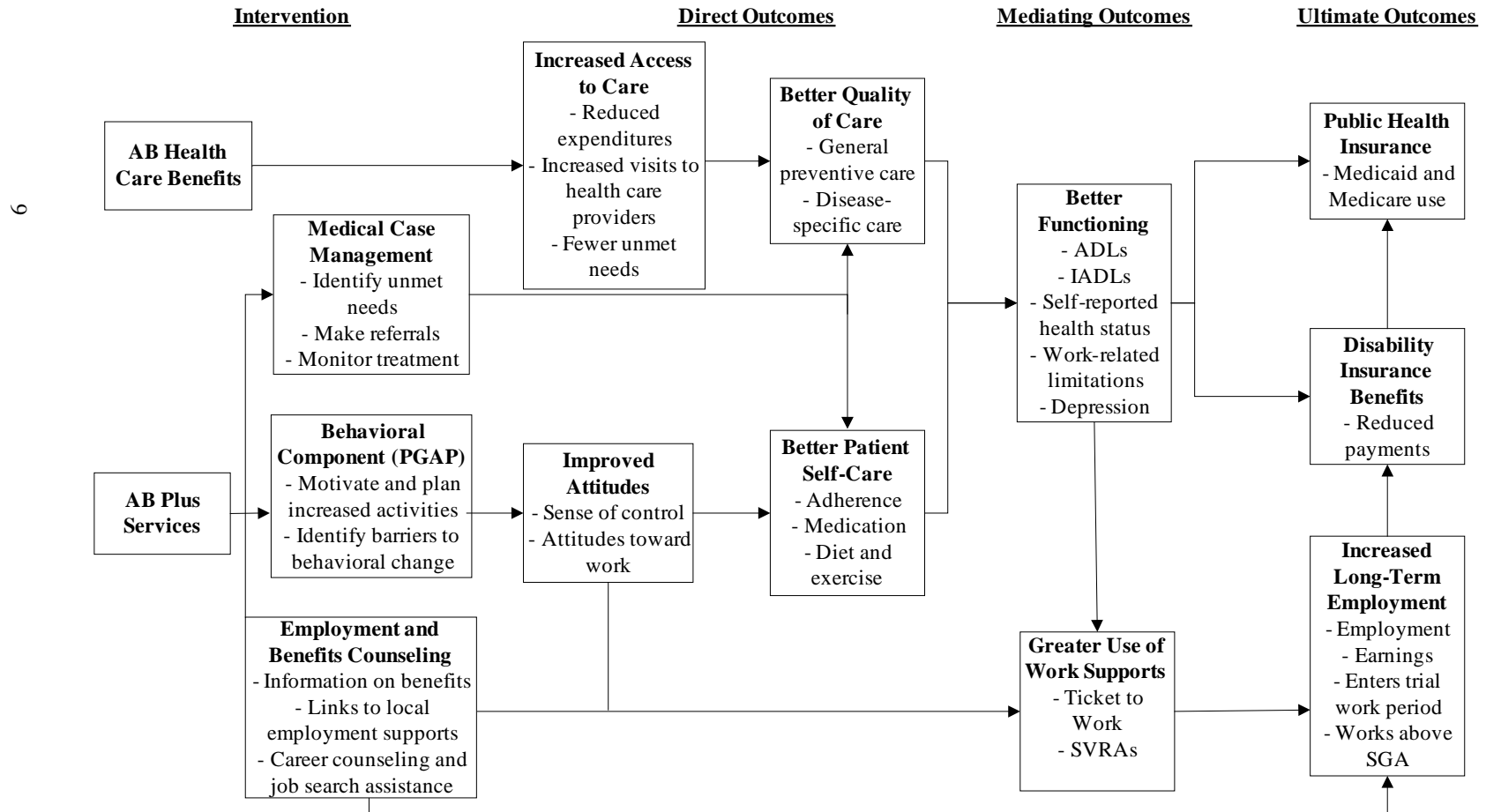
²⁷At the time individuals were targeted for recruitment, all sample members had at least 18 months left until they would be eligible for Medicare. Since locating and recruiting people could take several months, several people entered the study with fewer months left in the waiting period.

²⁸An additional eight people were randomized but later found to be ineligible for the study and therefore removed from the sample. Seven were later determined by SSA to have been ineligible for the SSDI program because they earned more than SGA during the five-month period before they could receive cash assistance. The eighth person was removed because it was later determined that she was insured at the time of randomization.

The Accelerated Benefits Demonstration

Figure 1.1

Anticipated Flow of Outcomes in AB and AB Plus



medical needs. Although it might seem obvious that providing health care benefits will increase health care coverage and health care use, the effects will be reduced if control group members were able to gain access to other health insurance, such as private insurance or Medicaid,²⁹ and if control group members were able to use health care even without health insurance (for example, through public clinics or charitable services or by paying for care themselves).

- **Mediating outcomes.** By increasing health care use, AB could have improved the health of treatment group members, which, in turn, could have increased short-term employment and promoted the use of employment supports outside those provided through AB. In addition, AB Plus services might have encouraged or helped people to use vocational rehabilitation services or other local services to help them find work. Improved health and increased use of employment supports, in turn, could have resulted in increased efforts to find work. Although improved health and functioning are important goals, they are considered mediating outcomes within the evaluation because they are a means of achieving AB's longer-term goals of increased employment and reduced SSDI receipt.
- **Ultimate outcomes.** The ultimate objectives of AB are to increase employment and reduce SSDI payments. In addition, AB might reduce costs associated with Medicare and Medicaid after the waiting period has ended. These effects are unlikely to be seen in the period covered by this report, however. For example, an individual would have to earn more than the SGA level for nearly the entire year after random assignment before benefits were reduced. Likewise, Medicare use cannot decrease during the period covered in this report because individuals are still waiting to become eligible for Medicare. Although employment could increase during the first year, individuals had to show that they could not undertake substantial gainful activity for at least a year in order to be approved to receive SSDI benefits. Thus, few individuals were likely to be able to return to work during the year after random assignment. In addition, the logic behind AB suggests employment will not increase until after individuals see improved health or employment-related assistance from AB Plus services. Effects on employment might also be small

²⁹Medicaid is a needs-based, state-administered public health insurance program for low-income families and individuals such as recipients of Temporary Assistance for Needy Families (TANF) and Supplemental Security Income (SSI). By contrast, Medicare is a federally-administered public health insurance program for retirees, SSDI beneficiaries, and their survivors. While Medicaid receipt is limited to individuals with low income and few assets, Medicare is not.

because the country entered a deep and prolonged economic downturn soon after recruitment began. This report consequently does not focus on these ultimate outcomes, although it does present estimated short-term effects on employment.

Data Sources

To measure outcomes for the impact and cost analyses and to describe the implementation of AB and AB Plus services, this report uses the data sources described below.

- **SSA administrative data.** SSA administrative data were used to determine who might be eligible for the study based on where they lived, their age, and when they would become eligible for Medicare. Administrative data also provided information on characteristics of sample members, particularly the primary disabling condition. Finally, SSA data provided information on Medicare eligibility and on who died during the intervention period.
- **Baseline survey.** Just prior to random assignment, individuals completed a baseline survey by telephone. It captured information on health insurance, health and functional status, use of medical services, unmet medical needs, employment history and use of employment supports, household composition and income, marital status, and education level.
- **Follow-up survey.** The 12-month survey — which is the main source of the impact analysis presented in this report — included questions about health insurance, health care use, unmet medical needs, physical and mental health and functioning, employment and use of employment supports, income, and material hardship. The 12-month survey was completed by 1,519 sample members (a response rate of 88.2 percent).
- **Health claims data.** For members of the AB and AB Plus groups, the plan administrator sent MDRC aggregate and individual-level enrollment and health benefits claims data that include the (1) date of claim, (2) date of service, (3) provider type, (4) diagnosis code, (5) medical service code, (6) amount charged for service, (7) amount paid, and (8) enrollee's copayment amount.
- **AB Plus management information system: OneCareStreet.** The demonstration used OneCareStreet to facilitate communication among AB Plus staff. AB Plus staff compiled the following information for each AB Plus group member: (1) number of contact attempts and successful contacts, (2)

date and type of AB Plus services used, and (3) time spent in contact with or preparing for contact with AB Plus group members or in consultation with third parties, such as doctors. OneCareStreet was also used by staff to record detailed case notes.

- **Meetings and document review.** Members of the implementation analysis team participated in regular discussions with AB Plus staff, a psychiatrist and a psychologist who helped design the AB Plus intervention, the health plan administrator, and AB Plus staff.³⁰ These meetings provided insight into how the intervention was developed and offered regular status updates as the intervention was implemented. Documents that are relevant to implementation were reviewed as well and include a report on the early implementation of program services; the AB Plus handbook, which contains protocols and tools used by program staff; the PGAP curriculum; meeting minutes; and progress reports to SSA.
- **Interviews with service providers.** Telephone interviews were conducted with the AB health plan administrator and AB Plus staff as well as select members of the intervention design team. The interviews took place during the spring of 2010 and were driven by a semi-structured interview protocol. Topics included the design and goals of the intervention, strategies for engaging participants, challenges encountered in engaging participants, service delivery, service coordination, overall impressions, and lessons learned.

Questions Addressed by This Report

This report presents the study's findings through 12 months in order to address the following questions.

- *What are the characteristics of the uninsured new SSDI beneficiaries who were enrolled in the study, and how do they compare with the characteristics of SSDI beneficiaries more broadly?* These questions are addressed in Chapter 2, which describes how individuals were recruited and what they looked like when they entered the study.
- *How were AB health care benefits implemented? What issues arose during implementation and how were they addressed? How much did program group members avail themselves of these health care benefits?* These ques-

³⁰Greg Simon is a psychiatrist at Group Health Cooperative in Seattle, and Michael Sullivan is Professor of Psychology at McGill University and the developer of PGAP.

tions are addressed in Chapter 3, which describes the AB health care benefits and how they were implemented.

- *What services were included in AB Plus? How were services changed in response to challenges that arose during the demonstration? And how many individuals received the different types of services?* These questions are addressed in Chapter 4, which describes the implementation of AB Plus services.
- *What are the effects of health care benefits and the incremental effects of AB Plus services on health care use, unmet medical needs, and health and functioning?* These questions are addressed in Chapter 5.
- *Did the two versions of the intervention affect economic outcomes, such as efforts to find work, employment, and the ability to pay for basic necessities?* This is the question addressed in Chapter 6.
- *How much did it cost to deliver AB and AB Plus?* This is the question addressed in Chapter 7, which presents estimates of the costs of the intervention during the study period and discusses additional data that can be collected to monitor longer-term effects that might produce cost savings.

Although this is the final report of the demonstration project, it is still too early to draw conclusions about the ultimate effectiveness of the AB and AB Plus interventions. The 12-month interview was conducted in the middle of the intervention period, which lasted 15 to 28 months, depending on the length of time between random assignment and when individuals became eligible for Medicare. As a result, the report can only describe the program's early effects on health and employment, which might have changed during the second half of the intervention period. Perhaps more important, this report was written as individuals were becoming eligible for Medicare, and so longer-term follow-up is needed in order to understand whether — after the intervention ends — AB will start to pay for itself through reduced Medicare costs and reduced SSDI benefits.

Chapter 2

Recruitment and Characteristics of the Research Sample

This chapter summarizes the process used to screen and enroll Social Security Disability Insurance (SSDI) beneficiaries into the Accelerated Benefits (AB) Demonstration. It describes the characteristics of the research sample members and includes a description of who was eligible, how they were recruited, and how recruitment changed over the course of the project. To provide context for understanding who was recruited into the study, the chapter concludes by comparing the AB sample members with other new SSDI beneficiaries.

Findings in Brief

Random assignment for AB took place between October 2007 and January 2009 in 53 metropolitan areas in the United States. During that period, a total of 1,997 beneficiaries were randomly assigned to one of three research groups described in Chapter 1: 400 to the AB group, 611 to the AB Plus group, and 986 to the control group. Budgetary pressures required the team to end random assignment to AB Plus in November 2008, however, after which individuals were assigned to only the AB group and the control group. In this report, the primary sample used in the impact analysis includes the 1,531 individuals who were randomly assigned through November 6, 2008. Impact estimates using the full sample are available in Appendix K.¹

The demonstration sample represents a unique segment of SSDI beneficiaries who were in very poor health and reported high rates of unmet medical needs, suggesting a strong potential demand for the AB health plan. Members of this group are also likely to be very difficult to employ, since few were working at baseline and they were recently determined to be unable to perform substantial gainful activity — a condition of eligibility for SSDI benefits. Relative to all new SSDI beneficiaries, the AB sample members were younger on average, more likely to have a nervous system impairment, less likely to have a musculoskeletal impairment, and more likely to live in areas of the country with high uninsurance rates.

Recruitment of Sample Members

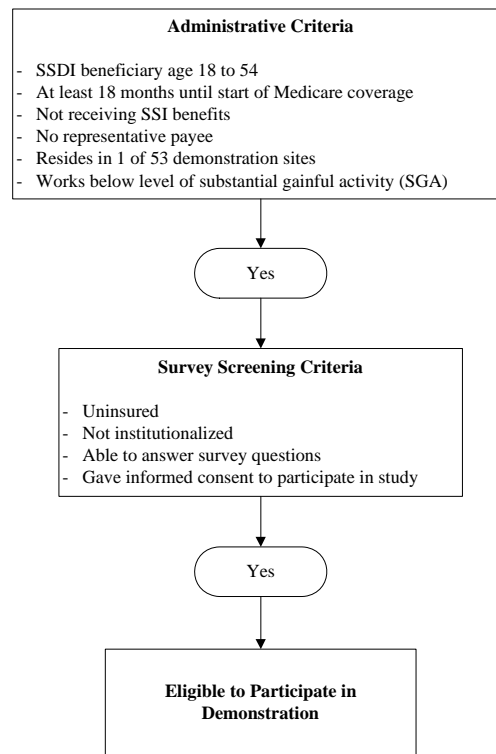
Figure 2.1 shows that the recruitment of sample members began by identifying a pool of potentially eligible SSDI beneficiaries. For this purpose, the Social Security Administration (SSA) provided the AB team with lists of newly entitled SSDI beneficiaries at the initial level of determination (rather than those who were approved to receive benefits after an appeal), who

¹Appendix material is presented in Volume 2 and is listed in this volume directly before the References.

The Accelerated Benefits Demonstration

Figure 2.1

The Process of Determining Eligibility for the AB Demonstration



were age 18 through 54, who had at least 18 months before their first date of entitlement to Medicare coverage, and who resided in one of the 53 metropolitan areas included in the demonstration.² Two categories of beneficiaries were excluded from this list: (1) those concurrently

²SSA has a multilayered appeals process that includes a reexamination by officials not involved in the initial determination; a review by an administrative law judge (ALJ); and, finally, appeals to the courts. The research sample for this demonstration includes only those accepted at the initial determination because of the demonstration requirement to have at least 18 months of time before the start of Medicare eligibility. As part of ongoing sample monitoring, sample members who met the initial eligibility criteria had to meet ongoing eligibility criteria to ensure that they would be exposed to a minimal dose of services. Specifically, the survey team removed sample members who had fewer than 15 months before their Medicare eligibility start date. This criterion essentially eliminated beneficiaries who could not be contacted for the survey for several months. To

receiving Supplemental Security Income (SSI), because most within this group qualified for health coverage through Medicaid; and (2) those with a representative payee (a person or organization that receives payments for a beneficiary who is unable to handle his or her own funds), because they would be less likely to be able to provide informed consent to participate.

SSDI beneficiaries who met the requirements above were contacted for a brief telephone survey about their current sources of health care coverage. Respondents who reported no source of coverage were eligible and were asked to provide consent to participate in the demonstration. Those who resided in institutions or had cognitive or physical impairments were excluded at this stage because they would not have been able to provide informed consent and respond to survey questions on their own. Respondents who consented to participate completed the full baseline survey and were subsequently randomly assigned to one of the three research groups: AB, AB Plus, or the control group.

The original goal of the demonstration was to recruit 2,000 beneficiaries and to assign 40 percent (800 beneficiaries) to the AB Plus group, 40 percent (800 beneficiaries) to the control group, and 20 percent (400 beneficiaries) to the AB group. Michalopoulos et al. showed that this sample size provided enough statistical power to detect policy-relevant impacts on health care use, employment, and SSDI receipt across each of the research groups.³

Random assignment began in October 2007 with a pilot phase (called “Phase 1” in this report) that included limited enrollment and random assignment of 64 new SSDI beneficiaries (12 in AB, 25 in AB Plus, and 27 in the control group).⁴ Phase 1 met three goals: (1) it provided information on how many beneficiaries were likely to be eligible for the study and their characteristics — information that was not available prior to the study but was needed to determine how many metropolitan areas to include; (2) it allowed the study team to test enrollment procedures; and (3) it allowed the demonstration to ensure that AB health benefits and AB Plus services were being delivered as intended. Beneficiaries in Phase 1 were recruited from four metropolitan areas: Houston, Minneapolis, New York, and Phoenix.⁵ Although most new beneficia-

ensure that sample members would finish their participation in services by the contract end date (January 2011), the survey team also excluded beneficiaries who became entitled to Medicare after December 2010.

³For example, according to the original power calculations, Michalopoulos et al. (2008) projected that, for comparisons of the AB group and the control group, the demonstration sample was likely to detect impacts of approximately 3 percentage points for medical improvement outcomes and of 5 percentage points for employment outcomes.

⁴During Phase 1, 66 individuals were randomized to the three groups. Subsequently, two of these individuals were determined not to have been eligible for SSDI and were removed from the sample.

⁵Metropolitan areas in Phase 1 were selected using a “consolidated metropolitan statistical area” (CMSA) definition, which includes areas that have a population of 1 million or more and which also contains separate component areas called “primary metropolitan statistical areas” (PMSAs). A PMSA is an urbanized county or set of counties that have strong social and economic ties to neighboring communities.

ries (84 percent) had medical coverage, enrollment targets were quickly met because all beneficiaries who did not have medical coverage consented to participate in the demonstration.⁶

Based on results from Phase 1, the research team and SSA decided that full rollout would take place in the 53 metropolitan areas with the largest number of new SSDI beneficiaries. (See Figure 2.2.) This number of areas was chosen to allow 2,000 beneficiaries to be recruited into the study and to be provided benefits before the demonstration's end in January 2011. In addition, the number of locations was kept to a minimum to allow services to be provided efficiently. For example, AB was limited to larger areas because the AB health care network was not available for some of the less populated areas in the United States and because employment and benefits counselors needed to become familiar with services that were available in the beneficiary's region. At the same time, including 53 metropolitan areas came close to filling SSA's needs for a nationally balanced sample, although the selected sites were not entirely nationally representative.

Recruitment for full rollout (called "Phase 2" in this report) began in March 2008. During this phase, between 20 and 65 new beneficiaries were recruited from each site.⁷ After the first few months of Phase 2, Buffalo and Boston were dropped from further recruitment, as they were unlikely to meet the threshold. In Buffalo, the uninsurance rate was under 4 percent, and, as a result, the site was unlikely to provide enough sample members. Boston was dropped when Massachusetts passed a law requiring all residents to have health insurance.⁸

Due to higher-than-expected health care costs for AB Plus members, SSA ordered a stop to random assignment to the AB Plus group in November 2008.⁹ A total of 1,531 individuals had been randomly assigned before this change in sample intake: 611 to AB Plus, 305 to AB, and 615 to the control group. The period of full-scale random assignment before this

⁶Wittenburg, Baird, Schwartz, and Butler (2008).

⁷Because uninsurance rates were expected to vary widely across sites based on the experience in Phase 1, the survey team set minimum (20) and maximum (65) limits on the number of sample members per site. The lower bound was set to avoid using extensive survey resources to screen out ineligible cases. The upper bound was set to avoid clustering sample members in sites that had high uninsurance rates.

⁸Wittenburg, Baird, Schwartz, and Butler (2008); Wittenburg, Warren, Peikes, and Freedman (2010).

⁹At the start of the demonstration, there was no information on the potential health care use of the eligible population. Consequently, the demonstration's original budget was based on Medicare projections for the average SSDI beneficiary, which was considered to be the closest proxy for the potential health claim costs of the treatment groups. While there were differences between the AB health plan and Medicare (discussed in Chapter 3), these assumptions appeared to be a reasonable starting point. However, as is described below in this chapter and in Chapter 3, the AB sample differs from the SSDI population along several dimensions (for example, differences in impairment), which could have led to the higher-than-expected health claim costs. Because the AB Plus sample targets were higher than the AB targets, a decision was made to cut the AB Plus sample and retain the AB targets, to ensure adequate power to detect impacts for the AB group.

The Accelerated Benefits Demonstration

Figure 2.2

The 53 Primary Metropolitan Statistical Areas Included in the AB Demonstration



change in recruitment is called “Phase 2a.” After Phase 2a, recruiting targets were revised so that the overall size of the demonstration would remain at 2,000. As previously, 20 percent of sample members were randomly assigned to the AB group, but now 80 percent were assigned to the control group. After the change in recruitment — a period referred to as “Phase 2b” — 95 individuals were assigned to the AB group, and 371 were assigned to the control group.

Intake ended in January 2009 with a total sample of 1,997 beneficiaries. Table 2.1 shows the number of sample members assigned to each study group across Phases 1, 2a, and 2b. Overall, the demonstration consisted of 400 in the AB group, 611 in the AB Plus group, and 986 in the control group.¹⁰

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Table 2.1

Summary of Research Group Sizes

Sample	Random Assignment Dates	AB Plus Group	AB Group	Control Group	Total
Phase 1	October-November 2007	25	12	27	64
Phase 2a	March-November 2008	586	293	588	1,467
Phase 2b	November 2008 - January 2009	0	95	371	466
Full research	Phases 1, 2a, and 2b	611	400	986	1,997

SOURCE: Calculations from random assignment data.

NOTE: Random assignment into the Phase 2a sample concluded on November 6, 2008. Random assignment into the Phase 2b sample began on November 7, 2008.

One implication of the change in random assignment is that three-way comparisons across all three research groups can be made using members recruited only in Phases 1 and 2a.

¹⁰The reduction in the sample size for the AB Plus group results in a loss of statistical power for the evaluation, though the sample sizes are still sufficiently large for detecting policy-relevant impacts on health care use, employment, and SSDI receipt outlined in Michalopoulos et al. (2008). For example, the revised sample size of the AB Plus group is still larger than that of the AB group, which was determined to be large enough to detect policy-relevant impacts. The primary drawback is that the reduction in sample size limits the power to detect impacts for some planned AB Plus subgroups (such as subgroups analyzed by impairment).

Because Phase 2b did not include random assignment to the AB Plus group, the control group in Phase 2b cannot be compared directly with AB Plus for these cases. However, comparisons between the AB group and the control group can be made using the full sample.

Recruitment succeeded because of high contact and participation rates. Administrative data provided by SSA identified 22,612 beneficiaries as potentially eligible for the study. Survey staff contacted 82 percent of this group (18,545 beneficiaries) by telephone between October 2007 and January 2009. Of those, 94 percent (17,444) completed the screener, of which 1,290 were ineligible for the study for reasons unrelated to their insurance status. Of the remaining 16,154 beneficiaries, 2,049 (12.7 percent) were uninsured and therefore eligible for the demonstration. Of the eligible beneficiaries, 2,022 consented to participate (99 percent), and, of these, 2,004 completed the baseline interview and were randomly assigned (99 percent). The final sample eventually consists of 1,997 sample members, as seven were no longer eligible for SSDI by the time of enrollment.

Figure 2.3 shows that uninsurance rates among screened beneficiaries ranged from 4 percent in Buffalo to 22 percent in Oklahoma City. In general, the highest uninsurance rates were concentrated in southwestern sites (Oklahoma City, Houston, and other areas in Texas), and the lowest rates were in northeastern, northern, and western sites (Buffalo, Boston, and multiple sites in California). This pattern is consistent with those reported by the Kaiser Family Foundation for the general population, except that California has a high uninsurance rate in the general population.¹¹ However, there was also variation across areas within the same state. For example, California sites generally had low uninsurance rates, but 13 percent of beneficiaries in San Diego were uninsured. While Texas sites generally had high uninsurance rates, only 11 percent of beneficiaries from San Antonio lacked insurance.

Characteristics of Sample Members at Baseline

Table 2.2 summarizes sample members' characteristics across such domains as health, medical coverage and care, employment, demographic and socioeconomic traits, and enrollment information, using data from SSA administrative records and the AB baseline survey. This is one of the few sources of information on new SSDI beneficiaries who lack health coverage. The data also provide an indication of program members' potential demand for demonstration services at baseline. Finally, comparisons of characteristics across the three research groups are helpful to assess whether any differences exist despite the use of random assignment.¹² (Box 5.1 in Chapter 5 explains how impact estimates are measured and presented in the tables of this report.)

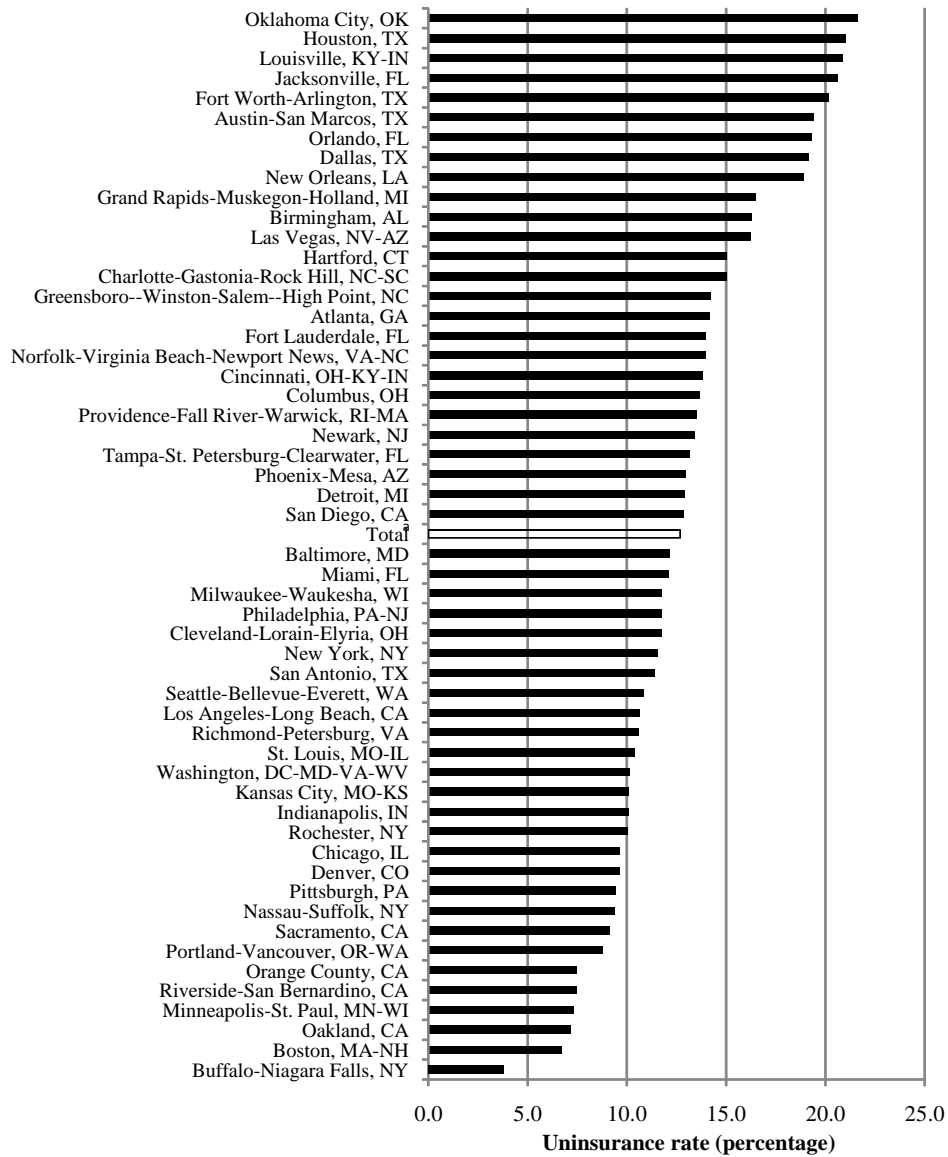
¹¹For a map of uninsured beneficiaries in the general population, see The Kaiser Family Foundation (2008).

¹²Appendix A presents characteristics of individuals who were randomly assigned through Phase 2a — the data which are used for the impact analyses in Chapters 5 and 6.

The Accelerated Benefits Demonstration

Figure 2.3

Uninsurance Rates Among Screened Beneficiaries in 53 Sites



NOTES: "The total bar represents the uninsurance rate among all screened beneficiaries (12.7 percent).

The 53 sites for the AB demonstration were based on the Primary Metropolitan Statistical Area definition used in the 1990s. "Uninsurance rate" refers to the proportion of uninsured beneficiaries to total beneficiaries screened (uninsured beneficiaries plus insured beneficiaries). Early in Phase 2a, recruiting was stopped in two sites: (1) Buffalo, where there was very limited potential to recruit sample members due to the low uninsurance rate, and (2) Boston, where recruitment was terminated because of the state health insurance requirement for all persons.

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Table 2.2

Selected Characteristics at Baseline of Sample Members Randomly Assigned
from October 10, 2007, Through January 21, 2009, by Research Group

Characteristic	AB Plus Group	AB Group	Control Group	Total	P-Value
<u>Health and functional limitations (%)</u>					
Primary diagnosis					0.340
Mental disorders (excluding retardation)	20.1	22.8	22.8	22.0	
Neoplasms	10.6	8.3	6.7	8.2	
Diseases of the:					
Circulatory system	11.9	10.5	11.8	11.6	
Musculoskeletal system and connective tissue	18.7	19.3	19.9	19.4	
Nervous system and sense organs	15.5	16.5	17.7	16.8	
Other	23.1	22.8	21.1	22.0	
Difficulty with any instrumental activities of daily living	94.3	93.5	94.4	94.2	0.798
Difficulty with any activities of daily living (ADLs)	27.8	29.5	29.4	28.9	0.764
Self-reported general health					0.592
Good, very good, or excellent	18.7	21.1	17.2	18.4	
Fair	34.4	33.8	35.2	34.7	
Poor	47.0	45.1	47.6	46.9	
Obese (Body Mass Index of 30 or higher)	45.8	45.3	43.6	44.6	0.656
<u>Medical coverage and care (%)</u>					
Date of last health insurance coverage					0.495
Less than 6 months ago	36.9	40.3	34.1	36.2	
6 months to less than 1 year ago	25.7	23.7	27.7	26.3	
1 year ago or more	33.6	32.2	34.4	33.7	
Never insured	3.8	3.8	3.9	3.9	
Number of months until Medicare-eligible					** 0.030
15-17	15.9	18.0	16.7	16.7	
18-24	73.2	72.0	76.6	74.6	
25-28	11.0	10.0	6.7	8.7	
In the past 6 months:					
Any unmet medical need	71.2	69.8	69.9	70.3	0.829
Any unmet prescription need	69.6	69.3	70.5	70.0	0.872
Seen or talked to a doctor	79.7	84.5	80.7	81.2	0.146
Any emergency room visits	38.8	44.8	42.4	41.8	0.144
Spent one night or more in the hospital	32.0	30.4	29.7	30.5	0.618
Any nursing home stays	5.2	8.3	6.2	6.3	0.147
<u>Employment (%)</u>					
Currently working	4.3	5.3	5.1	4.9	0.701

(continued)

Table 2.2 (continued)

Characteristic	AB Plus Group	AB Group	Control Group	Total	P-Value
<u>Demographic and socioeconomic data</u>					
Total annual household income (%)					0.993
Less than \$20,000	38.0	36.9	37.7	37.6	
\$20,000 to less than \$40,000	37.3	38.5	38.2	38.0	
\$40,000 or higher	24.7	24.5	24.1	24.4	
Not living with spouse/partner (%)	51.9	53.4	56.2	54.3	0.230
Highest education (%)					0.379
General Educational Development (GED) certificate	7.4	7.0	6.7	7.0	
High school diploma	53.5	51.3	50.6	51.6	
Technical certificate/associate's degree/2-year college program	9.7	13.0	9.2	10.1	
4 years (or more) of college	8.0	8.3	9.9	9.0	
None of the above	21.4	20.5	23.7	22.4	
Average age (years)	47.3	46.3	46.6	46.8*	0.055
Under 50 years old (%)	49.8	51.3	49.1	49.7	0.766
Female (%)	47.5	52.0	50.5	49.9	0.316
White race/ethnicity (%)	60.8	58.3	56.9	58.4	0.312
Census region (%)					0.482
South	48.0	44.0	47.0	46.7	
Northeast	16.4	17.8	14.9	15.9	
Midwest	17.3	21.5	19.0	19.0	
West/Pacific	18.3	16.8	19.2	18.4	
<u>Enrollment data (%)</u>					
Month of random assignment ^a					*** 0.000
October 2007	3.8	2.5	2.4	2.9	
November 2007	0.3	0.5	0.3	0.4	
March 2008	7.0	5.5	4.5	5.5	
April 2008	12.3	9.3	7.7	9.4	
May 2008	13.7	10.5	8.5	10.5	
June 2008	11.8	8.5	7.1	8.8	
July 2008	12.3	10.3	7.7	9.6	
August 2008	12.8	9.5	7.8	9.7	
September 2008	12.4	9.5	7.9	9.6	
October 2008	11.9	9.3	7.3	9.1	
November 2008	1.6	9.3	15.1	9.8	
December 2008	0.0	11.3	17.6	11.0	
January 2009	0.0	4.3	6.0	3.8	
Sample size	611	400	986	1,997	

SOURCES: Calculations from AB baseline survey data and Social Security Administration administrative data.

NOTES: A chi-square test for categorical variables and a t-test for continuous variables were run to determine whether there is a difference in the distribution of the characteristics across research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent. Sample sizes may vary because of missing data.

^aRandom assignment into the AB Plus group ended on November 6, 2008.

According to SSA's primary diagnosis designation (the first panel of Table 2.2), sample members at baseline had a wide range of mental and physical impairments, indicating a potential need for a variety of health supports. The most common primary diagnoses include mental disorder (22.0 percent); diseases of the musculoskeletal system (19.4 percent), nervous system (16.8 percent), or circulatory system (11.6 percent); and neoplasm (usually cancer, 8.2 percent).

Almost all sample members reported a significant health issue, which is not surprising, given SSDI program eligibility requirements. Nearly all (94.2 percent) reported some type of functional limitation that affects their instrumental activities of daily living, such as preparing meals, taking medications, and using the telephone. A substantial minority (28.9 percent) reported very serious limitations that prevented them from performing basic daily activities, such as getting in or out of a bed or chair (the most commonly reported problem), using the toilet, or eating. Nearly half the sample (46.9 percent) reported being in poor health, and a similar percentage (44.6 percent) also indicated being obese.

While only 3.9 percent of sample members reported never having been insured, 60.0 percent reported being uninsured for the past six months or longer (the second panel of Table 2.2). Sample members in all three research groups had high rates of unmet medical needs, such as forgoing medical care or tests in the previous six months (70.3 percent), a reflection of both their poor health status and their lack of coverage for care. A similar percentage also reported that they had not received or had taken less than their prescribed dose of prescription drugs. These findings indicate that many program members had pent-up demand for health services at the time of random assignment, given the long gaps since their last period of coverage.

However, sample members did not go completely without care. A large majority (81.2 percent) told interviewers that they had seen or talked with a doctor in the previous six months, and a substantial minority (30.5 percent) were hospitalized in the previous six months. Hence, sample members received a limited amount of care and prescription drugs that they could afford. A similar pattern of use of medical services and unmet medical needs was found among a sample of new SSDI beneficiaries without coverage during the mid-1990s.¹³ These findings also indicate that, despite being uninsured, some control group members would continue to use at least some health services during the demonstration.

Employment rates of sample members were low (4.9 percent), which is consistent with the serious health limitations noted above and SSDI program eligibility requirements that require the person to be unable to perform substantial gainful activity in order to qualify for benefits. Additionally, sample members were 46.8 years old, on average, at the time of random assignment, and approximately half were younger than 50 years.

¹³Livermore, Stapleton, and Claypool (2009); Riley (2006).

Sample members' income and family status partly explain why many struggled with unmet medical and prescription drug needs. Annual household incomes were less than \$20,000 for nearly 40 percent of sample members, and over half were living without a spouse or partner and therefore were lacking immediate access to a significant other's financial and emotional support, compared with the rest of the sample.

Overall, there were few systematic differences in baseline characteristics across the research groups, which is consistent with random assignment. The only notable difference is that a higher proportion of the AB Plus group had a primary diagnosis of neoplasm (cancer) than the AB or control groups (10.6 percent, compared with 8.3 percent and 6.7 percent).¹⁴ This is notable because individuals with neoplasm face unique risks (such as a higher probability of death) and likely will use the health plan in specific expensive ways. The estimated impacts reported in Chapters 5 and 6 adjust for this and other differences in baseline characteristics and test the sensitivity of the findings to the exclusion of the neoplasm subgroup.¹⁵

Comparison of Sample Members and the New SSDI Beneficiary Population

According to SSA administrative data presented in Table 2.3, the study sample differed from the broader population of all newly awarded beneficiaries in 2008; these differences were mainly due to the criteria used to identify the target sample for the demonstration. Reflecting the demonstration's age cap of 55 years, more sample members (49.7 percent) than new beneficiaries (42.6 percent) were under age 50 and therefore might be expected to have a greater chance of returning to work.¹⁶ Sample members were also less likely than new SSDI beneficiaries to have a musculoskeletal impairment (19.4 percent and 30.0 percent, respectively) but were more likely to have a disease of the nervous system or sense organs (16.8 percent and 8.1 percent).

Because of these differences, outcomes in this report may differ from those for the population of new SSDI beneficiaries. Nonetheless, the report does provide important information on the effects of health care benefits and AB Plus services on newly entitled beneficiaries who are likely to be among the most intensive users of health care services, given their longer Medicare wait times

¹⁴Table 2.2 reports the p-value for the joint chi-square test of the differences in the distribution of primary diagnosis and does not report results from the individual t-tests. While not shown in the table, the difference in rates of neoplasm is statistically significant across research groups (p-value = 0.02).

¹⁵Members across research groups also differ significantly in terms of when they were enrolled into the demonstration — a result of the discontinuation of AB Plus recruitment in November 2008.

¹⁶Using data from the National Beneficiary Survey, which collected information from a national sample of disability beneficiaries for the evaluation of the Ticket to Work program, Livermore, Stapleton, and Roche (2009) show that younger beneficiaries are more likely to return to work.

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Table 2.3

**Selected Characteristics of Sample Members at Baseline
and of New Disabled Worker Beneficiaries in 2008**

Characteristic (%)	Sample Members	2008 New Disabled Workers
Primary diagnosis		
Mental disorders (excluding retardation)	22.0	20.5
Neoplasms	8.2	9.6
Diseases of the:		
Circulatory system	11.6	10.5
Musculoskeletal system and connective tissue	19.4	30.0
Nervous system and sense organs	16.8	8.1
Other	22.0	21.1
Under 50 years old	49.7	42.6
Female	49.9	46.8
Sample size	1,997	877,226

SOURCE: Calculations from Social Security Administration administrative data.
(Web site: http://www.socialsecurity.gov/policy/docs/statcomps/di_asr/2008/)

Chapter 3

The Implementation of the AB Health Plan

Following the random assignment of new Social Security Disability Insurance (SSDI) beneficiaries into one of the three research groups in the Accelerated Benefits (AB) Demonstration, all AB and AB Plus group members were enrolled in AB health care benefits — referred to as the “AB health plan” — for the duration of their Medicare waiting period, which was generally 18 to 24 months. The AB health plan covered a broad range of health care services and was implemented similarly to other plans that the benefits administrator had overseen.

This chapter describes the implementation of the AB health plan; the implementation of the AB Plus services is discussed in Chapter 4. The chapter first describes the health plan features and how the plan was administered. Then it presents findings about the use of covered services during the year after random assignment and a brief look at trends beyond the first year, through July 2010, the last date for which data were available for this report. The chapter relies primarily on information from interviews with AB health plan staff conducted in 2008 and 2010, regular team meetings and review of health plan documents, and the plan’s claims data for all AB and AB Plus group members.

Findings in Brief

- **Almost all AB and AB Plus group members used the AB health plan during the year after random assignment.** Just over one-fourth had claims for one or more hospitalizations during the year; about two-thirds used outpatient services; and over three-fourths used the prescription drug benefit. Average total claims for program group members were \$19,265 during the first year. Roughly 12 percent had \$50,000 or more in total claim payments, and this group accounted for 53 percent of AB health plan expenditures.
- **There were few statistically significant differences between the AB and AB Plus groups’ use of the AB health plan.** Nevertheless, a series of small differences for most types of covered services resulted in the AB Plus group’s being more likely than the AB group to use between \$5,000 and \$10,000 in health care services and being less likely to use between \$1 and \$5,000 in services.
- **Not surprisingly, program group members who were in poor health at enrollment had higher payments during the year after random assign-**

ment than those who were in better health. For example, those who reported being in poor health at enrollment had higher claim payments than those who reported being in fair or better health (average expenditures were \$21,402 and \$17,377, respectively), and program group members with primary diagnoses of neoplasm (usually cancer) had higher payments than those without that diagnosis (average expenditures were \$39,697 and \$17,072).

The claims analyses presented in this chapter rely on claims that were incurred during the year after random assignment and subsequently accepted for payment, most of which the plan paid within three months and some of which were paid after the first year.¹ Because there are lags between when health services are received and when claims are paid, the results in this chapter might not reflect all services received.

The Structure and Administration of the AB Health Plan

Plan Features

In many respects, the AB health plan was more generous than Medicare, which is the main source of health care coverage for SSDI beneficiaries after the waiting period. Compared with Medicare, the AB plan had relatively modest cost-sharing, covered some services that Medicare does not, and reimbursed health care providers more generously. (See Table 3.1.)² The AB health plan was also more generous than most state Medicaid programs, which will cover more individuals in the Medicare waiting period under the recently passed federal health care reform (the Patient Protection and Affordable Care Act). The AB plan provided much more generous payments to health care providers, and the AB network may have provided greater access to health care, which can be limited under Medicaid in some states.³

In addition to covering basic health care needs — such as hospitalizations, physician visits, and diagnostic testing; prescription drugs, therapy, and rehabilitation supports (such as durable medical equipment) — the AB health plan covered inpatient and outpatient treatment for mental health problems and chemical dependency; acupuncture; and vision and dental care.⁴ The

¹In Chapters 3 and 4, the year after random assignment includes the month of random assignment and the subsequent 11 months.

²See Appendix C for the AB health plan benefit handbook that was provided to all AB and AB Plus group members after enrollment.

³Coughlin, Long, and Shen (2005); The Kaiser Family Foundation (2008).

⁴The health plan and AB Plus services were designed in consultation with a panel of experts from the health and disability field; see Appendix B. For Medicare benefits, see Centers for Medicare and Medicaid Services (2010).

The Accelerated Benefits Demonstration

Table 3.1

In-Network AB Health Plan Benefits at a Glance

<u>Benefit</u>	<u>Coverage</u>
Maximum benefit amount	Plan pays up to \$100,000 while participant is in the plan.
Copayment per event, such as an office visit to a network doctor	\$12 copayment
Hospital benefits (inclusive of mental health care)	\$200 copayment
Skilled nursing facility	Plan pays 100% of all costs, limited to 20 days per spell of illness.
Emergency room	\$35 copayment (waived if admitted to hospital).
Home health care	Plan pays 100% of all costs up to 40 visits (pre-certification required).
Ambulance	\$35 copayment
Diagnostic X-ray, lab test	Plan pays 100% of all costs.
Medical supplies	Participant pays 10% of all costs. (Plan pays 90% of all costs.)
Physical therapy	\$12 copayment
Occupational therapy	\$12 copayment
Outpatient mental health care	\$12 copayment
Hospice care	Plan pays 100% of all costs.
Durable medical equipment	Plan pays 100% of all costs.
Diabetic supplies/equipment	Plan pays 100% of all costs.
Prescription drugs	\$5 copayment, generic \$15 copayment, preferred brand \$30 copayment, nonpreferred brand
Dental care (Maximum benefit is \$1,000 during the period of participation in the plan.)	Preventive/diagnostic: Plan pays 100% of all costs. Basic: Participant pays 25% of all costs. Major: Participant pays 50% of all costs.
Vision care Refraction Lenses (and coatings) Frames Contact lenses	Plan pays up to \$200 maximum benefit while participant is in the plan.

NOTES: "Copayment" is the amount that the participant must pay at the time of service.
"Precertification" means that the plan must approve the service before it is provided.

AB health plan reimbursed providers at higher rates than Medicare for some services, such as surgery and pathology services, and it was similar to private health insurance rates in this regard.

The plan was designed to be accessible and affordable to program group members living in the demonstration's 53 nationwide recruitment sites. The plan's network spanned more than 450,000 health care professionals and 4,000 facilities. When program group members used providers in the network, costs were fully covered for most services after a \$12 copayment. Copayments were higher for ambulance services, emergency room visits, and inpatient hospital care. The prescription drug benefit had a tiered copayment system: \$5 for generic drugs; \$15 for preferred brand-name drugs; and \$30 for non-preferred brand-name drugs. In addition, a mail-order prescription drug option was available that allowed program group members to purchase prescriptions for three months at a time for a two-month copayment.

Few program group members reported problems affording health care under AB to the health plan administrator. The plan administrator reported only one program group member who could not afford the copayment. Because the member was seeking a medical assessment, the copayment was waived. Staff delivering AB Plus services also reported very few instances of affordability issues. If AB Plus group members said that they could not afford the copayment, AB Plus staff contacted the provider to ask whether the copayment might be waived. In some instances but not all, providers did waive the copayment. (Copayment levels are described below, in the section "Comparison of Health Plan Use, by Program Group.")

If a program group member used a provider out of the network, expenses were not covered unless the member obtained prior approval. Approval was routinely granted when there was no in-network provider in the area for a particular specialty or if a participant was in the middle of receiving care from a provider — particularly mental health or rehabilitation care — and changing to an in-network provider would disrupt treatment.

To contain the costs of the demonstration, plan benefits were limited to \$100,000 per beneficiary. In this respect, the AB health plan was less generous than Medicare or Medicaid, which do not limit the overall use of care. However, the demonstration's designers believed that few members would reach the limit and that, for most of those who did, Medicaid (or charity care) would be available.

Plan Enrollment

Demonstration sample members who were randomly assigned to the AB and the AB Plus groups were enrolled in the AB health plan at the time of random assignment and could begin to use the plan immediately. Staff conducting the baseline interviews that preceded random assignment briefly described the AB health plan and provided contact information for the plan administrator (POMCO Group) to those who wanted to learn more or wanted to begin us-

ing the plan before their identification cards arrived.⁵ The plan administrator mailed the identification card and specific information about plan benefits within three weeks of random assignment, in most cases.

AB and AB Plus group members remained enrolled in the plan until they became eligible for Medicare, reached the maximum benefit limit of \$100,000, or died. The plan administrator notified program group members by mail three months before they were to begin Medicare and again when they did begin, to remind them that the AB health plan ended as of the date that they became eligible for Medicare and to provide contact information for Medicare. The administrator also mailed notifications to those who were approaching the maximum benefit limit when they reached \$50,000 in paid claims and again at the time of disenrollment. This mailing included a resource list, which provided contact information for several national organizations dedicated to helping individuals with medical expenses. Both mailings included contact information for AB health plan customer service (and for AB Plus staff for that group's members) in case program group members had questions or concerns.⁶

Plan Administration

POMCO's administration of the AB health plan was similar in most respects to plan administration for its other clients; few procedures needed to be tailored owing to differences in the structure of the plan or the population served.

Claims and Appeals Processing

The plan administrator processed all AB health plan claims except those for prescription drugs, for which administration was contracted to Medco, a pharmacy benefits manager. The plan administrator's claims processing included entry of all claims received into the plan's data system, determining whether claims were for covered services and paying those that were, and producing and mailing payment checks and explanations of benefits. For AB and AB Plus group members with total paid claims at \$90,000 or above, the plan administrator also reviewed and approved all requests for payments, to help the member not exceed the \$100,000 limit. Two staff members were responsible for processing claims. One handled hospital claims, and the other handled all other types of claims. The plan administrator paid a total of 57,183 medical

⁵POMCO Group, headquartered in Syracuse, New York, has been a third-party benefits administrator for more than 30 years. Its clients are typically employers, and so most plan users are employed individuals. The employer typically handles plan development and user education; for AB, POMCO and MDRC shared this role. POMCO was paid \$14.50 per claim or bundle of related claims and \$3,600 per month for the national provider network. POMCO found this level of funding adequate, although start-up costs were higher than expected. See Chapter 7 for more information about the costs of administering the health plan. (MDRC is also a POMCO client.)

⁶See Appendix D for examples of the plan administrator's AB health plan mailings.

and dental claims incurred during the year after random assignment. A small number of appeals were processed relative to the number of claims received: 178 appeals were processed, or 0.3 percent of all claims.

The pharmacy benefits manager handled all prescription drug benefit inquiries, mail-order requests, and the processing of pharmacy claims. Prior approval from the plan administrator was required for prescription drugs over \$1,000 to ensure that program group members did not reach the plan cap solely due to unnecessarily high prescription drug costs. A total of 32,866 prescription drug claims were paid during the year after random assignment.

Benefits Management

The plan administrator contracted out benefits management (that is, precertification and utilization review) to CareGuide, which provided a team of nurses supervised by a medical director for these tasks. As described in Chapter 4, CareGuide also provided some AB Plus services. Nonemergency inpatient hospital services, out-of-network service use, and durable medical equipment all required precertification. For each precertification request, a nurse compared the clinical information from the AB or AB Plus group member's provider with standard clinical criteria for establishing the medical necessity of a requested service. Most decisions were made immediately, but nonurgent requests could take as long as five days. If the request met the criteria, the nurse authorized services, and, in the case of inpatient admissions, an initial length of stay was estimated.

Utilization review (also referred to as a "continued stay review") included the ongoing monitoring of members who were hospitalized or completing rehabilitation (for example, by reviewing provider treatment plans). The nurse used clinical criteria either to establish the medical necessity of revising the initial length-of-stay estimate or to initiate discharge planning. When medical necessity was not established, the nurse referred requests to the medical director for additional review. The same procedures were used for both AB and AB Plus group members; however, if the request was for an AB Plus group member, the benefits management nurse could also consult with AB Plus staff. Utilization review decisions for urgent care were made within 24 hours; nonurgent care decisions were made within four days.

During the year after random assignment, the benefits management program precertified services for 347 program group members. A total of 5,618 precertified claims were subsequently paid.

Customer Service

The plan administrator operated a Web site and a customer service telephone line to field questions from both program group members and providers. The performance goal for

telephone response time was the industry standard of less than 45 seconds, which administrator staff noted was met “most of the time.” Most calls to customer service were from providers, either inquiring about plan benefits or checking on the status of claim payments. Some members needed additional education about the \$100,000 benefit limit, since this was atypical of many health plans. The plan administrator assigned a client service representative to monitor AB health plan activity and respond to any inquiries that came through MDRC and the AB Plus providers. A total of 15,690 customer service calls were received from providers and members during the year after random assignment.

Based on survey responses of 289 AB and AB Plus group members six months after random assignment, satisfaction with the AB health plan was high.⁷ Members were highly satisfied with the overall quality of their care and of services from doctors. More than 90 percent rated the overall quality of care from all doctors as very good or excellent. They also reported being highly satisfied with the health plan administrator.

AB Health Plan Use During the Year After Random Assignment

Table 3.2 shows that almost all AB and AB Plus group members (88.7 percent) had at least one paid claim for a service covered by the AB health plan during the year after random assignment. (Box 5.1 in Chapter 5 explains how impact estimates are measured and presented in the tables of this report.) Total plan payments for all members and all services received that year totaled \$19,476,734. Inpatient and outpatient hospital claims made up the majority of total payment amounts and made up 35 percent and 29 percent of the total. Program group members had AB health plan coverage for an average of 11.5 months during the year and averaged \$19,265 in paid AB health benefit claims (including zeros for those who did not use the health plan). As is typical with health insurance, a minority of members accounted for a large share of the costs: 12.3 percent had payments of \$50,000 or more, and their payments made up 53.0 percent of the total for the plan. Only 3.5 percent, or 35 program group members, reached the benefit limit of \$100,000.

At just under \$20,000, spending per member for the AB health plan was substantially greater than for Medicare beneficiaries who were eligible as a result of disability. For example, the Medicare Payment Advisory Commission (MedPAC) estimated that average annual spending in 2008 per disabled Medicare beneficiary was \$11,018.⁸ Other researchers examined Medicare costs of SSDI beneficiaries in order to predict costs of ending the waiting period. For the full 24-month period, Riley estimated costs of \$10,055 per person in 2000 dollars, based on data

⁷Wittenburg, Warren, Peikes, and Freedman (2010).

⁸Medicare Payment Advisory Commission (2010).

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Table 3.2

Incurred Health Claims During the First Year of Follow-Up, by Program Group

Outcome	Total	AB Plus Group	AB Group	AB Plus-AB Difference (Impact)	P-Value
<u>Paid claims</u>					
Received paid claim (%)	88.7	89.6	87.4	2.2	0.282
Medical claim	84.5	86.2	81.9	4.2*	0.073
Inpatient hospital claim	25.8	26.8	24.3	2.5	0.390
Outpatient hospital claim	60.5	64.3	54.8	9.5***	0.003
Other medical claim	81.5	83.4	78.7	4.7*	0.064
Dental claim	20.0	19.6	20.6	-1.1	0.680
Prescription drug claim	81.5	83.1	79.1	3.9	0.114
Average total paid claims (\$)	19,265	19,738	18,542	1,195	0.487
Medical claims	16,074	16,573	15,312	1,261	0.443
Inpatient hospital claims	6,722	6,864	6,505	358	0.764
Outpatient hospital claims	5,611	5,823	5,287	536	0.505
Other medical claims	3,741	3,886	3,520	366	0.512
Dental claims	98	103	90	14	0.421
Prescription drug claims	3,093	3,062	3,141	-79	0.821
Paid claims amount (%)					
\$0	11.3	10.4	12.6	-2.2	0.282
\$1-\$4,999	29.1	26.7	32.8	-6.1**	0.039
\$5,000-\$9,999	15.3	17.7	11.8	5.9**	0.014
\$10,000-\$24,999	21.3	21.4	21.0	0.4	0.894
\$25,000-\$49,999	10.8	11.3	9.9	1.4	0.484
\$50,000-\$99,999	8.8	9.0	8.6	0.4	0.824
\$100,000 or higher	3.5	3.6	3.3	0.2	0.842
<u>Copays</u>					
Average total copay amount (\$)	270	274	263	11	0.600
Copay amount (%)					
\$0	13.6	12.4	15.3	-2.8	0.204
\$1-\$249	48.6	48.1	49.3	-1.2	0.713
\$250-\$499	20.9	22.4	18.5	3.8	0.151
\$500 or more	17.0	17.1	16.9	0.2	0.933
<u>Mental health/substance abuse services</u>					
Received paid claim (%)	17.1	18.3	15.3	3.0	0.202
Average total paid claims (\$)	448	423	486	-64	0.675
<u>Physical/occupational/speech therapies</u>					
Received paid claim (%)	13.7	13.5	13.9	-0.4	0.876
Average total paid claims (\$)	249	223	289	-66	0.562

(continued)

Table 3.2 (continued)

Outcome	Total	AB Plus Group	AB Group	AB Plus-AB Difference (Impact)	P-Value
<u>Medical supplies/medical devices/prosthetics</u>					
Received paid claim (%)	22.6	22.6	22.4	0.2	0.940
Average total paid claims (\$)	436	544	271	273**	0.047
<u>Emergency room care</u>					
Received paid claim (%)	33.0	32.9	33.2	-0.2	0.942
Average total paid claims (\$)	1,217	1,119	1,367	-248	0.279
<u>In-network claims</u>					
Received paid claims for in-network provider (%)	83.4	84.7	81.4	3.3	0.180
Average total paid claims for in-network providers (\$)	14,494	14,917	13,848	1,069	0.480
<u>Out-of-network claims</u>					
Received paid claims for out-of-network provider (%)	58.1	58.7	57.0	1.7	0.600
Average total paid claims for out-of-network providers (\$)	1,678	1,759	1,554	205	0.635
Sample size	1,011	611	400		

SOURCE: MDRC calculations from AB health plan claims records.

NOTES: For each comparison, a two-tailed t-test was applied to differences between outcomes for research groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent.

from 1997 to 2000.⁹ Similarly, Livermore, Stapleton, and Claypool estimated the average annual costs for medical and prescription drugs to be \$8,366 in 2006 dollars, based on data from 1994 to 1996.¹⁰ These differences are not surprising, since new beneficiaries are more likely to have terminal illnesses, such as cancer (as described in Chapter 2).¹¹ In addition, the differences might be explained in part by the lower cost-sharing and higher provider payments of the AB health plan compared with Medicare.

⁹Riley (2004).

¹⁰Livermore, Stapleton, and Claypool (2009).

¹¹Riley (2004) finds that the cost of care is substantially greater for new SSDI beneficiaries near the end of life than for other beneficiaries.

The use of plan benefits differed considerably by type of service. The benefits most commonly used by program group members were physician visits, diagnostic testing outside a hospital, and prescription drugs. A substantial portion also used inpatient and outpatient hospital services. During the year after random assignment, roughly a quarter of all members had a hospitalization, which is similar to the 23.2 percent of disabled Medicare beneficiaries who were hospitalized in 2006.¹² In addition, 60.5 percent had claims for outpatient hospital services, including visits to the emergency room, diagnostic tests, treatments, rehabilitation services, and surgeries that did not require an overnight stay. Among the program group, 33.0 percent incurred a claim for emergency room care, compared with 19.7 percent of Americans who responded to the National Health Interview Survey in 2007.¹³ The average inpatient claim payment per member was \$6,722, and outpatient payments averaged \$5,611 (including zeros for those who did not have any claims for these services). By contrast, only 20.0 percent used the dental benefit, despite the fact that dental care is not covered under Medicare and seldom is covered by most private health insurance. Plan administrator staff thought that relatively few members used the dental benefit because they had more pressing medical problems to attend to.

The AB health plan included mental health and rehabilitation services that many SSDI beneficiaries were believed to need. Demonstration designers hypothesized that, in addition to the 22 percent of sample members with primary diagnoses of mental disorders, some members with other primary diagnoses would also use mental health services. However, only 17.1 percent of members used such services. Almost 14.0 percent used physical, occupational, or speech therapy, and 22.6 percent had claims for medical supplies, devices, or prosthetics. Designers hypothesized that these services would support return-to-work efforts by helping to improve an individual's functioning and mobility.

Copayments for both the AB and the AB Plus group were relatively low, at \$270 on average, which reflects the low copayment requirements of the benefit plan (Table 3.2). Only 17.0 percent had copayments over \$500 or more. By comparison, the average cost-sharing for disabled Medicare beneficiaries in 2008 was \$1,517, and 58 percent of aged and disabled Medicare beneficiaries paid \$500 or more.¹⁴

Just over half of program group members (58.1 percent) had claims for at least one out-of-network service during the year after random assignment; however, the amount spent was low relative to all claims. The average claims payment per member for these services was much lower than for in-network services: \$1,678, compared with \$14,494 (Table 3.2, last two panels).

¹²Kennedy, Engle, and Blodgett (2009).

¹³Garcia, Bernstein, and Bush (2010).

¹⁴Centers for Medicare and Medicaid Services (2009).

Trends during Year 1. Members began using plan benefits within the first three to five months after random assignment and continued to use them at a high level throughout the year (Figure 3.1, upper graph). From Month 5 through Month 12, the percentage of members with paid claims each month remained above 70 percent (70.2 percent in Month 5 and 74.1 percent in Month 12). While health care expenditures are typically somewhat volatile, the average monthly payments rose quickly over the first few months and then trended downward during the year. Trends differed by type of service. Throughout the first year, payments for prescription drug claims were not volatile but remained relatively constant (about \$250 to \$370 per month, from Month 4 to Month 12).

Disenrollment. Few members disenrolled from the health plan or died during the year after random assignment. As expected, only a small number (1.0 percent, or 10 members) transitioned to Medicare during the year, and 5.4 percent (55 members) died.

Comparison of Health Plan Use, by Program Group

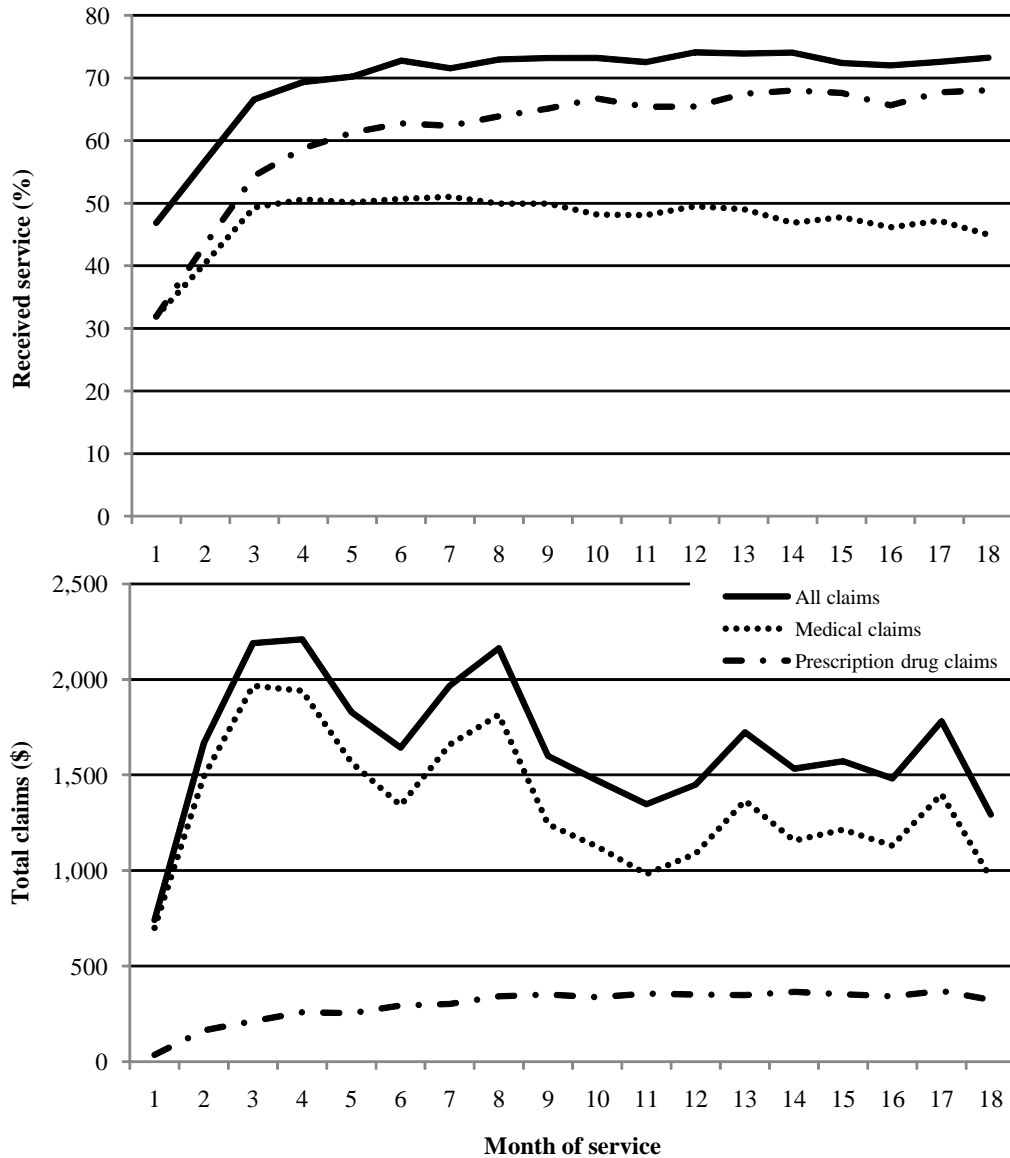
A comparison of health plan use by the AB and AB Plus groups provides estimates of the incremental effect of AB Plus services on the use of health services (Table 3.2).¹⁵ This comparison shows only two statistically significant differences: the AB Plus group was more likely to have a claim for outpatient hospital services and for other nonhospital medical care, such as physician visits. However, the comparisons reveal a pattern of non-statistically significant differences: AB Plus group members were slightly more likely to have claims for covered services — and therefore to have had slightly higher payments for them — than their AB counterparts. AB Plus staff noted that they encouraged AB Plus group members to contact their physicians whenever the members raised health concerns and that, as a result of those contacts, physicians may have ordered more diagnostic tests or prescription drugs or admitted some members to the hospital. This may have contributed to the small differences observed.

¹⁵Differences between the AB and AB Plus groups in Table 3.2 were regression-adjusted to improve statistical precision. All results are based on ordinary least squares (OLS) regression. Covariates include indicators for the following: under age 50, female, Census region (Northeast, Midwest, and South), having a high school diploma or General Educational Development (GED) certificate, being white, having annual household income below \$40,000, feeling downhearted or blue most or all of the time, poor self-reported general health, body mass index over 30, any unmet medical need in six months prior to random assignment, primary diagnosis related to mental health, primary diagnosis of neoplasm, having 19 to 24 months until Medicare eligibility, having 25 to 28 months until Medicare eligibility, and month of random assignment.

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Figure 3.1

AB Health Plan Use and Expenditures, by Month of Eligibility and Service Use



SOURCE: Calculations from AB health plan claims records.

NOTES: Month 1 is the month of random assignment. To facilitate depiction of trends, averages for Month 1 were adjusted to estimate service use had all program group members been randomly assigned on the first day of the month and been eligible for services immediately. See Appendix E for details.

Monthly means and percentages are calculated by dividing measures of service use by the proportion of program group members eligible for AB health plan.

Characteristics of Sample Members with Higher Plan Payments

It is well known that a small proportion of the insured population accounts for a large proportion of insurance payments. In 2006, MedPAC found that most Medicare spending for aged and disabled beneficiaries was concentrated among individuals with a few key characteristics: those with multiple chronic conditions, those using inpatient services, and those in their last year of life.¹⁶ In order to test whether specific groups of sample members who were defined by indicators of poor health as measured at the time of demonstration enrollment had markedly greater plan payments than others, the study team conducted an analysis of the association between selected baseline characteristics and plan payments.¹⁷ In addition to health status indicators, to further understand the variability in claim payments across characteristics in general, the study team included some baseline characteristics that are not directly related to health status (such as primary impairment of mental health disorder and unmet medical need during the past six months).

Consistent with the MedPAC findings, Table 3.3 shows that AB program group members with poorer health had higher payments than others. The largest difference seen was for members with a primary diagnosis of neoplasm (that is, cancer or other tumors); their payments were more than 150 percent higher (a difference of \$22,626) than payments for those who did not have this primary diagnosis. Members who reported their health status as poor and those who received a quick determination for SSDI (as represented by program group members with 19 to 24 months until Medicare eligibility) — suggesting that their condition was probably severe — also had somewhat higher payments (differences of \$4,025 and \$5,141, respectively) than those who reported better health or fewer than 19 months until Medicare eligibility. Finally, obese program group members, who represent nearly half of all sample members and who likely suffer from various chronic medical conditions associated with being overweight, had higher payments than those who were not obese (a difference of \$4,096).

Individuals with unmet needs prior to random assignment might have had a pent-up demand for medical services that resulted in an initial surge in the use of AB benefits. Interestingly, the results do not support that hypothesis: the average expenditures for those who reported unmet medical needs in the six months prior to random assignment were greater than those for program group members not reporting unmet needs, but the difference is not statistically significant.

¹⁶Medicare Payment Advisory Commission (2010), p. 12.

¹⁷Subgroup differences in the use of the AB health plan were estimated using OLS regression, controlling for membership in the AB or the AB Plus group and other characteristics of sample members. Covariates are the same as those used for Table 3.2.

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Table 3.3

**Total Health Claims Incurred During the First Year of Follow-Up,
by Selected Characteristics of Sample Members at Baseline**

Total Paid in Health Claims (\$)	With Sample Member Characteristic	Without Sample Member Characteristic	Difference	P-Value
Neoplasm primary diagnosis	39,697	17,072	22,626***	0.000
Sample size (total = 1,011)	98	913		
Mental disorder primary diagnosis	15,308	20,327	-5,019**	0.022
Sample size (total = 1,011)	214	797		
19-24 months until Medicare-eligible	21,304	16,163	5,141***	0.006
Sample size (total = 1,011)	610	401		
Poor self-reported health	21,402	17,377	4,025**	0.018
Sample size (total = 1,010)	467	543		
Obese	21,556	17,460	4,096**	0.015
Sample size (total = 1,006)	459	547		
Unmet medical need in past 6 months	19,945	17,629	2,317	0.210
Sample size (total = 1,011)	714	297		

SOURCES: Calculations from AB health claims, baseline survey responses, and Social Security Administration administrative records.

NOTES: For each comparison, a two-tailed t-test was applied to differences between outcomes for research groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Sample sizes may vary because of missing data.

Program group members with primary diagnoses of mental health disorders had lower payments than those with primary diagnoses of physical health problems (a statistically significant difference of \$5,019. This may reflect the use of less costly services for treatment of mental health disorders (that is, more medications but fewer hospitalizations); whether plan claims data support this hypothesis, however, requires further analysis.

Less than 4 percent of the sample (35 individuals) reached the benefit limit of \$100,000 within the first year (the first panel of Table 3.2). Table 3.4 shows, not surprisingly, that those with claims related to neoplasm were more likely to hit the \$100,000 plan cap than those without the diagnosis. Obese program group members were also more likely to hit the cap. AB Plus

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Table 3.4

**Reached \$100,000 Health Claims Limit During the First Year of Follow-Up,
by Selected Characteristics of Sample Members at Baseline**

Reached \$100,000 (%)	With Sample Member Characteristic	Without Sample Member Characteristic	Difference	P-Value
Neoplasm primary diagnosis	16.4	2.1	14.4***	0.000
Sample size (total = 1,011)	98	913		
Mental disorder primary diagnosis	0.8	4.2	-3.3**	0.026
Sample size (total = 1,011)	214	797		
19-24 months until Medicare-eligible	3.8	3.0	0.7	0.561
Sample size (total = 1,011)	610	401		
Poor self-reported general health	3.9	3.1	0.7	0.536
Sample size (total = 1,010)	467	543		
Obese (Body Mass Index of 30 or higher)	4.5	2.6	1.9*	0.098
Sample size (total = 1,006)	459	547		
Any unmet medical need in past 6 months	3.1	4.4	-1.4	0.281
Sample size (total = 1,011)	714	297		

SOURCES: Calculations from AB health claims, baseline survey responses, and Social Security Administration administrative records.

NOTES: For each comparison, a two-tailed t-test was applied to differences between outcomes for research groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Sample sizes may vary because of missing data.

staff reported that some AB Plus group members who were obese told them that, as AB health plan members, they intended to have surgeries for knee replacements or treatment for some persistent health problems.

Trends in Service Use from Random Assignment to July 2010

The previous sections of this chapter present findings about health care use during the year after random assignment because that is the period for which impact estimates are presented in Chapters 5 and 6. However, all program group members were enrolled in the AB health plan for at least 15 months, and more than 70 percent had 18 or more months until Medi-

care eligibility. Figure 3.1 shows that trends in health care use over a longer period — between random assignment and July 2010, the last date for which information is currently available — do not differ from trends during the first year. During this longer period, program group members had AB health plan coverage for an average of 16.7 months. By July 2010, 90.5 percent had incurred at least one claim, compared with 88.7 percent in Year 1; the average total paid claim was \$29,682, compared with \$19,265 in Year 1; 5.6 percent had reached the maximum benefit limit of \$100,000 or more, compared with 3.5 percent in Year 1; and 80.6 percent had transitioned to Medicare, compared with 1.0 percent in Year 1.¹⁸ Overall use of the plan remained above 70 percent after the first year. After that, however, the amount of medical services used declined while the use of prescription drug benefits increased. Despite some volatility, average monthly expenditures per program group member stayed around \$1,500.

Conclusions

The findings to date offer important insights about the demand for health services and the costs of providing health coverage to an uninsured population of SSDI beneficiaries in the Medicare waiting period.

Program group member use of the AB health plan demonstrates a clear need for health insurance during the Medicare waiting period among the target population for the AB Demonstration. Most used the plan and used it within months of random assignment. Moreover, average AB health plan payments were high (and higher than existing estimates of payments for disabled Medicare beneficiaries or SSDI beneficiaries), though it is difficult to determine the specific reasons for the differences. They are, however, likely due at least in part to the high rates of cancer and other serious disease among demonstration participants, as well as the low cost-sharing required by the AB health plan and the plan's relatively generous reimbursement for care. Similar to the research in the field, the majority of costs were concentrated among a small number of program group members.

Relatively few AB health plan users reached the plan's \$100,000 limit during the year after random assignment. POMCO sent all members who hit the limit a resource list to help them locate services to assist with their medical expenses, and the information was reiterated when calls were made to customer service. Members in the AB Plus group also had the assistance of AB Plus staff to identify potential resources, as discussed further in Chapter 4. This suggests that, should insurance be offered to this population, the cap used under the AB Demonstration should be reconsidered and, if it would be retained, that resources be made available to help individuals find alternatives while they are waiting for Medicare eligibility to begin.

¹⁸Appendix Table E.1 presents the findings; the percentage who transitioned to Medicare is not shown.

Chapter 4

The Implementation of AB Plus Services

As detailed in Chapters 1 and 2, the Accelerated Benefits (AB) Demonstration randomly assigned new Social Security Disability Insurance (SSDI) beneficiaries into one of three research groups to study whether short-term investments in health care and related services would lead to improved health, increased employment, and reduced reliance on SSDI benefits. The *AB group* had access to the program's health care benefits; the *AB Plus group* had the same access and also could use other services delivered by telephone; and a *control group* could not receive AB services but could obtain health insurance on their own. Both the AB group and the AB Plus group were enrolled in the AB health plan for the duration of their Medicare waiting period, which was generally 18 to 24 months. Chapter 3 describes the implementation of the AB health plan; this chapter focuses on the implementation of AB Plus services.

The AB Plus group was offered voluntary services delivered by telephone to facilitate a return to work and to improve access to needed health care. These services included a behavioral motivation program (the Progressive Goal Attainment Program, or PGAP), employment and benefits counseling, and medical case management. Individuals could use one or more of these services at any time following program intake. AB Plus program staff also provided ongoing service coordination, giving participants a point of contact to coordinate services throughout the demonstration.

This chapter describes the implementation of AB Plus services using information from interviews conducted in 2010 with AB Plus design and service delivery staff, observations from AB Plus meetings and document reviews, and service-use data from the AB Plus management information system (OneCareStreet).

Findings in Brief

- **Most members of the AB Plus group completed intake, and a substantial proportion used services.** During the year after random assignment, 84.9 percent of the AB Plus group completed AB Plus intake. About two-thirds used at least one AB Plus service during that year: just over one-third participated in either PGAP or employment and benefits counseling; about two-fifths participated in medical case management; and one-tenth participated in all three services.

- **Staff spent considerable time trying to reach members of the AB Plus group over the telephone, even when the members themselves had requested that staff contact them.** Coaches (staff who had social work backgrounds) had to call an average of 5.8 times before completing intake or before they made the maximum number of attempts to provide one of the three services.
- **The intensity of service use varied by service type.** AB Plus members had 8.7 telephone sessions, on average, with all AB Plus staff, concentrated in a three- to four-month period. Total session time averaged 4.2 hours. The one-third of the AB Plus group who used employment and benefits counseling averaged 6.0 telephone sessions, for a total of 2.5 hours. About one-third used PGAP and averaged 6.8 sessions, for a total of 4.9 hours. Those who used medical case management averaged 1.8 sessions, for a total of 1.0 hour.
- **There were differences in AB Plus service use across member subgroups defined by health status, primary diagnosis, and education level at study enrollment.** Those with a primary diagnosis of neoplasm were less likely to participate in PGAP than those who did not have that primary diagnosis (26.2 percent, compared with 37.0 percent), but they were more likely to use medical case management (53.8 percent and 40.5 percent, respectively). Those with at least a high school diploma or General Educational Development (GED) certificate were more likely to use all types of AB Plus services than those with lower levels of education (87.7 percent, compared with 74.8 percent).
- **PGAP and employment and benefits counseling were largely implemented as designed; AB Plus program intake and medical case management were refined over time.** During early implementation, the design team became concerned that program intake and medical case management led participants to focus too much attention on the medical problems associated with their illness or disability and distracted them from finding ways to be productive with their limitations and become reintegrated into physical, social, and occupational activities. As a result, the message delivered during intake was revised to focus more on the goals of behavior change, increasing activity levels, and returning to work. In addition, medical case management was limited to addressing specific short-term health barriers to starting PGAP, as well as helping those who were critically or terminally ill find appropriate health care.

Approach to Program Design and Implementation Analysis

AB Plus services were designed in consultation with a panel of experts from the health and disability fields. (See Appendix B.) During a series of meetings in 2006 and 2007, the panel designed AB Plus services, as summarized for the Social Security Administration (SSA) in a design report.¹ Implementation of services began with 26 beneficiaries recruited during Phase 1 in October and November 2007. This initial phase was used to learn more about the target population and how to deliver services to a small group before enrolling the full sample. To refine the program's design and service delivery, the team was guided by service-use data from the AB Plus management information system (OneCareStreet), case file reviews and meetings with staff, and semi-structured interviews with nine participants. However, most modifications were made in 2008 as the full sample was enrolled.² Table 4.1 compares the AB Plus program design with the program that was implemented between 2008 and 2010.

The implementation analysis in this chapter is based on multiple data sources: (1) service-use information from OneCareStreet; (2) observations from regular meetings with AB Plus staff and the design team; (3) a review of documents relevant to implementation, including participant materials and tools used by staff to deliver services; and (4) interviews conducted with staff and the design team via telephone during the spring of 2010. These interviews used semi-structured protocols to make sure that the interviewers covered all important topics but also to allow program staff to elaborate on their specific experiences in implementing AB Plus. Protocol topics included the design and goals of the intervention, strategies for engaging participants, challenges encountered in engaging participants, service delivery, service coordination, overall impressions, and lessons learned. To identify significant changes to AB Plus services, the analysis team relied on staff perceptions and the analysis team's prior experience in analyzing program implementation. A few anecdotes are presented to provide additional insights into how services were implemented.

Overview of AB Plus Services

The AB Plus intervention included three voluntary services provided by telephone. Two services were geared specifically toward getting participants who were able back on the path to

¹Berin and Baird (2007).

²Decisions to modify AB Plus services were made by the following group: Peter Baird, David Butler, and Rachel Pardoe of MDRC; Dr. Greg Simon, M.D. M.P.H. (Senior Investigator and Group Health Psychiatrist), and Dr. Michael von Korff, Sc.D. (Senior Investigator), from Group Health Cooperative; Dr. Michael Sullivan (Professor of Psychology in Social Sciences and Humanities) at McGill University; Heather Adams, from the University Centre for Research on Pain and Disability; and Tamra Ellis from the University Centre for Rehabilitation and Health.

The Accelerated Benefits Demonstration

Table 4.1

Comparison of the AB Plus Program Design and the Program Implemented in 2008-2010

	Program Designed ^a	Program Implemented ^b
Intake assessment	During a 1-hour telephone session, coach introduces services and administers intake assessment. The assessment includes a structured instrument with questions about current medical providers and medications and a screening tool for depression and other mental health disorders.	Formal medical assessment was dropped and information gathered informally across 1-3 telephone sessions (though continued to use formal mental health screening tool). <i>Reason for change: Focus on all that was medically wrong distracted from finding ways to be productive with limitations and become re-integrated into physical, social, and occupational activities.</i>
PGAP (Progressive Goal Attainment Program)	Coach delivers PGAP in 10 weekly modules aimed at (1) incrementally increasing participants' activity levels, (2) changing daily routines to be consistent with holding a job, (3) reducing participants' perceptions of disability, and (4) helping participants manage pain and discomfort.	Coaches were given flexibility to adapt the delivery and duration of the modules, as necessary. <i>Reason for change: AB Plus group had a wider range of diagnoses and functional limitations than most previous PGAP participants.</i>
Employment and benefits counseling	Employment counselor links participants to local employment-related services, helps them identify job leads, and prepares them to apply for employment. Benefits counselor provides information about how returning to work affects SSDI and other benefits.	Implemented without change to major activities. However, two activities were added: (1) the warm transfer process between coach and counselor and (2) a resource list for participants who needed financial assistance or social services. <i>Reason for additions: The warm transfer process was added because not all participants were contacting employment counselors after a referral, nor were they returning counselors' calls. Some participants had financial problems that had to be addressed before they would consider trying PGAP.</i>
Medical case management	Coach or nurse addresses health problems related to finding appropriate care for critical or terminal illness or barriers to the use of employment-related services (by helping participant obtain appropriate treatment and follow-through on recommended treatment plans).	Coach or nurse addresses health problems related to finding appropriate care for critical or terminal illness. Other referrals are limited to specific issues that could be addressed in the near term. <i>Reason for change: Focus on all that was medically wrong distracted from finding ways to be productive with limitations and become re-integrated into physical, social, and occupational activities.</i>

NOTES: ^aBased on an unpublished report to SSA about Accelerated Benefits program design (Berin and Baird, 2007).

^bBased on information collected for Chapter 4.

work, and the third aimed to help the participant address any medical problems that were barriers to that path. The services are described below.

- **A behavioral motivation program called the “Progressive Goal Attainment Program” (PGAP).** PGAP was designed to be delivered in 10 weekly modules. It aimed to (1) incrementally increase participants’ activity levels, (2) change daily routines to be consistent with holding employment, (3) reduce participants’ perceptions of disability, and (4) help participants to better manage pain and discomfort.
- **Employment and benefits counseling.** Employment counseling linked participants to local employment-related services, helped them identify job leads, and prepared them to apply for employment. Benefits counseling provided information about how returning to work would affect participants’ SSDI payments and other benefits.
- **Medical case management.** AB Plus medical case management services assisted participants in accessing needed health care services beyond the help provided by the health plan administrator.³ This component of AB Plus was meant to help participants address short-term health problems that might be barriers to using PGAP or employment and benefits counseling and to help those with critical or terminal, more serious medical issues receive appropriate health care.

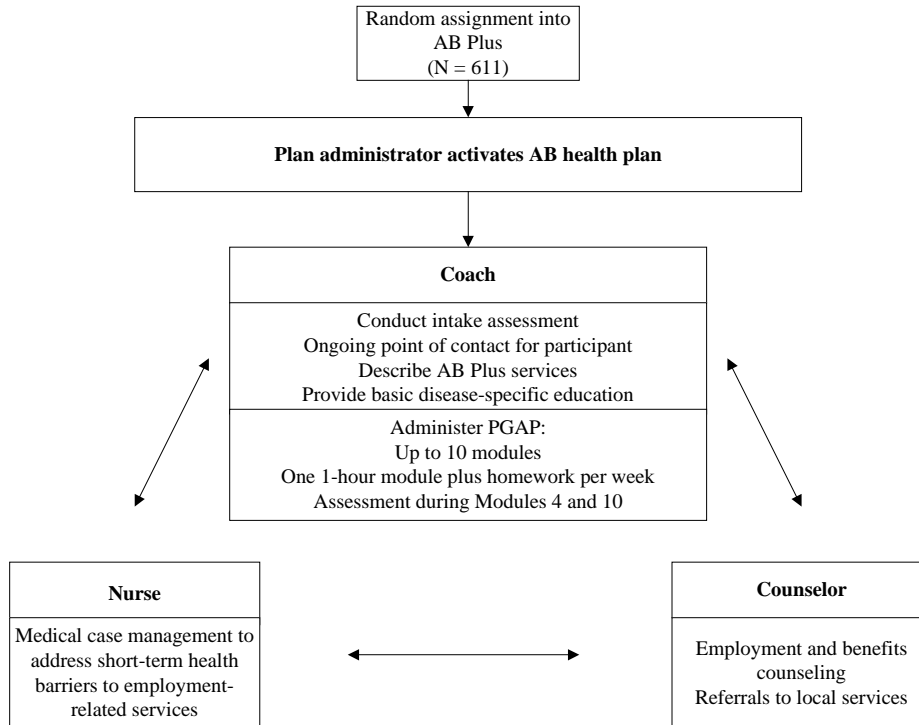
As depicted in Figure 4.1, the demonstration design assumed that members of the AB Plus group would receive an intake assessment and orientation to AB Plus services, after which participants would be referred to PGAP unless they had health problems that required a referral for medical case management. Participants could also ask for medical case management later on, to assist them with complex health problems. The expectation was that those who were interested in returning to work would use employment and benefits counseling after completion of at least four PGAP modules, but they could use the service at any time. (For example, they might use benefits counseling shortly after enrollment if their concern about how work would affect benefits was a deterrent to starting PGAP.)

³POMCO Group, headquartered in Syracuse, New York, has been a third-party benefits administrator for more than 30 years.

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Figure 4.1

Flow of AB Plus Intervention Services



Staffing

Table 4.2 describes the staffing structure of AB Plus and shows that services were provided by three types of staff:

- **Coaches** conducted intake, acted as participants’ primary point of contact during the demonstration, and administered PGAP. They also provided some basic disease-specific education as part of their medical case management. Coaches were CareGuide employees with social work backgrounds. Their immediate previous experience was as telephonic health coaches for participants in employer-sponsored health insurance programs. At the peak of demonstration activities, between fall 2008 and winter 2009, AB Plus employed

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Table 4.2

Staffing Structure of AB Plus

Characteristic	Nurse	Coach	Counselor
Organization	CareGuide: ^a Dallas, TX	CareGuide: ^a Indianapolis, IN	TransCen, Inc.: ^b Rockville, MD
Responsibilities	Nurses provided most medical case management to the AB Plus group members referred to them by coaches, counselors, or the AB health plan.	Coaches conducted intake, administered PGAP, and provided ongoing service coordination, which involved being the key contact for AB Plus group members providing some medical case management.	Counselors provided employment and benefits counseling to AB Plus group members who showed an interest in exploring return-to-work possibilities or who had benefits questions.
Number of staff	3 nurses, 1 of whom specialized in psychiatric care	9 coaches, 1 of whom was a bilingual Spanish-speaking coach	2 employment counselors and 2 benefits counselors
Staff back-grounds, credentials, and training	Registered Nurses, certified as case managers, trained in PGAP	Trained as social workers, experienced in telephonic health coaching and motivational interviewing, extensive training in PGAP	Certified benefits counselors and employment counselors with experience assisting people with disabilities with finding employment, trained in the PGAP
Caseload	Contact with approximately 15 to 20 cases per week; total caseload larger	Most experienced coaches, 90 to 100 cases; newer coaches, 60 and 80 cases; Spanish-speaking coach, 20 cases	Approximately 50 to 60 active at a time; total caseload larger
Supervisors	Nurses were supervised by a nursing director and medical director, both located in the Dallas office.	Coaches were supervised by a coaching director, located in the Indianapolis office.	Counselors were supervised by the EBC project director.

An AB Plus management information system and weekly team meetings that included the study team supported and facilitated communication among AB Plus staff.

NOTES: Staffing is described for fall 2008 and winter 2009, the peak of demonstration activities.

^aCareGuide was a national disease management company that provided telephonic services primarily for insured employees of its clients. Its nurses provided similar services for AB Plus, while the role for its coaches was quite different. In early 2010, CareGuide merged with American Health Holdings, Inc.

^bTransCen, Inc., provides employment and benefits counseling for individuals with disabilities, as it did for AB Plus.

nine coaches. Their caseloads varied in size: coaches with the most AB Plus experience were assigned 90 to 100 members of the AB Plus group, while newer coaches were assigned between 60 and 80 participants. A bilingual Spanish-speaking coach had a caseload of 20. Most coaches worked between 25 and 35 hours per week. It was assumed that they could provide PGAP services to no more than 20 or 25 participants per week.

- **Nurses** provided most medical case management and were employed by CareGuide. At the peak of demonstration activities, three registered nurses provided services. All were certified as case managers and had prior experience providing services by telephone for members of employer-sponsored health insurance programs. One nurse specialized in psychiatric care and assisted participants with depression or other mental health disorders, while the other two assisted those who had physical disorders. Each nurse worked with approximately 15 to 20 participants in a given week, although their total caseloads were larger. For example, the psychiatric nurse had as many as 80 cases.
- **Counselors** from TransCen, Inc., provided employment and benefits counseling. The employment counselors had experience delivering in-person job development and training to people with disabilities, while benefits counselors were certified Community Work Incentive Coordinators (CWICs), previously employed by Work Incentive Planning and Assistance (WIPA) programs. At the peak of demonstration activities, two experienced employment counselors and two experienced benefits counselors served members of the AB Plus group. Counselors had 50 to 60 “active” participants at any given time, but their total caseload was larger.

The two organizations, CareGuide and TransCen, provided differing levels of day-to-day supervision of AB Plus staff. For example, in 2008, CareGuide assigned the role of coaching director to the most senior coach, who held weekly meetings with the other coaches and acted as a mentor and trainer for them. He developed a coach appraisal form with items that needed to be covered in each call, but he generally did not have time to listen to coaches’ calls or develop a metric to assess the calls. Nurses and counselors received little supervision; the organizations viewed them as professionals with previous experience directly relevant to their demonstration roles who could be relied on to solve problems on their own and to ask questions as needed.

In addition to supervision from within the organizations, the design team gave feedback to AB Plus staff during weekly team calls and during separate calls with the coaching director

and counselors to discuss overall demonstration performance, based on monitoring reports that the team generated each month. These reports included feedback on the quality of data entry into OneCareStreet and the progress made to reach service engagement benchmarks.⁴

Intake and Ongoing Service Coordination

Following random assignment, members of the AB Plus group were assigned to a coach who worked with them for as long as they remained eligible for services, which ranged from 15 to 28 months. The coach telephoned individuals to conduct intake within 26.9 days of random assignment, on average. Within 30 days of random assignment, coaches had attempted to contact 83.8 percent of members of the AB Plus group and had completed intake with 32.2 percent. During AB Plus intake, the coach conducted an assessment and described the three intervention services. Initially, the AB Plus assessment was conducted using a structured instrument with questions about current medical providers and medications, along with a screening tool for depression and other mental health disorders. Early on, the design team determined that the tool led members of the AB Plus group to focus too much on all that was medically wrong and that it distracted them — particularly within the limited time frame of the project — from the goals of behavior change, increasing activity levels, and returning to work. Coaches subsequently gathered this information informally, as part of ongoing telephone conversations, rather than through a formal assessment. The coaches continued to administer the depression screen, however, because the design team hypothesized that depression would likely be a common co-occurring condition for many participants and, if left untreated, could deter efforts to return to work. In addition, the depression screen helped coaches to identify participants who might need a referral to medical case management, to make sure that they were getting appropriate treatment for depression. The section below entitled “Medical Case Management, Service Features,” lists the criteria used by coaches to identify referrals to case management services.

After the assessment process was modified, most intake time was spent introducing individuals to PGAP. The design team thought that a discussion about PGAP illustrated the employment-related goals of AB Plus well and highlighted the expectation that participants would be referred to PGAP unless they had health problems that required medical case management or precluded them from participating in AB Plus at all. The coaches used a script to introduce PGAP and then mailed interested members a video about one of four conditions: cancer, mental health conditions, chronic medical conditions, or chronic pain. Produced by PGAP’s designers, the videos described the challenges of living with each condition and the benefits of reintegrating social, physical, and employment activities into their lives, as well as what was expected of PGAP participants in terms of time commitments. Coaches then called each individual to discuss

⁴See Appendix F for information about AB Plus staff training and the management information system, OneCareStreet, used to support services and facilitate communication between staff.

how the medical condition affected his or her life and goals, after which the coach and member decided whether the logical next step was PGAP or a referral to another AB Plus service.

The coach who conducted intake became the member's main point of contact and the AB Plus service coordinator for the remainder of the demonstration. That person also became the PGAP coach, if the member chose to participate. In this role, the coach followed up on referrals to AB Plus services.

The coaches also offered some medical case management, including providing basic disease-specific education (for example, discussing condition-specific lifestyle changes and sending participants relevant educational materials to assist with adhering to a diet or increasing one's exercise level). The coach also answered questions about the AB health plan, which often resulted in a referral to the plan administrator or in sending the member a list of local in-network health plan providers. Coaches also answered questions about the member's upcoming transition to Medicare.

The Behavioral Motivation Program: PGAP

Background

Because it can take months for applicants to complete the SSDI determination process, during that time they may lose contact with the labor market and adopt lifestyles that make their return to work difficult. AB Plus included PGAP to assist people in putting themselves back on a path to work. The original PGAP model was a face-to-face intervention for Canadian worker's compensation beneficiaries. While results from randomized clinical trials of PGAP are pending, there is a growing body of nonexperimental research to support its potential effectiveness for the SSDI population. One study found increased return to work for individuals with whiplash who participated in PGAP and received physical therapy, compared with individuals who received only physical therapy.⁵ Another study found that 63.7 percent of worker's compensation beneficiaries with chronic musculoskeletal conditions and co-morbid mental health problems returned to work within a month of completing PGAP.⁶

Service Features

PGAP was designed to gradually reduce the participant's perception of disability and other attitudinal barriers to increasing physical activity and encouraging adoption of a daily activity schedule consistent with a work routine. An introductory video explained the program's goals and motivation. The full program is delivered as 10 curriculum-based modules, with ap-

⁵Sullivan, Adams, Rhodenizer, and Stanish (2006).

⁶Sullivan et al. (2005).

proximately one 1-hour module being administered each week. Participants receive a workbook that includes writing assignments addressing individual goal-setting, activity scheduling, and problem solving.

PGAP as delivered in AB Plus was similar to the original model. One difference was that the AB Plus coaches were social workers, whereas occupational and physical therapists administered the program in the original model. The AB Plus coaches required substantial education about disability and working with people who had disabilities, and this was provided during demonstration training sessions. In the end, the design team believed that the coaches were as good as or better than most rehabilitation specialists in administering PGAP, in part because of their previous experience delivering services over the telephone. Another difference between PGAP as delivered in AB Plus and the original model was that the members of the AB Plus group had a wider range of diagnoses and functional limitations than most previous PGAP participants. As a result, PGAP was modified early in the demonstration as more was learned about AB Plus participants. For example, some assignments initially asked participants to perform activities that were not feasible for someone using a wheelchair, so similar activities that could be done in a wheelchair were substituted. PGAP participants who had pressing health or financial problems, such as being too ill or faced with eviction or loss of utilities, could not always complete one module per week. Such participants were allowed to repeat modules if they missed a few weeks. Lessons could also be repeated if the participant needed reinforcement for some other reason.

PGAP activities included weekly coaching sessions delivered by telephone and assignments from the PGAP workbook, which the participants would review with their coach during each telephone session. The workbook began with five self-administered tools to assess pain, depression, perceived disability, fear and fatigue, and catastrophic thinking. To measure participants' progress, these assessments were readministered during the fourth and tenth modules. The initial modules of PGAP focused on developing a schedule that kept participants active during normal working hours and gradually built up their level of activity and on keeping logs of activities actually conducted.⁷ The coach emphasized activities that the participant was interested in pursuing and that got the person out of bed earlier, out of the house, and exercising modestly. Examples of activities include visiting a neighbor, resuming a household activity that they had stopped doing, and participating in activities related to improving relationships with family members. Toward the end of the curriculum, the focus was on activities that would facilitate reentry into community life and employment.

Low literacy made it difficult for some participants to self-administer the assessments and respond to writing assignments. For example, some participants had difficulty using

⁷See Appendix G for an example of the PGAP activity log.

thought-reaction records, which asked the participant to recall a difficult situation, reflect on what happened, and describe how the situation could have been handled better. Coaches administered the assessments to participants with low literacy but noted that this was time-consuming and that the assessments did not lend themselves to being read to someone else. The thought-reaction records were also challenging because they sometimes raised sensitive emotional or psychological issues that the coaches, who were not trained as mental health counselors, could not address. One coach noted, “It felt like tearing off a bandage and just leaving the wound open and exposed.”

Coaches reported that participants generally found keeping activity logs useful, because it allowed them to look back at their accomplishments over time. Moreover, the act of writing down goals allowed the coaches and participants to break goals down into several manageable steps, so that participants did not find themselves “pushing till it hurt and then having to lie down.” Some participants found the planning activities difficult, however, because they said that had they never planned ahead, even before the onset of their disability.

Employment and Benefits Counseling

Background

The SSDI program has a number of different work incentive provisions, but beneficiaries have found these provisions to be difficult to understand and are not aware of how to maximize their use of them. Less than half of all sample members provided correct answers to questions at baseline about the availability of cash benefits or Medicare coverage while employed, and 92.0 percent did not know about the trial work period or were unaware of its length (not shown). Moreover, SSA efforts to assist beneficiaries to return to work — such as the Ticket to Work Program or the State Partnership Initiative demonstrations — have had very low participation rates, in part because beneficiaries have been unfamiliar with or confused by the efforts that SSA has taken to encourage work.⁸ As a result, the Ticket to Work Act included the Benefits Planning, Assistance and Outreach (BPAO) program, later named the Work Incentives Planning and Assistance (WIPA) program, to explain to beneficiaries how SSA work incentives affect disability benefits and to assist and encourage beneficiaries in accessing their work incentives.

AB Plus employment and benefits counseling were designed to supplement existing SSA programs, like the WIPA program. Employment and benefits counseling helped members of the AB Plus group define career goals, supported their goals with benefits education, and then linked members of the AB Plus group to local resources that could deliver services avail-

⁸Stapleton et al. (2008); Peikes and Bartkus (2002); Rangarajan, Wittenburg, Honeycutt, and Bruckner (2008); and Stapleton et al. (2008).

able in the member's specific community. AB Plus employment and benefits counseling were implemented as designed; however, benefits counselors took on an additional role of developing site-specific social support service resource lists for members of the AB Plus group who needed such services (as described below).

Service Features

Like PGAP, the AB Plus employment and benefits counseling were well-defined face-to-face services that had been used for some time prior to the demonstration. The main modification for the demonstration was to deliver these services by telephone. On receiving a referral from a coach or nurse, a benefits counselor contacted the participant to introduce employment and benefits counseling and learn more about the participant's interest in services. The benefits counselor often mailed the participant written materials, such as the SSA Red Book, which described SSA work incentives, or the AB Plus Employment Toolkit, which presented information about job search, employment planning, and how work might affect SSDI benefits. The benefits counselor also referred participants who were interested in working to the employment counselors.

In mid-2009, the design team modified referrals to the employment counselor slightly because participants were not contacting counselors, as suggested by the coaches, and were not returning counselors' calls. The coaches, who had often developed trusting relationships with participants over time, started offering to hold a conference call with the participant and employment counselor; this was referred to as a "warm transfer." On the call, the coach introduced the participant to the employment counselor, and the three discussed what employment services might be appropriate for the participant.

Employment Counseling

Employment counselors helped participants develop employment goals and decide how best to achieve them, given a participant's disability. A toolkit was developed for the demonstration that provided a structured process and tools drawn from existing vocational programs to support this process. The tools included developing an inventory of a participant's skills, interests, and abilities and addressing such real-life concerns as transportation, mobility, health, stamina, and the local job market. However, the employment counselors noted that they often did not use the toolkit but instead preferred to keep the process conversational and driven by participants' interests. Because delivering counseling over the telephone sometimes made it difficult for employment counselors to understand work limitations and work-readiness, counselors developed creative ways to assess these issues. For example, one counselor helped a participant explore the physical demands of a job by mimicking certain on-the-job activities after the participant expressed an interest in a job requiring standing or lifting.

Once the participant identified potential employment or training interests, the employment counselor helped the participant prepare a résumé and identify work or training opportunities. Because it was not possible for the employment counselors to be familiar with the labor markets in all 53 metropolitan areas, they also needed to be creative in identifying such opportunities. For example, one counselor encouraged participants to walk around their neighborhood, noting the businesses in the area in order to explore which ones might make suitable employers. Another counselor suggested that a participant walk into a neighborhood business, note what might be lacking, and then discuss with the employer whether he or she could be hired to fill that gap. The counselors developed resource lists that described the key employment-related services in the demonstration sites, and they made referrals to the local services, such as the vocational rehabilitation agency, the One-Stop Workforce Center, and Ticket to Work employment networks. To facilitate connections, employment counselors sometimes called local offices to ask about their procedures for serving SSDI beneficiaries and then informed participants about what was expected of them, what to ask for, and what resources they might need to line up in advance (such as an ambulation device).

Benefits Counseling

AB Plus benefits counseling began by identifying the participant's benefits concerns and employment goals. The benefits counselors then provided three levels of analysis, depending on the participant's type of concerns: (1) general information about how work affects benefits and SSA work incentives; (2) "income scenarios" for different wage levels, with charts explaining each level's specific impact on total income; and (3) for those working or about to start work, a benefits summary and analysis that was adapted from the ones used by WIPA programs and that provided a detailed explanation of how a specific job would affect benefits. As input to these analyses, a benefits counselor often had the participant request an SSA Benefits Planning Query (BPQY) in order to have accurate SSA benefit information. Benefits counselors also provided Work Incentives Plan to-do lists with specific tasks for the participant to carry out and the order in which the tasks should be done.

Beginning three months prior to Medicare enrollment, the benefits counselors sent all participants in employment and benefits counseling a packet of information to supplement that which they received from the AB health plan administrator and SSA.⁹ The letter provided contact information for employment or benefits resources (for example, WIPA, One-Stop Workforce Centers, vocational rehabilitation, and Ticket to Work employment networks), as well as programs that cover Medicare cost-sharing and premiums for beneficiaries with limited incomes. Benefits counselors reported that most participants found the information helpful be-

⁹See Appendix H for a sample Medicare transition packet.

cause the transition to Medicare overwhelmed some with the number of decisions that they needed to make.

Benefits counselors took on an added role, the need for which emerged only as the demonstration progressed. In part due to the economic recession that coincided with the AB demonstration period, some members of the AB Plus group had financial problems that had to be addressed before they could consider trying PGAP. As a result, they needed assistance buying food, paying mortgages and other bills, managing debt, and — if they reached the AB health plan’s \$100,000 limit — applying for Medicaid. Those who had hit the benefit limit needed help finding funding for needed health care until they could enroll in Medicare. It fell to the benefits counselors to identify resources for such members, although a number of AB Plus staff commented that social workers might have been a more appropriate and less costly resource for this type of assistance.

Medical Case Management

Background

“Medical case management,” “disease management,” and “care coordination” are terms that are often used interchangeably to refer to services to improve the self-management of chronic diseases. Nurses or social workers — usually employed by hospitals, primary care providers, and private entities — provide this type of care. The underlying assumption is that individuals with chronic conditions see many providers, take many medications, and are advised to follow complex self-care regimens with no single provider overseeing their care or assisting them in adhering to recommendations. In addition, communication among providers is often poor, and if the individual is hospitalized, there is little oversight during the transition back home when the person is highly vulnerable. The evidence on the effectiveness of medical case management and related services has been mixed. This is primarily because it has been difficult to predict who will benefit most from what can be resource-intensive care, and although the implementation of such care shares basic features, differences in effectiveness are related to the detail of the care (for example, how it is implemented and how intensively).¹⁰

AB Plus medical case management was originally designed to help the AB Plus group find appropriate health care services and address health problems that might be barriers to using PGAP or employment and benefits counseling. As the demonstration progressed, the services were implemented even more narrowly; as a result, some might consider them to more closely resemble care navigation than medical case management.

¹⁰See, for example, Peikes, Chen, Schore, and Brown (2009).

Service Features

Nurses were the primary providers of AB Plus medical case management services, and providing those services was their only role in the demonstration. However, the coaches also provided some aspects of case management (such as patient education and help accessing providers), although this was not their primary responsibility. When participants had health problems that were too complex for the coaches, the coaches referred them to the medical case management nurses.

Medical case management nurses received referrals primarily from coaches, sometimes from the AB health plan benefits management staff, and less frequently from employment and benefits counselors. At the start of the demonstration, members of the AB Plus group could be referred for any health problem or unmet medical need that might affect the use of the two AB Plus employment-related services. An example is poor adherence to treatment recommendations for medications or diet. During early implementation, however, the design team became concerned that this version of medical case management led participants to focus too much attention on their illness or disability and distracted them from finding ways to be productive with their limitations and become reintegrated into physical, social, and occupational activities. A similar argument was made about the structured AB Plus intake assessment, which, as noted earlier in this chapter, was eliminated.

As a result, coaches and other staff were instructed to restrict referrals for medical case management to those requests that could be addressed in the near term. Specifically, coaches and counselors were to limit nurse referrals to those members of the AB Plus group who met the following criteria: (1) were screened as likely to have depression or with symptoms of another serious psychiatric disorder and for whom there was no evidence of treatment, (2) needed a determination about whether they were healthy enough to participate in PGAP, (3) were potentially oversedated by their current medication regimen, (4) needed more health education than the coach could provide, or (5) were critically or terminally ill. In addition, nurses continued to receive referrals from coaches or from the health plan benefits managers to assist with arranging complex services after hospitalization, such as different levels of care in multiple settings and home care supported by durable medical equipment.

Medical case management services differed for participants with mental and physical disorders. The psychiatric nurse routinely developed a simple plan of care for each participant. The plan included at most three goals of the participant's choosing, such as getting up at the same time each day, taking a walk, or seeing a therapist. The goals were prioritized, based on the nurses' judgment, and follow-up calls were scheduled to gauge progress toward the goals. The nurse also reviewed medications by first asking the participant to assemble all medication vials and read the labels to her. Then, the nurse and participant discussed the side effects and efficacy of each medication. The psychiatric nurse also infrequently made referrals to mental

health providers when participants had none. The nurse self-reported that roughly 80 percent of participants who were referred to her were already receiving appropriate treatment, although she did not provide verification of this estimate. In addition, on rare occasions, she communicated directly with the participant's mental health provider, usually to request that the provider send a formal order for a requested service or piece of equipment.

The nurses handling physical health problems spent most of their time helping participants navigate the health plan and obtain needed health care resources and approvals, particularly following a hospital stay. For example, a participant leaving the hospital after a total knee or hip replacement usually required approval for rehabilitation or skilled nursing care from a provider in the health plan network. If a hospitalized participant needed to apply for Medicaid on reaching the AB health plan's \$100,000 limit, the nurses sometimes prompted the hospital social worker to begin the paperwork for the application. When time permitted, the nurses also followed up with participants after they left the hospital, using an informal set of questions to find out how they were feeling, whether they were able to get up and about, and whether they had been to their physician and were following the recommended treatment regimen.

Other activities included reviewing requests for equipment and services not related to hospital stays and providing patient education, which is a routine part of nursing care. Nurses noted that occasionally they received requests for durable medical equipment that were not consistent with AB Plus goals, such as increasing activity levels, and, in those cases, were denied. For example, one participant requested a heated lift chair so he "could sit by the window and watch people go by." The nurses reported that they provided health care education to about a fifth of the participants referred to them. Education was similar to the information that coaches provided and included helping participants find providers in the health plan network by referring them to the plan's Web site or by sending them printed lists and providing disease-specific educational materials, such as information about the appropriate diet for a particular medical condition. The psychiatric nurse mentioned referring participants who were not interested in group therapy to self-help and message-board Web sites.

Service Use

The information presented in this section is based on data from the AB Plus management information system: OneCareStreet. Staff used the system to record interactions with AB Plus group members and to coordinate services. While the implementation analysis found no significant problems with the quality of data collected, two areas are underrepresented, based on the system's design. First, the intensity measures presented in this section estimate only the time that participants and staff were in direct contact and thus omit the time that participants spent on the "homework" tasks that were part of PGAP and employment and benefits counseling. Second, medical case management services illustrate only the time that the nurse and participant

were in direct contact. Coaches recorded their medical case management interactions as ongoing service coordination because these efforts were often paired with other non-PGAP tasks that they delivered to participants.

The measures presented below are for the year following random assignment.¹¹ Appendix I includes the same measures for a longer follow-up period, through July 2010. Unless noted, the longer follow-up period did not change the outcomes.

Overall Use of Services

Table 4.3 shows that, during the year after random assignment, 84.9 percent of the AB Plus group completed intake and thereby used at least one AB Plus service. Following intake, 73.8 percent had at least one additional session with an AB Plus staff member (not shown). The relatively high rate of completing intake may reflect the fact that members had just enrolled in the AB health plan and thus were inclined to also complete the intake process. About a third participated in each of the employment-related services — 36.3 percent in PGAP and 35.4 percent in employment and benefits counseling — and 41.9 percent participated in medical case management. Nearly two-thirds participated in at least one of the three key services, and 10.2 percent participated in all three. About two-thirds received ongoing service coordination from the coach. Participants averaged 8.7 contacts that lasted a total of 4.2 hours and had contact with staff in at least three or four months of the first year after random assignment. Only 14.1 percent of participants averaged more than 10 hours in total.

Intake

Table 4.4 shows that 74.2 percent of the AB Plus group members who completed intake did so within three months of random assignment. The intake process took about 40 minutes, on average. Contacting members of the AB Plus group for intake was more labor intensive than these numbers imply, however. Coaches called individuals an average of 5.8 times before completing intake or abandoning their attempts to reach them. The coaches' contact protocol specified that they make nine calls, attempt to contact the group member by mail, and follow up the mailing by up to nine more calls. Coaches noted that common barriers to direct contact with members of the AB Plus group included members' having personal or family health or financial problems that made them unable or unwilling to participate in AB Plus. Furthermore, according to coaches, some members of the AB Plus group — having recently spent considerable effort convincing SSA that they could not work — were suspicious of AB Plus and refused to participate in the program.

¹¹As for the outcomes reported in Chapter 3, the year following random assignment includes the month of random assignment and the subsequent 11 months.

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Table 4.3

Use of AB Plus Services During the First Year of Follow-Up

Service Use	AB Plus Group
Used any service (%)	84.9
Completed intake	84.9
Used 1 or more key AB Plus services	65.6
Progressive Goal Attainment Program	36.3
Employment and benefits counseling	35.4
Medical case management	41.9
Used all 3 key services	10.2
Used ongoing service coordination	67.6
<u>Average total service use^a</u>	
Months with at least 1 session	3.8
Total sessions	8.7
<u>Hours of service use (%)</u>	
No service use ^b	15.4
Less than 1	19.8
1 to less than 2	13.6
2 to less than 5	21.6
5 to less than 10	15.6
10 or more	14.1
Average total hours	4.2
Average total hours for 3 key services	3.1
<hr/>	
Sample size	611

SOURCE: Calculations from records of CareGuide OneCareStreet management information system.

NOTES: ^aThis measures direct contact between staff and AB Plus group members. Service use independent of staff is not measured.

^bA small number of AB Plus group members received services but did not have service time recorded; these participants are included in the "No service use" category.

Ongoing Service Coordination

Table 4.5 reports that 67.6 percent of members of the AB Plus group had one or more ongoing service coordination sessions with their coach. "Coordination sessions" refer to any telephone sessions with coaches that were made not for intake or PGAP; such sessions could have included, for example, a medical case management contact about basic disease-specific education or assistance getting approval for a health plan service. Coordination was the first session after intake for 69.0 percent of those who completed intake (not shown), suggesting that

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Table 4.4

Intake Activities During the First Year of Follow-Up

Service Use	AB Plus Group	Intake Completers
Completed intake (%)	84.9	100.0
<u>Month of follow-up when intake was completed (%)</u>		
No intake completed	15.1	0.0
Months 1 through 3	63.0	74.2
Months 4 through 6	10.6	12.5
Months 7 through 9	6.6	7.7
Months 10 through 12	4.8	5.6
<u>Hours to complete intake (%)</u>		
No intake completed ^a	20.6	6.6
Less than 1	67.3	79.2
1 to less than 2	12.0	14.1
2 or more	0.2	0.2
Average total hours	0.5	0.6
Average number of intake calls without contact ^b	5.8	4.8
Sample size	611	519

SOURCE: Calculations from records of CareGuide OneCareStreet management information system.

NOTES: ^aA small number of AB Plus group members completed intake but did not have service time recorded; these participants are included in the "No intake completed" category.

^bThis measures the average number of telephone calls made to AB Plus group members when trying to contact them for services. AB Plus staff followed a protocol to locate AB Plus group members. Hard-to-reach members were called nine times and then were sent a letter to encourage them to call AB Plus staff; 14.9 percent never completed intake during the first year of follow-up.

many had other needs to meet or questions to answer before deciding whether to use one of the three key AB Plus services. For 13.6 percent of members of the AB Plus group, coordination was their only AB Plus service. Among those who had at least one such session, 62.2 percent engaged in ongoing service coordination within three months of random assignment, with a total duration of just under an hour spread over three to four calls, on average. As was the case for intake, coaches needed to be persistent to reach participants for coordination. On average, coaches made 5.4 unsuccessful calls before reaching participants for ongoing coordination sessions.

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Table 4.5

Use of Ongoing Service Coordination During the First Year of Follow-Up

Service Use	AB Plus Group	Ongoing Service Coordination
Used ongoing service coordination (%)	67.6	100.0
<u>Month of follow-up when first used ongoing service coordination (%)</u>		
No service use	32.4	0.0
Months 1 through 3	42.1	62.2
Months 4 through 6	13.3	19.6
Months 7 through 9	7.0	10.4
Months 10 through 12	5.2	7.8
<u>Average total use of ongoing service coordination^a</u>		
Months with at least 1 session	1.7	2.5
Total sessions	2.4	3.5
<u>Hours in ongoing service coordination (%)</u>		
No service use ^b	32.4	0.0
Less than 1	49.1	72.6
1 to less than 2	12.4	18.4
2 to less than 5	4.9	7.3
5 to less than 10	1.0	1.5
10 or more	0.2	0.2
Average total hours	0.6	0.9
Average total hours per session		0.2
Average number of ongoing service coordination calls without service use ^c	4.1	5.4
Sample size	611	413

SOURCE: Calculations from records of CareGuide OneCareStreet management information system.

NOTES: ^aThis measures direct contact between staff and AB Plus group members. Service use independent of staff is not measured.

^bA small number of AB Plus group members used ongoing service coordination but did not have service time recorded; these participants are included in the "No service use" category.

^cThis measures the average number of telephone calls made to AB Plus group members when trying to contact them for services. AB Plus staff followed a protocol to locate AB Plus group members. Hard-to-reach members were called nine times and then were sent a letter to encourage them to call AB Plus staff; 11.2 percent never used ongoing service coordination during the first year of follow-up.

PGAP

Table 4.6 shows that 36.3 percent of the AB Plus group participated in PGAP during the year after random assignment. Four in five of those who participated started within the first six months. Members of the AB Plus group who participated in PGAP made good progress through the curriculum. Table 4.7 reports that, among the 222 PGAP participants, 16.7 percent completed all ten modules, and 53.1 percent completed at least four. Completion of at least four modules was considered by the PGAP designers as an important milestone because by then a participant would have received a sufficient “dose” of PGAP to have established regular activities during normal work hours. PGAP participants spent an average of 11.2 weeks on the curriculum, suggesting that participants could not cover one module per week, as designed. Participants who were unable to complete more than three modules averaged 2.4 sessions per module, compared with 1.3 sessions per module for participants who progressed further through the curriculum. On average, coaches made 6.1 unsuccessful calls before reaching PGAP participants for sessions (Table 4.6).

Employment and Benefits Counseling

As shown in Table 4.8, during the year after random assignment, 35.4 percent of the AB Plus group participated in employment and benefits counseling, with the majority using the benefits counseling component. Use of employment and benefits counseling services began shortly after random assignment for some members of the AB Plus group: 36.1 percent of those who used the service had a contact with counselors within three months, usually the benefits counselors. During that first year, 49.5 percent of service users spoke to employment counselors, but 75.9 percent spoke with benefits counselors. Those who used employment and benefits counseling services averaged 6.0 telephone sessions, spread over three to four months, for a total of 2.5 hours. In addition to the time recorded for the sessions, the counselors noted that they devoted significant time investigating resources in advance of most telephone calls.¹²

¹²After the first year, employment and benefits counselors continued to receive new referrals; according to staff, however, the nature of interactions focused less on support service issues and more on employment-related activities. The intensity of participation remained the same. As of July 2010, a total of 44.5 percent (that is, another 9 percent relative to the first year) had at least one employment and benefits counseling session (Appendix Table I.6).

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Table 4.6

Use of PGAP Services During the First Year of Follow-Up

Service Use	AB Plus Group	Used PGAP
Used PGAP services (%)	36.3	100.0
<u>Month of follow-up when first used PGAP services (%)</u>		
No service use	63.7	0.0
Months 1 through 3	14.4	39.6
Months 4 through 6	14.7	40.5
Months 7 through 9	4.8	13.1
Months 10 through 12	2.5	6.8
<u>Average total use of PGAP services^a</u>		
Months with at least 1 session	1.1	3.0
Total sessions	2.5	6.9
<u>Hours in PGAP services (%)</u>		
No service use ^b	63.8	0.5
Less than 1	5.1	14.0
1 to less than 2	4.8	13.1
2 to less than 5	10.5	28.8
5 to less than 10	12.4	34.2
10 or more	3.4	9.5
Average total hours	1.8	4.9
Average total hours per session		0.7
Average number of PGAP calls without service use ^c	2.5	6.1
Sample size	611	222

SOURCE: Calculations from records of CareGuide OneCareStreet management information system.

NOTES: ^aThis measures direct contact between staff and AB Plus group members. Service use independent of staff is not measured.

^bA small number of AB Plus group members received PGAP services but did not have service time recorded; these participants are included in the "No service use" category.

^cThis measures the average number of telephone calls made to AB Plus group members when trying to contact them for services. AB Plus staff followed a protocol to locate AB Plus group members. Hard-to-reach members were called nine times and then were sent a letter to encourage them to call AB Plus staff; 14.6 percent never used PGAP services during the first year of follow-up.

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Table 4.7

Summary of PGAP Completions During the First Year of Follow-Up

Service Use	AB Plus Group	Used PGAP
Average number of modules completed	1.8	4.8
Average number of weeks between first and last PGAP session, among PGAP users		11.2
Distribution of modules completed (%)		
0 ^a	67.9	11.7
1-3	13.1	36.0
4	2.0	5.4
5-9	11.0	30.2
10	6.1	16.7
Average session per module (completed 1-3 modules)		2.4
Average session per module (completed 4 or more modules)		1.3
Sample size	611	222

SOURCE: Calculations from records of CareGuide OneCareStreet management information system.

NOTES: A participant could complete PGAP at any point after the fourth module. Completion of at least four modules was considered by the PGAP designers as an important milestone and a sufficient dose of PGAP.

A participant is anyone who had at least one PGAP session, including those who did not complete even one module.

^aIncludes participants who started the first module but did not complete it.

Medical Case Management

Table 4.9 shows that, among the 41.9 percent of members of the AB Plus group who had at least one session with a medical case management nurse during the year after random assignment, 73.0 percent did so within six months. Among service users, most telephone sessions were in a one- to two-month period during which the typical user had 1.8 sessions with a total duration of 1.0 hour, on average. This estimate excludes time spent investigating resources in preparation for a call and calls from AB health plan benefits management staff (for example, to clarify medical necessity) that did not require contact with the AB Plus group member. Only 8.6 percent of service users used 2 hours or more. The nurse responsible for psychiatric cases noted that she spent most of her time with a minority of participants who consistently had symptoms of serious mental health disorders, such as delusions or suicidal thoughts.

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Table 4.8

Use of Employment and Benefits Counseling During the First Year of Follow-Up

Service Use	AB Plus Group	Used EBC
Used employment and benefits counseling (EBC) services (%)	35.4	100.0
Used employment counseling	17.5	49.5
Used benefits counseling	26.8	75.9
<u>Month of follow-up when first used EBC services (%)</u>		
No service use	64.7	0.0
Months 1 through 3	12.8	36.1
Months 4 through 6	11.8	33.3
Months 7 through 9	6.6	18.5
Months 10 through 12	4.3	12.0
<u>Average total use of EBC^a</u>		
Months with at least 1 session	1.2	3.3
Total sessions	2.1	6.0
<u>Hours in EBC services (%)</u>		
No service use ^b	64.7	0.0
Less than 1	10.5	29.6
1 to less than 2	8.8	25.0
2 to less than 5	11.3	31.9
5 to less than 10	4.3	12.0
10 or more	0.5	1.4
Average total hours	0.9	2.5
Average total hours per session		0.4
Average number of EBC calls without service use ^c	1.5	3.8
Sample size	611	216

SOURCE: Calculations from records of CareGuide OneCareStreet management information system.

NOTES: ^aThis measures direct contact between staff and AB Plus group members. Service use independent of staff is not measured.

^bA small number of AB Plus group members received EBC services but did not have service time recorded; these participants are included in the "No service use" category.

^cThis measures the average number of telephone calls made to AB Plus group members when trying to contact them for services. AB Plus staff followed a protocol to locate AB Plus group members. Hard-to-reach members were called six times and then were sent a letter to encourage them to call AB Plus staff; 10.7 percent never used EBC services during the first year of follow-up.

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Table 4.9

Use of Medical Case Management Services During the First Year of Follow-Up

Service Use	AB Plus Group	Used MCM
Used medical case management (MCM) services (%)	41.9	100.0
<u>Month of follow-up when first used MCM services (%)</u>		
No service use	58.1	0.0
Months 1 through 3	20.3	48.4
Months 4 through 6	10.3	24.6
Months 7 through 9	7.5	18.0
Months 10 through 12	3.8	9.0
<u>Average total use of MCM services^a</u>		
Months with at least 1 session	0.6	1.4
Total sessions	0.7	1.8
<u>Hours in MCM services (%)</u>		
No service use ^b	58.4	0.8
Less than 1	26.7	63.7
1 to less than 2	11.3	27.0
2 to less than 5	2.3	5.5
5 to less than 10	1.3	3.1
10 or more	0.0	0.0
Average total hours	0.4	1.0
Average total hours per session		0.5
Average number of MCM calls without service use ^c	0.2	0.4
Sample size	611	256

SOURCE: Calculations from records of CareGuide OneCareStreet management information system.

NOTES: This tables measures only the MCM services delivered by nurses. The MCM services delivered by coaches was recorded as ongoing service coordination.

^aThis measures direct contact between the MCM nurses and AB Plus group members. Service use independent of staff is not measured.

^bA small number of AB Plus group members received MCM services but did not have service time recorded; these participants are included in the "No service use" category.

^cThis measures the average number of telephone calls made to AB Plus group members when trying to contact them for services; 8.2 percent never used MCM services during the first year of follow-up.

Characteristics of Members Who Participated in AB Plus Services

To test whether specific groups of members of the AB Plus group participated more than others, the evaluation team conducted an analysis of the association between AB Plus participation and selected characteristics of sample members as measured at the time of random assignment. Table 4.10 shows that the analysis found differences in the use of some AB Plus services for some subgroups, including those defined by health status, primary diagnosis, and level of education. Members of the AB Plus group who had at least a GED certificate or high school diploma were more likely to complete at least four PGAP modules (22.9 percent, compared with 8.4 percent of those who did not complete high school). This is consistent with coaches' observations that low literacy made participating in PGAP more difficult. Not surprisingly, members of the AB Plus group with a primary diagnosis of neoplasm were less likely to complete four PGAP modules than those with another medical condition (9.2 percent, compared with 21.1 percent) but were more likely to participate in medical case management (53.8 percent, compared with 40.5 percent). Those who self-reported being in poor health participated in employment and benefits counseling significantly less than those in fair or better health (30.7 percent, compared with 39.5 percent).

Conclusions

The following findings from the implementation analysis provide context for some of the impact findings discussed in subsequent chapters and offer lessons for any future implementation of AB Plus services.

Implementation Successes

- **A substantial proportion of the AB Plus group chose to participate in the key AB Plus services.** Despite the fact that the focus of AB was the provision of a health benefit and that AB Plus services were voluntary and delivered by telephone rather than in person, 36.3 percent participated in PGAP, 35.4 percent participated in employment and benefits counseling, and 41.9 percent participated in medical case management.
- **PGAP and employment and benefits counseling can be delivered by telephone, but telephone delivery had its limitations.** Prior to the demonstration, each of the services had been provided almost entirely in person, raising questions about how well they could be adapted for the telephone. The demonstration's adaptations succeeded in engaging substantial proportions of members of the AB Plus group. Staff reported that the telephone allowed them to reach people they may not have been able to reach if services were

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Table 4.10

Use of AB Plus Services During the First Year of Follow-Up, by Selected Characteristics of Sample Members at Baseline

Characteristic	Used an AB Plus Service (%)	Used Ongoing Service Coordination (%)	Used PGAP (%)	Completed PGAP Module 4 (%)	Used Employment and Benefits Counseling (%)	Used Medical Case Management (%)
Primary diagnosis						
Neoplasms	84.6	49.2 ***	26.2 *	9.2 **	30.8	53.8 **
Not neoplasms	85.0	69.8	37.5	21.1	35.9	40.5
Mental disorders (excluding retardation)	83.7	65.9	36.6	22.8	32.5	48.8 *
Not mental disorders	85.2	68.0	36.3	19.1	36.1	40.2
Months until Medicare-eligible						
19-24	86.7	69.6	36.6	20.1	35.5	43.1
Other	82.2	64.5	36.0	19.4	35.1	40.1
Self-reported general health status						
Fair or better	84.6	67.9	38.3	21.6	39.5 **	39.2
Poor	85.4	67.2	34.1	17.8	30.7	44.9
Body Mass Index (BMI)						
Obese (BMI of 30 or higher)	87.8 *	70.6	35.5	20.8	34.4	44.1
Overweight or less	82.4	65.2	37.0	19.1	36.1	39.7
Educational attainment						
High school /GED or higher	87.7 ***	71.5 ***	39.8 ***	22.9 ***	38.5 ***	44.0 **
Less than high school/GED	74.8	53.4	23.7	8.4	23.7	34.4
Sample size (total = 611)						

SOURCES: Calculations from OneCareStreet records, AB baseline survey data, and Social Security Administration administrative records.

NOTES: For each comparison, a chi-square test was run to determine whether there is a difference in the distribution of the characteristics across AB Plus service use. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Two sample members with missing values for Body Mass Index (BMI) were excluded from the calculations of service use by body mass.

delivered face-to-face in an office — such as individuals with emotional or physical barriers to leaving their houses. Staff also said that the telephone lent itself well to delivering factual information, such as benefits information or employment resources. Nevertheless, telephone administration offered some challenges to staff. First, it was difficult initially to interest members and build relationships that sustained their interest once they decided to use the services. This was reflected in part by the number of times staff had to call members before actually reaching them. Second, staff using the telephone were not able to visually assess participants' abilities and, more generally, to read "body language." AB Plus staff developed creative ways to obtain information that heretofore had been obtained by observing participants.

Adaptations

- **The coaching role was more ongoing than originally envisioned.** The program design assumed that the coaches would complete intake with participants and then deliver PGAP and some medical case management services. However, a number of individuals in the demonstration's target population had significant health and disability problems that required medical attention, so more effort was needed to engage them than envisioned during the demonstration's design phase. The coaches became an ongoing point of contact for members of the AB Plus group, especially for those who had complex problems or needs that were outside the purview of the nurses and counselors. As a result, the coach role included not just initially engaging members of the AB Plus group in the demonstration but also sustaining their interest — introducing the key AB Plus services and encouraging participants to try them — as well as acting as a general resource to participants. Coaches consequently were the AB Plus staff who developed the strongest relationships with members of the AB Plus group.
- **Intervention services were refocused on a rehabilitation model (rather than a medical model) to promote types of health care and daily routines that helped participants engage in activities that were more consistent with return-to-work goals.** Over time, and in light of the fact that members of the AB Plus group had many health and disability-related problems, the design team became concerned that AB Plus intake assessment and medical case management focused too much on what was medically wrong with members. This distracted from helping participants reintegrate into physical, social, and occupational activities. Some participants (including those with diabetes or who were obese) had extensive ongoing health care needs. The design team believed that AB Plus services could not adequately address all medical needs and behaviors, given the

resources and limited duration of the intervention. As a result, the structured intake assessment was dropped in favor of a more informal approach to collecting health information, and the focus of medical case management was narrowed from a general disease management-type intervention to one aimed at overcoming short-term health barriers to starting PGAP. The statistics on AB Plus service use reflect the fact that, in terms of hours of service received, medical case management was the least intense of the three key services.

Implementation Challenges

- **Low literacy was a barrier to AB Plus participation.** Statistical analysis showed that the members of the AB Plus group who had less education had lower rates of use of all services. In particular, those without a high school education were less likely to participate in PGAP at all and were less likely to complete at least four PGAP modules. This is consistent with coaches' observations that low literacy made it difficult for some members to complete PGAP workbook assignments.
- **Medical case management was the least structured and most judgment-driven service.** Medical case management was relatively unstructured and driven by professional judgment of the nurses and coaches. Although this is not a problem for the demonstration in and of itself, it makes it difficult to understand what precisely might be replicated in any future implementation.
- **Considerable resources were used to make and maintain contact with members of the AB Plus group.** Coaches made an average of five or six unanswered telephone calls per member to complete intake or provide ongoing service coordination or PGAP, usually in response to a member's request for service. Staff hypothesized the following as reasons why members did not respond to calls and messages: members had personal or family health or financial problems that took priority over AB Plus or, having just spent considerable effort convincing SSA that they could not work, members were suspicious of AB Plus.
- **Staff reported that many AB Plus group members needed financial assistance for basic purchases, such as food and shelter, or help managing debt.** These needs, which were not anticipated in the demonstration design (and which may have been exacerbated by the current economic recession) had to be met before the members could consider AB Plus services. The benefits counselors stepped in to provide information about resources, but social workers may have been better suited and less costly helpers.

Chapter 5

Estimated Impacts on Health Care Use, Unmet Needs, and Health Status

The Accelerated Benefits (AB) Demonstration randomly assigned new Social Security Disability Insurance (SSDI) beneficiaries into three research groups to study the effects of health care benefits on health care use, employment, and benefits receipt. The AB group and the AB Plus group were enrolled in the AB health plan for the duration of their Medicare waiting period, which was generally 18 to 24 months; they had access to the program's health care benefits, and the AB Plus group could also use other services delivered by telephone. The control group could not receive AB services but could obtain health insurance on their own.

Chapter 3 shows that nearly all AB and AB Plus sample members used the program's health care benefits, while Chapter 4 shows that nearly all members of the AB Plus group used at least some of its three telephone services: the Progressive Goal Attainment Program (PGAP), employment and benefits counseling, and medical case management. This chapter investigates whether the demonstration's short-term investments in health care and related services led to changes in health care use and health status.

As illustrated in Figure 5.1, coverage under the AB health plan should increase health care affordability, which, in turn, should increase program group members' health care use; decrease their unmet medical and prescription drug needs; and, perhaps, improve their health status. AB Plus services might bolster these effects on health care use and health status. In particular, medical case management may help individuals find and use more appropriate and more effective health care, while PGAP might improve health — especially mental health — by helping individuals increase their daily activity levels.

Findings in Brief

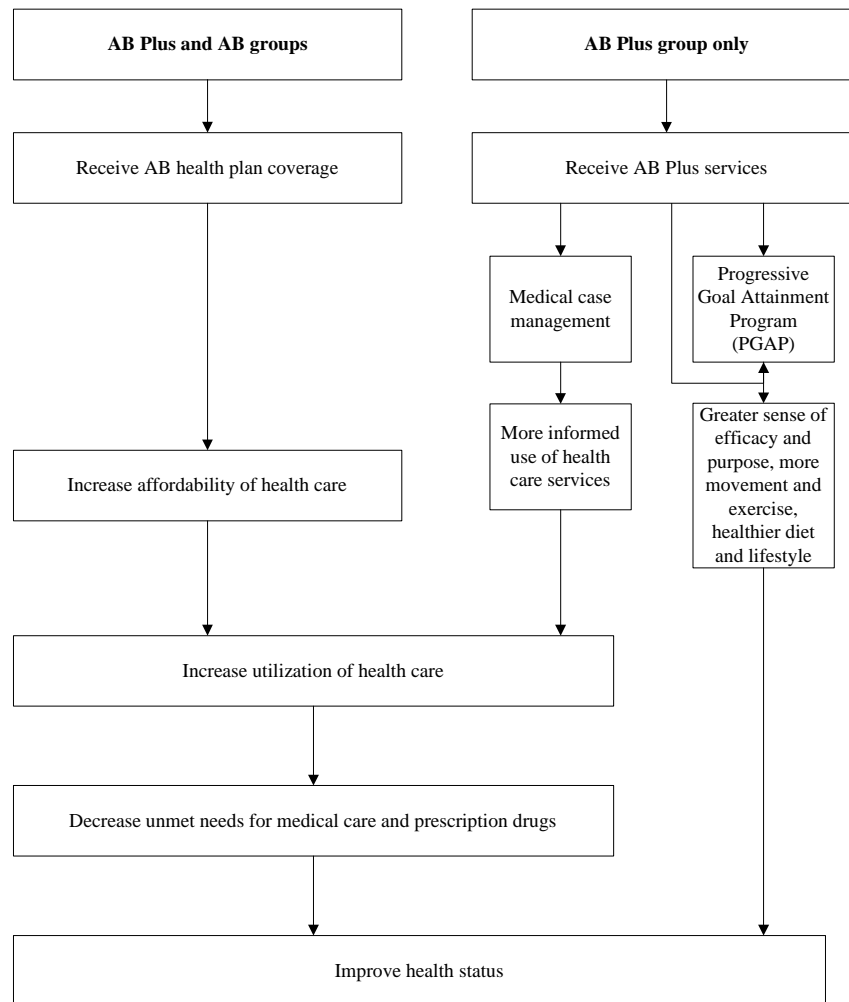
This chapter provides information supporting the following findings:

- **Both the AB Plus and AB groups increased their overall health care use compared with the control group.** While the control group made extensive use of health care (90.2 percent), program group members were more likely to use these services (96.3 percent). The demonstration increased the AB Plus and AB groups' use of regular care and diagnostic tests. Both groups were 12 to 13 percentage points more likely than the control group to have a regular source of care and to have had three or more doctor visits. They also

The Accelerated Benefits Demonstration

Figure 5.1

Change Framework for Health Care, Unmet Needs, and Health Outcomes



were more likely to have had a diagnostic test; AB Plus members' use of these tests was also higher than the AB group's. Lastly, AB Plus and AB group members both underwent more surgeries than the control group.

- **The AB Plus and AB groups' increase in health services led in various ways to large reductions in unmet needs, compared with the control group.** About half of AB Plus and AB group members reported having unmet medical needs — much less than among the control group members

(70.1 percent). Also, the control group was much more likely to delay or forgo medical care for financial reasons (specifically, due to cost or lack of health insurance). Program group members also were much less likely than the control group to have an unmet prescription drug need.

- **Overall, the health status of AB Plus and AB group members improved, compared with the control group.** More AB Plus and AB group members self-reported good, very good, or excellent health (28.0 percent and 31.7 percent, respectively), compared with the control group (21.3 percent). Estimated impacts on health from a standard survey instrument show that the AB and AB Plus groups reported better mental health than the control group. They also reported improvements in several components of physical health.

Previous Research

Although little is known about how the lack of health insurance affects SSDI beneficiaries, a growing body of evidence on other groups indicates that health care coverage does affect health care use and health status. More than one-third of the uninsured who have serious health care concerns (such as diabetes or hypertension) could not see a physician when needed in the past year due to cost.¹ Becoming eligible for Medicare at age 65 reduced the probability of delaying or not receiving medical care and increased the likelihood of routine doctor visits for the previously uninsured.² This is not to suggest that the uninsured do not use medical care, though. A summary of the evidence by the Congressional Budget Office estimates that they receive 60 percent as much care as the insured population.³

Unfortunately, it is difficult to conclude that health insurance improves health, since so few randomized trials have investigated this proposition. The RAND Health Insurance Experiment of the 1970s is often cited in this regard, but it assessed the effect of insurance generosity, not the effect of having any insurance at all. Additionally, beginning in 2008, the Oregon Health Study randomized Medicaid coverage to uninsured, low-income adults on a waiting list for one of its state programs, but it is too early to learn the effects of this insurance expansion.⁴ Thus, the AB Demonstration has important implications for national disability and health policy.

There is evidence from previous nonexperimental studies that providing health care benefits can improve health outcomes, but drawing inferential conclusions from such studies is

¹Ayanian et al. (2000).

²Card, Dobkin, and Maestas (2008).

³Congressional Budget Office (2008).

⁴Allen et al. (2010).

often difficult because of the effects that unobservable factors may have on health status.⁵ One nonexperimental study suggests that lack of health insurance caused 165,000 extra deaths from 2000 through 2006.⁶ Another estimates that eligibility for Medicare at age 65 resulted in a 20 percent reduction in death among the severely ill who were previously uninsured and improves health status, particularly among those with cardiovascular disease and diabetes.⁷ However, highlighting the difficulty in accepting results from nonexperimental studies, a later study slightly revised this model by controlling for self-reported health status and smoking behavior and concluded that there is little evidence to suggest that extending insurance coverage would significantly change the number of deaths in the United States.⁸ Yet another study found no evidence of a significant drop in age-adjusted mortality among the elderly compared with the near-elderly in the 10 years after Medicare was introduced in 1965.⁹

Expectations for One-Year Impacts

The AB research design considers health care use and unmet needs to be direct outcomes; in other words, AB should produce impacts on these measures within one year. Findings about the use of the AB health plan support this, inasmuch as most of the AB Plus and AB group members (88.7 percent) used the AB health plan in the first year, and two-thirds did so within the first three months. (See Chapter 3, Table 3.2 and Figure 3.1.)

However, two factors could limit the impacts of AB on health care use. Most importantly, about 40 percent of the control group had health coverage at some time during the year after they entered the study, and about one-third (34.9 percent) reported coverage at the time of the 12-month interview (not shown). In addition, a small portion of the program group reached the AB health plan's \$100,000 limit during the first year (3.5 percent; Table 3.2), which may have limited their ability to receive needed health care during the intervention period.

The second avenue through which unmet needs may be reduced and health status may improve — a means available only to AB Plus members — is by using AB Plus's medical case management to receive more effective health care.

⁵Levy and Meltzer (2008). The alternative argument is made as well, albeit less frequently. For example, Fisher (2003) argues in an editorial piece that reducing highly invasive hospital care results in lower-quality care and that hospital-based care is dangerous when it is not necessary. Also, Gawande (2010) discusses the evidence that treatment for cancer may kill some people a couple of weeks before they would have died without the treatment.

⁶Dorn (2008).

⁷Card, Dobkin, and Maestas (2007); McWilliams, Meara, Zaslavsky, and Ayanian (2007).

⁸Kronick (2009).

⁹Finkelstein and McKnight (2008).

Finally, if health care use increases and unmet needs decrease, health status is expected to improve (as measured by self-reported general health, quality-of-life scales, and mortality). Changes in health, however, are mediating outcomes — in which the demonstration’s impacts could take longer than one year to observe. A policy brief analyzing interim, six-month impacts of the AB Demonstration was released in April 2010; these initial findings show positive effects on health care services and unmet needs.¹⁰

Data and Outcomes

Most data presented in this chapter come from a follow-up survey administered approximately 12 months after respondents entered the study. By using survey data, it is possible to learn how the control group fared, which cannot be done with data related to program participation, such as AB health claims or AB Plus service data. The 12-month survey sample includes 1,360 individuals randomly assigned through November 6, 2008 (when entry into AB Plus ended), including 548 AB Plus group members, 274 AB group members, and 538 control group members. Appendix Tables K.1 through K.3 compare the AB and control groups using the full research sample, including Phase 2b. Results are similar to those shown in this chapter.¹¹

A second source of information on all study members is the Master Beneficiary Record database of the Social Security Administration (SSA). SSA retains death information in its Numident (official death) file and Master Beneficiary Record database (for SSDI beneficiaries only); these data are collected from state vital statistics offices as well as voluntary sources, such as funeral homes. SSA provided MDRC with mortality information as part of program operations (to facilitate termination of AB health plan coverage and AB Plus services and to aid in fielding the 12-month survey).

The estimates of health care use shown in this chapter are based on self-reported survey data and differ somewhat from those in Chapter 3, which reflect AB health plan claims. Survey data are subject to recall inaccuracies. Also, the AB health plan claims data do not include all medical and prescription drug services that an individual could have received. (Some services were not covered by the plan; health care providers did not accept the plan; or program group members did not submit medical bills for reimbursement.) In addition, 3.5 percent of AB Plus and AB group members reached the \$100,000 coverage limit (Table 3.2). Finally, the survey data and health claims data cover somewhat different samples; the survey data pertain to the 1,360 respondents (548 from AB Plus, 274 from AB, and 538 from the control group), while

¹⁰Wittenburg, Warren, Peikes, and Freedman (2010).

¹¹As a sensitivity check, Appendix J presents results for individuals without neoplasms (usually cancer). Results are similar to those presented in the body of the report. In addition, Appendix L presents results for a core set of outcomes, including employment preparation and employment, for several subgroups. Results are shown in the appendix because there were few differences in outcomes across subgroups.

the health claims are available for all 1,011 program group members (611 from AB Plus and 400 from AB).¹²

In the discussion below, outcomes relating to health care use are broken into primary and specialty care, prescription drugs, and hospital-based care. Unmet needs are separated into those related to medical needs and prescription drugs and those that are due to financial factors — cost or lack of insurance.¹³ And health status is measured using the standard SF-36 health instrument — a generic and validated series of 36 items that measure health-related quality of life during the past four weeks.¹⁴ Responses to the SF-36 are aggregated into eight scales and two summary component measures.¹⁵ Besides their widespread use, the normed SF-36 scores have the advantage of offering easy interpretation. The scales and summary component measures are comparable with each other as well as with scores for the 1998 general U.S. population. They are normed to have means of 50 and standard deviations of 10. Therefore, a score of 40 is 1 standard deviation below the mean — or in the lowest 16th percentile.¹⁶ Finally, the health status measures also include mortality.

Statistical Issues

As mentioned in Chapter 1, three comparisons can be made among the research groups to address three different aspects of the interventions. First, comparing outcomes for the AB group and the control group provides an estimate of the effects of access to health benefits during the Medicare waiting period because only one group is eligible for AB health benefits. Second, comparing outcomes for the AB Plus group and the control group provides an estimate of the effects of combining health benefits with AB Plus services. Finally, comparing outcomes for the AB Plus group and the AB group provides an estimate of the incremental effects of AB Plus services, above and beyond the effects of health care benefits alone.

¹²Appendix O presents a survey response analysis.

¹³The survey question about reasons for unmet prescription drug needs mentioned only cost and did not explicitly include lack of insurance as a potential reason. However, it seems reasonable to assume that respondents without insurance would characterize unmet needs for this reason as being due to cost.

¹⁴The SF-36 is available in the standard (four-week) and acute (one-week) recall versions. The standard version appeared to be more appropriate for the purposes of this study because health status during a month seemed a better gauge of health-related quality of life than status during a single week.

¹⁵The eight SF-36 scales include limitations in physical activities because of health problems, limitations in social activities because of physical or emotional problems, limitations in usual role activities because of physical health problems, bodily pain, general mental health (psychological distress and well-being), limitations in usual role activities because of emotional problems, vitality (energy and fatigue), and general health perceptions (Ware and Sherbourne, 1992). These scale scores are aggregated to calculate the two summary component scores: physical health and mental health.

¹⁶Saris-Baglana et al. (2009).

Although random assignment means that the impact of AB could be assessed using simple averages for each group, this report presents regression-adjusted impact estimates using linear regression methods. Regression adjustment is intended to increase the statistical precision of the estimated effects, helping to distinguish normal variation in outcomes from the effects of the interventions.¹⁷ Appendix M presents full regression results for a core set of outcomes from Chapters 5 and 6. Following standard MDRC practice, binary outcomes were estimated using linear probability models. Appendix N presents impacts for binary outcomes using logistic regressions; it confirms that the implications are similar to those presented in Chapters 5 and 6. Box 5.1 explains how impact estimates are measured and presented in the tables of this report.

To assess whether the program made a difference, statistical significance is used. Briefly, statistically significant impacts are ones that are large enough that they are unlikely to have resulted from a program with no true effect. To assess statistical significance, two-tailed tests were performed at the 10 percent significance level. That means two things. First, using a two-tailed test means that either a large positive or a large negative finding would be interpreted as evidence of the program's effect. Second, using a 10 percent significance level means that there is a 10 percent chance that a program with no true effect could result in a statistically significant impact estimate on any particular outcome. Thus, using statistical significance reduces the chance of incorrectly concluding that the program had an effect, but it does not eliminate it.

Estimated Effects of AB and AB Plus

Health Care Use

Primary Care, Specialty Care, and Prescription Drugs

Table 5.1 shows the estimated effects of the demonstration on health care use during the first year of follow-up. Nearly all AB Plus and AB members (96.3 percent) reported having a primary or specialty care visit — 6.1 percentage points more than control group members. Note the very large portion of the control group who received care. While a substantial portion of them (about 40 percent) were able to obtain health insurance through other means (not shown),

¹⁷Covariates include indicators for the following: under age 50, female, Census region (Northeast, Midwest, and South), having a high school diploma or General Educational Development (GED) certificate, being white, having annual household income below \$40,000, feeling downhearted or blue most or all of the time, poor self-reported general health, body mass index over 30, any unmet medical need in six months prior to random assignment, primary diagnosis related to mental health, primary diagnosis of neoplasm, having 19 to 24 months until Medicare eligibility, having 25 to 28 months until Medicare eligibility, and month of random assignment. Missing values for covariates were imputed using the research group's mean. Sample members with missing values for dependent variables (outcomes) were not included in the regression results. Appendix O provides sensitivity tests of survey nonresponse — which includes those who did not respond to the survey because of death.

Box 5.1

How Impacts Are Measured in This Evaluation

The effects, or *impacts*, of AB and AB Plus are estimated by three comparisons. First, comparing outcomes for the AB group and the control group shows the impacts of AB group members' access to the AB health plan. Second, comparing outcomes for the AB Plus and control groups shows the impacts of combining access to the AB health plan with AB Plus telephonic services. Finally, comparing outcomes for the AB Plus and AB groups shows the incremental impacts of AB Plus telephonic services, above and beyond the impacts of the AB health plan. These comparisons are made through regression procedures that adjust for baseline characteristics in order to increase the statistical precision of the impact estimates.

The impact tables in this report are divided into four series of numbers. The first series shows the mean values or percentages for each research group for a particular outcome, adjusted by the regression procedure to control for differences among research groups in selected characteristics of sample members recorded at their time of random assignment. For example, in the table below, 89.2 percent of the AB Plus group had a regular source of care, compared with 77.7 percent of the control group. In addition, AB Plus group members averaged 22.7 doctor visits, compared with 17.2 visits for the control group. Results for the AB group may be compared with the control group and with the AB Plus group in the same way.

The next three series of numbers display the estimated impacts, the results of comparing outcomes for each research group. (Only one set of impact estimates is displayed here: the AB Plus and control group comparisons.) The "Difference (Impact)" column shows the magnitude of each impact. In these examples, the combination of access to the AB health plan and AB Plus telephonic services led to an impact of 11.5 percentage points (89.2 percent *minus* 77.7 percent) in the incidence of having a regular source of care and to an impact of 5.5 doctor visits (22.7 *minus* 17.2) above the control group levels. These impacts may also be called *increases* relative to the control group, since averages for the AB Plus group are higher.

The two columns at the right show whether each impact estimate is *statistically significant*. Statistically significant impacts are large enough that they are unlikely to have resulted from a program with no true effect. The number of asterisks indicates whether the estimated impact is statistically significant at the 10 percent (one asterisk), 5 percent (two asterisks), or 1 percent (three asterisks) level; the lower the level, the less likely that the impact is due to chance. In these examples, each impact estimate is accompanied by three stars, which means that there is less than a 1 percent chance that a program with no effect would have generated such a large difference. The rightmost column shows the p-value, which is an estimate of the probability that a particular effect could have occurred by chance. In both examples, the chances are less than 1 in 1,000, which gives considerable confidence that the effects are real.

Outcome	AB Plus Group	AB Group	Control Group	AB Plus-Control	
				Difference (Impact)	P-Value
Had a regular source of care (%)	89.2	90.7	77.7	11.5***	0.000
Number of doctor visits	22.7	22.4	17.2	5.5***	0.000
Sample size (total = 1,360)	548	274	538		

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Table 5.1
Impacts on Use of Health Care During the First Year of Follow-Up

Outcome	AB Plus Group	AB Group	Control Group	AB Plus-Control		AB-Control		AB Plus-AB		
				Difference (Impact)	P-Value	Difference (Impact)	P-Value	Difference (Impact)	P-Value	
<u>Primary care, specialty care, and prescription drugs</u>										
Had primary or specialty care visit (%)	96.3	96.3	90.2	6.0***	0.000	6.1***	0.001	0.0	0.977	
Internal medicine	80.8	76.1	67.4	13.4***	0.000	8.7***	0.006	4.7	0.134	
Specialists	67.3	67.6	53.2	14.1***	0.000	14.4***	0.000	-0.3	0.925	
Mental health	25.8	26.0	26.3	-0.4	0.839	-0.3	0.914	-0.2	0.953	
Number of visits	22.7	22.4	17.2	5.5***	0.000	5.2***	0.003	0.3	0.862	
Had a regular source of care (%)	89.2	90.7	77.7	11.5***	0.000	13.0***	0.000	-1.5	0.552	
Had 3 or more visits	83.0	82.1	69.9	13.1***	0.000	12.2***	0.000	0.9	0.774	
Had a diagnostic test (%)	71.1	63.0	48.7	22.4***	0.000	14.4***	0.000	8.1**	0.022	
Regularly takes prescription drugs (%)	90.1	92.8	84.0	6.1***	0.001	8.8***	0.000	-2.7	0.248	
<u>Hospital-based care (%)</u>										
Visited emergency department	48.4	49.0	47.6	0.9	0.771	1.4	0.700	-0.5	0.882	
1-2 visits	30.5	32.9	28.2	2.2	0.428	4.7	0.174	-2.4	0.475	
3-5 visits	12.6	10.4	15.2	-2.7	0.192	-4.8*	0.056	2.1	0.395	
6 or more visits	5.4	5.6	4.1	1.3	0.315	1.6	0.336	-0.2	0.887	
Admitted to hospital	36.5	34.0	31.3	5.3*	0.065	2.7	0.434	2.5	0.467	
1-2 admissions	26.8	23.9	21.0	5.8**	0.026	2.9	0.355	2.9	0.367	
3-5 admissions	7.4	6.5	7.5	-0.1	0.930	-1.0	0.599	0.9	0.648	
6 or more admissions	2.4	3.6	2.8	-0.4	0.675	0.8	0.514	-1.2	0.317	
Underwent surgery	29.5	28.0	19.4	10.1***	0.000	8.6***	0.007	1.5	0.640	
Sample size (total = 1,360)	548	274	538							

SOURCE: Calculations from responses to the AB 12-month follow-up survey.

NOTES: For each comparison, a two-tailed t-test was applied to differences between outcomes for research groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Sample sizes may vary because of missing data.

many of these individuals remained uninsured and paid for care out of pocket, made use of the health care safety net (such as community health centers, public hospitals, or private nonprofit hospitals), relied on support of family and friends, or went into debt. Despite this high utilization level, unmet needs linger (in all three groups, but more so for the control group).

Use of non-mental health services drives the program-control difference in health care use, with AB Plus and AB members being more likely than the control group to have visited doctors of internal medicine and specialists. The overall rate of visiting a mental health professional was much lower than for other types of care, for which about one-quarter of each research group had at least one visit; somewhat fewer program group members (17.1 percent) incurred a mental health or substance abuse claim under the AB health plan (Chapter 3, Table 3.2).

While control group members did access a considerable amount of health care, they did not use as much regular care or receive as many diagnostic screening tests as the AB Plus and AB group members. AB Plus and AB increased the proportion of individuals with a regular source of care by 11.5 to 13.0 percentage points, respectively, over the control group's level (77.7 percent), and both groups increased the likelihood of having three or more visits to the doctor by about the same amount (over the control group's average of 69.9 percent). Additionally, AB Plus and AB group members were, respectively, between 6.1 and 8.8 percentage points more likely than the control group (84.0 percent) to regularly take a prescription drug. The majority of AB Plus members (71.1 percent) had a diagnostic test, which is much higher than among the control group (48.7 percent). This is true for AB group members as well (63.0 percent, or 14.4 percentage points higher than the control group). The 8.1 percentage-point difference between AB Plus and AB group members may be attributed to AB Plus services, as AB Plus staff encouraged individuals to contact their physicians if they raised a health concern during a medical case management or PGAP session. This, in turn, may have caused doctors to recommend (and sample members to receive) more diagnostic tests.

Hospital-Based Care

While primary and specialty care was expected to (and did) increase for AB Plus and AB group members, it is less clear how hospital-based care would change. Increased access to regular care and preventive services could decrease the need to visit the emergency department, to be admitted to the hospital, or to undergo surgery.¹⁸ However, the AB health plan also makes these services more affordable, potentially increasing their use. Visits for hospital-based care — particularly in the emergency room — may not change if study participants are going for appropriate care and true emergencies. Impacts on emergency room care use also may not

¹⁸Other efforts to reduce hospitalization by increasing use of primary and preventive care have rarely been effective.

appear if program group members used it as a usual source of care while uninsured but later began to use it for urgent needs after gaining health coverage.

The largest impacts on these measures are seen for having undergone a surgery — both the AB Plus and the AB group were more likely (29.5 percent and 28.0 percent, respectively) to have had such a procedure, compared with the control group (19.4 percent). The positive impacts on surgeries suggest that the health coverage offered to AB Plus and AB group members addressed a previously unmet surgical need (discussed next). This also is supported by a prior study that found an increase in elective surgeries (such as bypass surgery and joint replacement) when individuals turned 65 and became eligible for more generous health insurance coverage through Medicare.¹⁹

Similar proportions of each research group used most other types of care. Slightly less than half visited the emergency department, and about one-third had a hospital admission (although AB Plus members were slightly more likely to go to the hospital than the control group). It may seem surprising that 31.3 percent of control group members used presumably costly hospital care, but about half of these control group members reported having insurance coverage during the follow-up period. In addition, this is consistent with recent research from the National Center for Health Statistics, which found the uninsured are just as likely as the insured to visit the emergency department.²⁰

Unmet Needs

Table 5.2 summarizes the estimated effects of AB on unmet medical and prescription needs and out-of-pocket medical expenditures during the first year of follow-up. Nearly every measure presented shows a large reduction in unmet need when comparing the AB Plus and AB groups with the control group.

Both AB and AB Plus reduced the proportion reporting unmet medical needs by 18 to 20 percentage points — a similar impact as observed at six months. Additionally, the level of unmet needs is striking: 70.1 percent of the control group and more than half of the program groups indicated some unmet medical need. These levels are higher than prior research has found. For example, one earlier study found that more than one-third of the uninsured with serious health care needs (such as diabetes or hypertension) could not see a physician when needed in the past year due to cost.²¹ This finding might reflect the broad nature of the demonstration's survey question, which asked individuals whether there was any time that they did not see a doctor or get medical care that they needed or whether there was any time that they

¹⁹Card, Dobkin, and Maestas (2008).

²⁰Garcia, Bernstein, and Bush (2010).

²¹Ayanian et al. (2000).

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Table 5.2

Impacts on Unmet Medical and Prescription Needs and Out-of-Pocket Medical Expenditures During the First Year of Follow-Up

Outcome (%)	AB Plus Group	AB Group	Control Group	AB Plus-Control		AB-Control		AB Plus-AB	
				Difference (Impact)	P-Value	Difference (Impact)	P-Value	Difference (Impact)	P-Value
<u>Any unmet medical need</u>	52.5	50.2	70.1	-17.7***	0.000	-20.0***	0.000	2.3	0.504
Postponed getting medical care	39.2	39.3	62.9	-23.7***	0.000	-23.6***	0.000	-0.1	0.979
Did not get medical care	26.9	30.3	53.9	-26.9***	0.000	-23.6***	0.000	-3.3	0.330
Referred to doctor, but did not go	10.7	11.8	15.8	-5.1**	0.011	-4.0	0.104	-1.1	0.650
Referred for tests, but did not go	3.8	2.6	10.7	-6.9***	0.000	-8.2***	0.000	1.2	0.486
Referred for surgery, but did not go	13.9	11.6	18.5	-4.6**	0.034	-6.9***	0.010	2.3	0.396
<u>Unmet medical needs due to cost or lack of insurance</u>	24.3	28.6	59.9	-35.6***	0.000	-31.3***	0.000	-4.3	0.192
Postponed or did not get medical care	20.9	26.1	57.9	-37.0***	0.000	-31.8***	0.000	-5.2	0.113
Referred to doctor, but did not go	4.8	6.3	14.1	-9.4***	0.000	-7.8***	0.000	-1.6	0.441
Referred for tests, but did not go	1.5	1.3	9.2	-7.7***	0.000	-7.9***	0.000	0.2	0.911
Referred for surgery, but did not go	5.2	6.0	13.8	-8.6***	0.000	-7.9***	0.000	-0.8	0.717
<u>Had unmet need for prescriptions</u>	35.5	33.1	75.2	-39.7***	0.000	-42.1***	0.000	2.4	0.482
Had reduced dosage due to cost	25.6	25.9	59.2	-33.6***	0.000	-33.3***	0.000	-0.2	0.940
Does not take prescriptions regularly	9.9	7.2	16.0	-6.1***	0.001	-8.8***	0.000	2.7	0.248
<u>Out-of-pocket medical expenditures</u>									
Less than \$1,000	47.5	56.8	35.4	12.1***	0.000	21.4***	0.000	-9.3**	0.012
\$1,000 to less than \$5,000	39.2	28.8	37.6	1.6	0.585	-8.9**	0.015	10.5***	0.004
\$5,000 or more	13.3	14.4	26.9	-13.7***	0.000	-12.5***	0.000	-1.2	0.687
Sample size (total = 1,360)	548	274	538						

SOURCE: Calculations from responses to the AB 12-month follow-up survey.

NOTES: For each comparison, a two-tailed t-test was applied to differences between outcomes for research groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Sample sizes may vary because of missing data.

postponed getting needed medical care. In other words, the question asked about *any* unmet needs, not just those that might be due to the cost of care. In fact, about half the unmet needs in the AB Plus and AB groups were not due to cost or insurance — relatively fewer than in the control group (85 percent). This suggests an even greater effect of the demonstration, as unmet needs due to cost or insurance best estimate the effect of providing program group members with immediate health coverage.

The demonstration also reduced AB Plus and AB group members' unmet prescription drug needs by more than half (about one-third, compared with three-quarters of the control group). Most of this decrease was due to program group members' taking their full recommended dosages (about three-quarters, compared with 40.8 percent of the control group). AB Plus and AB members also were more likely to take any prescriptions regularly (6.1 and 8.8 percentage points, respectively, above the control group's average of 84.0 percent).²²

While health care use increased and unmet needs decreased, AB Plus and AB group members' out-of-pocket medical expenditures decreased due to the \$100,000 in health care covered by the AB health plan. Both versions of the program reduced the proportion of sample members who paid more than \$5,000 out of pocket, and they increased the proportion who had out-of-pocket expenditures of less than \$1,000. However, the AB Plus group was significantly less likely than the AB group to spend less than \$1,000 on health care and was significantly more likely to spend between \$1,000 and \$5,000. Although AB health plan benefits and differences in health care use were relatively similar between the AB Plus and AB groups (Chapter 3), AB Plus members may have been encouraged to seek more care through care management or PGAP services. AB Plus members also had more diagnostic tests, which may have contributed to their somewhat higher out-of-pocket health care expenditures.

Health Status

Table 5.3 shows the AB's estimated impacts on self-reported health status during the first year of follow-up. Overall, physical and mental health status improved for AB Plus and AB group members, compared with the control group. More AB Plus and AB group members (28.0 percent and 31.7 percent, respectively) reported good, very good, or excellent health than members of the control group (21.3 percent). Additionally, they were more likely to express that their health had improved since random assignment (more than one-third of AB Plus and AB group members, compared with about one-quarter of the control group); in the baseline survey, about one-third of the sample had reported having fair health, and about one-half had reported

²²Sample members who did not take prescriptions regularly are included in the overall measure of unmet prescription drug need.

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Table 5.3

Impacts on Physical and Mental Health During the First Year of Follow-Up

Outcome	AB Plus Group	AB Group	Control Group	AB Plus-Control		AB-Control		AB Plus-AB		
				Difference (Impact)	P-Value	Difference (Impact)	P-Value	Difference (Impact)	P-Value	
<u>Self-reported health (%)</u>										
Good, very good, or excellent	28.0	31.7	21.3	6.6***	0.007	10.4***	0.001	-3.8	0.209	
Fair	46.8	41.5	41.4	5.4*	0.075	0.1	0.978	5.3	0.151	
Poor	25.2	26.7	37.2	-12.0***	0.000	-10.5***	0.001	-1.5	0.617	
<u>Health compared with random assignment (%)</u>										
Improved	35.4	35.9	25.7	9.7***	0.000	10.2***	0.002	-0.6	0.862	
Did not change	55.5	52.9	57.4	-1.9	0.530	-4.5	0.223	2.6	0.478	
Worsened	9.1	11.2	16.9	-7.7***	0.000	-5.7**	0.015	-2.1	0.373	
<u>SF-36 health survey^a</u>										
<u>Component summary scores</u>										
Physical	32.4	33.5	32.3	0.1	0.839	1.2*	0.087	-1.1	0.120	
Mental	39.4	38.6	36.9	2.5***	0.001	1.7*	0.057	0.8	0.352	
<u>Scales</u>										
Physical functioning	30.4	30.6	30.2	0.2	0.776	0.4	0.614	-0.2	0.784	
Role physical	33.8	33.8	32.5	1.3***	0.009	1.3**	0.040	0.0	0.942	
Bodily pain	36.0	37.4	35.1	0.9	0.168	2.4***	0.004	-1.4*	0.074	
General health	33.3	34.0	32.3	1.0*	0.071	1.6**	0.017	-0.6	0.360	
Vitality	38.7	39.6	37.9	0.8	0.173	1.7**	0.013	-0.9	0.166	
Social functioning	33.5	33.2	31.8	1.7**	0.011	1.4*	0.084	0.3	0.726	
Role emotional	36.8	36.0	34.0	2.8***	0.000	2.0**	0.033	0.8	0.392	
Mental health	37.9	37.0	35.8	2.0***	0.006	1.1	0.202	0.9	0.324	
Quality adjusted life years (0 = worst health state; 1 = best)	0.542	0.538	0.529	0.013**	0.038	0.009	0.232	0.004	0.610	
Sample size (total = 1,360)	548	274	538							

(continued)

Table 5.3 (continued)

Outcome	AB Plus Group	AB Group	Control Group	AB Plus-Control		AB-Control		AB Plus-AB	
				Difference (Impact)	P-Value	Difference (Impact)	P-Value	Difference (Impact)	P-Value
<u>Died since random assignment^b</u>	5.2	5.2	3.5	1.8	0.109	1.7	0.203	0.0	0.973
Sample size (total = 1,531)	611	305	615						

SOURCES: Calculations from responses to the AB 12-month follow-up survey, AB baseline survey and Social Security Administration administrative data.

NOTES: For each comparison, a two-tailed t-test was applied to differences between outcomes for research groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Sample sizes may vary because of missing data.

^aAll SF-36® health survey measures (component summary scores and scales) are normed to a U.S. general population with a mean of 50 and standard deviation of 10. The eight health domain scales contribute to the physical and mental component summary measures. However, the physical functioning, role physical, bodily pain, and general health scales contribute most to the physical component summary measure. Similarly, the vitality, social functioning, role emotional, and mental health scales contribute most to the mental component summary measure. The individual scale scores have the following meanings. (Web site: <http://www.sf-36.org/tools/sf36.shtml#LIT>)

Physical functioning scale: lowest possible score is "very limited in performing all physical activities, including bathing or dressing"; highest possible score is "performs all types of physical activities including the most vigorous without limitations due to health."

Role physical scale: lowest possible score is "has problems with work or other daily activities as a result of physical health"; highest possible score is "has no problems with work or other daily activities."

Bodily pain scale: lowest possible score is "has very severe and extremely limiting pain"; highest possible score is "has no pain or limitations due to pain."

General health scale: lowest possible score is "evaluates personal health as poor and believes it is likely to get worse"; highest possible score is "evaluates personal health as excellent."

Vitality scale: lowest possible score is "feels tired and worn out all of the time"; highest possible score is "feels full of pep and energy all of the time."

Social functioning scale: lowest possible score is "extreme and frequent interference with normal social activities due to physical and emotional problems"; highest possible score is "performs normal social activities without interference due to physical or emotional problems."

Role emotional scale: lowest possible score is "has problems with work or other daily activities as a result of emotional problems"; highest possible score is "has no problems with work or other daily activities."

Mental health scale: lowest possible score is "has feelings of nervousness and depression all of the time"; highest possible score is "feels peaceful, happy, and calm all of the time."

^bThis measure is based on Social Security Administration administrative data and includes survey respondents (N = 1,360) and nonrespondents (N = 171). It shows only deaths that occurred within the one-year follow-up period.

poor health (Chapter 2, Table 2.2).²³ However, about half of all groups reported no change in health since random assignment (55.5 percent of the AB Plus group, 52.9 percent of the AB group, and 57.4 percent of the control group). Still, the movements in health status among AB Plus and AB group members are heartening, as self-reported general health statuses did improve overall. Program group members — who had severe health conditions at the time of random assignment — experienced slower health declines than their counterparts in the control group.

The SF-36 health survey measures one's health-related quality of life, and while the study's overall levels are much lower than levels in the U.S. general population, impacts are positive overall on many of these health-related quality-of-life outcomes, such as the interference of mental or physical health on work or daily activities. The mental component summary score indicates that the demonstration increased mental health, moving from 36.8 for the control group to 39.4 and 38.5 for the AB Plus and AB groups, respectively. This is equivalent to a jump, on average, from the 9th to the 14th percentile nationally for the two program groups — a relatively small but statistically significant improvement. Mental health may have gotten better simply because program group members had more security and, therefore, decreased stress associated with having medical coverage through the AB health plan. However, the large impact on taking prescription drugs (Table 5.1) may have contributed to this as well. Estimated effects on the physical component summary score are smaller than for the mental component, although the AB group had significantly higher physical health scores than the control group.

The AB Plus and AB groups each saw improvements over the control group in five out of eight of the SF-36 scales. Both groups had increases in their role functioning-physical, general health, and role functioning-emotional scales. Compared with the control group, only the AB Plus group improved in social functioning and mental health, and only the AB group improved its bodily pain and vitality scores.

The bottom panel of Table 5.3 shows how many people died in the year after entering the study, indicating whether AB had an effect on short-term mortality. Overall, the death rates are higher than anticipated, reflecting the presence of a number of very sick people in the sample. In particular, about 30 percent of those with a primary diagnosis of neoplasm (cancer) died in the first year, accounting for more than half of all deaths among sample members (not shown).

Since the difference in death rates between the AB Plus and control groups is very close to being statistically significant at the 10 percent level (p -value = 0.109) and because death rates are just barely significantly higher when the AB and AB Plus groups are combined (p -value = 0.082; not shown), some further analyses were conducted to rule out possible explanations

²³For example, a sample member who at baseline self-reported health as fair would have improved health if it was reported as good, very good, or excellent at 12 months.

related to the intervention. The demonstration increased the proportion of individuals who underwent surgery. Since surgeries carry risks of infections and complications, then it is possible that AB and AB Plus sample members died soon after undergoing surgery, and this might suggest that AB health benefits were responsible for the higher death rates in those groups. That explanation did not prove to be the case. Death rates are slightly higher among AB Plus and AB group members who did not receive surgery (control group data are unavailable because AB health plan claims were used for this analysis), and those who died after surgery did not generally die shortly after surgery. A second hypothesis is that PGAP participation (or, less likely, another AB Plus service) resulted in excessive physical activity that could have resulted in death. However, very few AB Plus members who died had engaged in PGAP. Moreover, case notes from the OneCareStreet and Wisdom systems in April 2010 do not indicate any issues in PGAP service delivery. If individuals reported that they were tired or not feeling well, the PGAP counselor followed protocol and asked that the participants modify their activity.

Because neither health care benefits nor AB Plus services were expected to result in more death, and because the further analyses did not find an obvious link between the AB interventions and death, the research team concluded that the difference in death rates between the two AB groups and the control group is likely to be typical variation in a sample of this size. This view is bolstered by the fact that the difference in death rates between the program and control groups fluctuates substantially depending on which samples and time periods are examined. For example, when the entire AB and control group samples are used in the comparison (that is, including individuals who were randomized in Phase 2b), death rates for the two groups are nearly the same (4.4 percent and 4.6 percent, respectively; Appendix Table K.5). By contrast, the difference in death rates between the AB Plus group and the control group is 2.5 percentage points and statistically significant during the 21 months following random assignment, which is the longest follow-up period available for all sample members.

Conclusions

Despite quite high levels of health care use among the control group, their unmet health care needs persisted during the demonstration's first year of follow-up. This underscores a key issue with the 24-month waiting period for Medicare eligibility. While those new SSDI beneficiaries who are uninsured manage to use health care, they seem to have great difficulty satisfying their health care needs. In contrast, providing AB Plus and AB group members with health care coverage increased their health care use on many fronts — from seeing general practitioners and specialists to undergoing surgeries and taking prescription drugs regularly — resulting in a large reduction in their unmet medical needs. However, perhaps due to the uniqueness of new SSDI beneficiaries in the demonstration, some of the program group's unmet health care needs persisted.

The uptake in health care use translated to improvements in many health status measures for AB Plus and AB group members. This may continue, as program group members will have access to the AB health plan for up to 12 additional months. Few statistically significant differences emerged between AB Plus and AB group members after one year.

In general, both the AB Plus and the AB group members reported being better off at the end of one year in the demonstration: they spent less out of pocket on medical expenses, had high satisfaction with the AB health plan (Chapter 3), experienced much fewer unmet needs, and saw improvements in measured health status. These encouraging results underscore the importance of providing health care coverage to uninsured, new SSDI beneficiaries during the 24-month Medicare waiting period.

Chapter 6

Estimated Impacts on Employment, Job Preparation, and Paying for Basic Necessities

New beneficiaries of Social Security Disability Insurance (SSDI) who participated in the Accelerated Benefits (AB) Demonstration were randomly assigned into three research groups to study the effects of health care benefits on health care use, employment, and benefits receipt. For the 18 to 24 months that they waited before becoming eligible for Medicare, members of both the AB group and the AB Plus group were enrolled in the AB health plan and could access the program's health care benefits; in addition, the AB Plus group could use other services delivered by telephone. Although control group members could obtain health insurance on their own, they could not receive AB services.

Chapter 5 examines the effects of the program on health care use, unmet medical needs, and health status during the year following random assignment. This chapter now presents the estimated short-term effects of AB and AB Plus on participants' job search, use of work supports, employment, and difficulties in paying for basic necessities.

According to the logic model, improvements in health could lead to an increase in the use of work supports and job search. Health improvements could also lead to an increase in employment, though these effects could take longer to develop, particularly if program participants are using work supports to prepare for employment. Additionally, the AB Plus services — particularly the employment and benefits counseling and the Progressive Goal Attainment Program (PGAP; see Chapter 4) — could lead to an increase in the use of work supports, job search, and employment. Finally, reductions in out-of-pocket health expenses shown in Chapter 5 (as well as earnings from employment) might result in the immediate reduction in difficulty meeting daily needs, such as paying bills for housing, food, and utilities. As in Chapter 5, results are regression-adjusted and are based on data from the 12-month survey for individuals randomly assigned through November 6, 2008 (when entry into AB Plus ended).

Findings in Brief

- **AB Plus services increased job preparation and job search.** Compared with the control group and the AB group, the AB Plus group used more employment supports from the Ticket to Work program, vocational rehabilitation programs, and One-Stop Career Centers. However, there were no statistically significant impacts on these outcomes for the AB group.

- **There were no statistically significant impacts on current employment or employment during the year after random assignment.** Overall, employment was very low for all three research groups, which is consistent with the serious health problems and low employment rates observed at baseline.
- **Both AB and AB Plus reduced the percentage of participants who reported difficulties in paying for basic necessities.** This was measured as respondents' reporting skipping or cutting the size of meals; inability to pay mortgage, rent, or utility bills; and discontinuation of phone service. The impacts of AB were larger than those of AB Plus, which is consistent with the finding that AB participants had lower out-of-pocket medical expenditures.

Job Search and the Use of Work Supports

Table 6.1 shows the estimated first-year effects of AB Plus on job search, use of employment-related services, whether participants obtained information on work incentives from the Social Security Administration (SSA), and education outcomes. The employment services that were measured in the 12-month follow-up survey were distinct from those offered by AB Plus and included participation in the Ticket-to-Work program, the state vocational rehabilitation program, and the state unemployment program, among others. The SSA work incentives measures include information on whether participants tried to call the Social Security office or disability service organizations to find out how their benefits might be affected by work, and they signal the participants' motivation to seek employment. Finally, the education measures include current school enrollment and enrollment in a school-based program since random assignment.

The AB Plus program increased all types of job preparation except education. AB Plus members were more likely to look for jobs than control group and AB group members (15.5 percent versus 12.5 percent and 10.5 percent, respectively), although only the difference between the rates for the AB Plus and AB groups is statistically significant. Overall, few people looked for work, and differences across groups are not large. AB Plus also significantly increased the proportion of people receiving employment or vocational services, such as the Ticket to Work program. AB Plus participants were also more likely than respondents in the other two groups to gather information on how benefits would be affected by work — which, as noted above, might be related to direct delivery of employment and benefits counseling.

Neither program significantly increased school enrollment. This is not surprising, given that most study participants were middle-aged at random assignment; about 70 percent of the sample were between ages 45 and 55 (not shown). Lack of impacts on education may also be driven, in part, by the relatively large number of people who entered the demonstration with a

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Table 6.1

Impacts on Efforts to Gain Employment During the First Year of Follow-Up

Outcome (%)	AB Plus Group	AB Group	Control Group	AB Plus-Control		AB-Control		AB Plus-AB		
				Difference (Impact)	P-Value	Difference (Impact)	P-Value	Difference (Impact)	P-Value	
Looked for work										
Ever looked for work	15.5	10.5	12.5	3.0	0.142	-2.0	0.433	5.0**	0.046	
During past 4 weeks	9.3	7.5	7.9	1.4	0.413	-0.4	0.861	1.8	0.396	
Full-time work	3.9	4.1	3.6	0.3	0.766	0.5	0.715	-0.2	0.902	
Employment-related services										
Received employment or vocational rehabilitation services	9.0	3.6	4.9	4.1***	0.005	-1.3	0.468	5.4***	0.003	
Ticket to Work program	4.6	1.3	1.5	3.1***	0.002	-0.2	0.853	3.3***	0.007	
Vocational rehabilitation services	4.7	1.8	3.1	1.6	0.158	-1.3	0.328	2.9**	0.032	
Other employment services	7.5	2.3	4.5	2.9**	0.032	-2.3	0.171	5.2***	0.002	
Information on work and benefits										
Tried to find out how benefits would be affected by work	37.2	26.4	30.7	6.5**	0.023	-4.3	0.221	10.7***	0.002	
Received help understanding effect of employment on Social Security benefits	43.9	30.1	31.5	12.4***	0.000	-1.4	0.687	13.8***	0.000	
School enrollment										
Enrolled in school	5.8	4.3	4.6	1.2	0.366	-0.3	0.869	1.4	0.364	
Currently enrolled	3.6	3.0	2.4	1.3	0.219	0.7	0.596	0.6	0.634	
Sample size (total = 1,360)	548	274	538							

SOURCE: Calculations from responses to the AB 12-month follow-up survey.

NOTES: For each comparison, a two-tailed t-test was applied to differences between outcomes for research groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Sample sizes may vary because of missing data.

high school diploma or a General Educational Development (GED) certificate, which is also consistent with the age distribution of the sample.

Overall, the findings provide some evidence that AB Plus might influence the number of participants who were on a work path, including connecting people to more intensive direct employment supports through vocational rehabilitation programs, the Ticket to Work program, and One-Stop centers. It is possible that these services might lead to longer-term employment outcomes. These findings for the AB Plus group relative to the AB group are also consistent with the logic model that additional AB Plus supports may hasten impacts for employment-related outcomes.

Employment

Table 6.2 shows the estimated effects of AB and AB Plus on current employment and employment since random assignment. Both measures are presented because it is not clear whether AB would have larger effects later in the follow-up period — that is, at the time at the interview — or over the full follow-up period.

Employment rates for both measures are generally low, and there are no statistically significant impacts. Only a minority of participants in any of the groups (about 11 percent) had worked since random assignment, mostly in wage and salary jobs (not self-employment), and a smaller portion (about 7 percent) were currently working. On average, about 6 percent to 7 percent of respondents were working during any given month in the year following random assignment.

The lack of employment impacts at this early stage is not necessarily surprising, given the SSDI program eligibility requirements, the poor health characteristics of the sample, and poor economic climate. To qualify for benefits, a beneficiary must have an inability to engage in any substantial gainful activity (SGA) by reason of any medically determinable physical or mental impairment(s) which can be expected to result in death or which lasted or can be expected to last for a continuous period of not less than 12 months. Hence, it is not surprising that few beneficiaries are working during the one-year follow-up period. In fact, only about 5 percent of the sample were working when they entered the study, which is lower than the 10 percent average for the general SSDI population.¹ Finally, most of the follow-up period occurred during the most severe economic downturn since the Great Depression, which would have made it difficult for program group members to find jobs.

¹Livermore (2009).

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Table 6.2

Impacts on Employment and Earnings During the First Year of Follow-Up

Outcome	AB Plus Group	AB Group	Control Group	AB Plus-Control		AB-Control		AB Plus-AB	
				Difference (Impact)	P-Value	Difference (Impact)	P-Value	Difference (Impact)	P-Value
Employment since random assignment (%)									
Ever employed	10.5	10.7	9.3	1.2	0.507	1.4	0.522	-0.2	0.921
Self-employed	2.3	1.2	1.7	0.6	0.455	-0.5	0.618	1.1	0.265
Participated in special work program	0.9	1.1	0.7	0.2	0.763	0.3	0.621	-0.2	0.803
Average monthly employment ^a	6.6	7.4	6.3	0.3	0.821	1.1	0.501	-0.8	0.623
Current employment									
Currently employed (%)	7.2	7.9	6.7	0.4	0.778	1.2	0.541	-0.7	0.702
Self-employed	1.4	0.1	1.1	0.3	0.663	-1.0	0.168	1.3*	0.081
Participating in special work program	0.7	0.4	0.7	0.0	0.995	-0.3	0.575	0.3	0.569
Average weekly earnings, current or most recent job (\$)	26	17	24	2	0.701	-7	0.381	9	0.232
Sample size (total = 1,360)	548	274	538						

SOURCE: Calculations from responses to the AB 12-month follow-up survey.

NOTE: For each comparison, a two-tailed t-test was applied to differences between outcomes for research groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Sample sizes may vary because of missing data.

^aThis measure is a percentage indicating the number of months employed out of the total number of months of follow-up. These data include all sample members; those who were not employed received zero values.

Paying for Basic Necessities

Table 6.3 shows the estimated first-year effects of the AB and AB Plus programs on whether survey respondents reported difficulties in paying for basic necessities, such as skipping meals (because there was not enough money for food); inability to pay mortgage, rent, or utility bills; moving in with other people due to inability to pay mortgage, rent, or utility bills; or discontinuation of phone service since random assignment. These outcomes are indirect measures of poverty and can be used to determine whether AB program interventions such as health insurance served to improve living conditions by maintaining the program group members' disposable incomes.

The overall reported level of “any difficulty paying for basic necessities” among the control group (71.3 percent) indicates that a majority of new SSDI beneficiaries face at least one of these difficulties, and it underscores the economic challenges faced by many demonstration participants. The two most commonly reported problems were reduced or skipped meals and difficulties paying rent, mortgage, and utility bills (over 46.0 percent of the control group). Smaller but still substantial minorities of the control group reported moving in with others to pay bills (15.0 percent) or having phone service discontinued for reasons not related to weather or maintenance issues (25.7 percent). Indeed, Chapter 4 notes that even several participants who were enrolled in AB Plus expressed needs for other social service supports, including food assistance.

Both the AB Plus and the AB program significantly reduced difficulties with at least one of these four necessities, by 5.9 and 12.1 percentage points, respectively. The larger impact of AB health benefits alone is consistent with the significantly greater reduction in out-of-pocket expenditures on health care among AB members relative to AB Plus members, as noted in Chapter 5. Because the difference in out-of-pocket expenditures between the AB and AB Plus groups was not an anticipated effect of AB Plus services, it is unclear whether the difference between the two groups is really due to AB Plus services and, if so, why. Within the four categories of needs reported in Table 6.3, there are no statistically significant impacts.

Conclusions

The impacts of AB Plus on work supports, while small in magnitude, offer some hope of potential longer-term effects on employment, even though that program had no statistically significant impacts on employment. The findings also indicate that the additional telephonic supports of AB Plus had some effect in moving participants into other work supports, though they were not enough on their own to move participants into long-term employment.

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Table 6.3

Impacts on Paying for Basic Necessities During the First Year of Follow-Up

Outcome (%)	AB Plus Group	AB Group	Control Group	AB Plus-Control		AB-Control		AB Plus-AB	
				Difference (Impact)	P-Value	Difference (Impact)	P-Value	Difference (Impact)	P-Value
Any difficulty meeting living needs	65.4	59.2	71.3	-5.9**	0.033	-12.1***	0.000	6.2*	0.069
Cut size of or skipped meals	42.8	42.0	46.1	-3.4	0.258	-4.1	0.257	0.8	0.834
Could not pay mortgage, rent, or utility bill	45.7	45.4	47.0	-1.4	0.649	-1.6	0.662	0.2	0.948
Moved in with others	13.4	13.4	15.0	-1.6	0.437	-1.6	0.525	0.0	1.000
Phone service discontinued ^a	26.7	26.8	25.7	1.0	0.712	1.1	0.738	-0.1	0.974
Sample size (total = 1,360)	548	274	538						

SOURCE: Calculations from responses to the AB 12-month follow-up survey.

NOTES: For each comparison, a two-tailed t-test was applied to differences between outcomes for research groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Sample sizes may vary because of missing data.

The first three need categories represent difficulties due to not enough money or problems making payments.

^aThis category includes being without telephone service for more than 24 hours when that was not due to a temporary loss of service (for example, because of a storm).

The lack of employment-related impacts for the AB group underscores the challenges of moving this population into immediate employment, particularly during a period of major economic downturn. In part, these findings reflect that it takes time for new SSDI beneficiaries to use the health plan to reach medical stabilization and begin the process of rehabilitation. The findings also illustrate the major challenges in improving employment outcomes for new beneficiaries who have just started receiving cash supports.

It is too early to assess whether the AB demonstration will lead to any long-term improvements in employment. The improved health outcomes for AB and AB Plus participants could lead to eventual employment outcomes. Additionally, the increased use of work supports by AB Plus participants could also translate into long-term employment. While both of these outcomes are possible, their disabling conditions and over a year of detachment from the labor force may make it more difficult for many AB and AB Plus participants to make a successful entry into the labor market.

The reductions in difficulties paying for basic necessities indicate that AB and AB Plus participants were able to use the AB health plan to offset medical costs well enough that they were able to pay for other necessities. As shown in Chapter 2 (Table 2.2), many participants were financially vulnerable at baseline, given their poor health conditions, limited incomes, and living alone. However, even among the AB and AB program groups, the majority of SSDI beneficiaries continued to report difficulties in paying for a basic necessity during the first year of follow-up. Hence, although AB played an important role in maintaining economic well-being, participants continued to face several financial difficulties that could affect their long-term economic well-being.

Chapter 7

Analysis of AB Demonstration Costs

To study the effects of health care benefits on health care use, employment, and benefits receipt, the Accelerated Benefits (AB) Demonstration randomly assigned new beneficiaries of Social Security Disability Insurance (SSDI) into three research groups. Both the AB group and the AB Plus group could access the program's health plan benefits as they waited 18 to 24 months before becoming eligible for Medicare; the AB Plus group also could use three additional services delivered by telephone. The control group members could not receive any AB services but could obtain health insurance on their own.

This chapter summarizes the costs of the AB demonstration and highlights areas that should be considered in examining its major benefits. The findings at this early stage of follow-up — one year after random assignment — underscore the large expenses incurred by the Social Security Administration (SSA) and the need for more information to provide a full assessment of outcomes.

The costs of the AB health plan are projected to be \$31,370 per AB and AB Plus program group member, and the costs of providing AB Plus services are projected to be over \$3,000 per AB Plus member. While the short-term impacts cited in Chapters 5 and 6 are not substantial enough in monetary terms to cover these costs, the demonstration has the potential to generate benefits in several areas in the future. These areas include all the ultimate outcomes identified in the logic model in Chapter 1, including SSDI program participation, Medicare and Medicaid usage, and long-term employment. The study team considered projecting future savings in these areas but decided that one year of follow-up is too limited a period to allow for reliable projections. Assessing future savings will therefore require additional data collection.

Total Costs of the AB Demonstration

The costs of the demonstration are described using two types of measures: average costs per program group member (including service users and nonusers) and average costs per service user (excluding nonusers). Costs per program group member can be used to compare AB with other programs and demonstrations. Costs per service user can be used to assess the potential costs of delivering services under different assumptions about the level of participation.

There are two notable differences between the per program member costs presented in this chapter and those presented in Chapter 3. First, costs in this chapter include information on everyone in the study, whereas Chapter 3 is limited to those who entered the study through

Phase 2a (from October 2007 through November 2008). Second, the costs in this chapter include information for the full demonstration period, including projections through the end of the project in January 2011, whereas Chapter 3 includes costs over a one-year period. Costs are projected through January 2011 by taking information available through July 2010 — which is the latest period for which data were available when this report was written — and projecting costs for the remaining months based on monthly per program member costs from the previous two months of service use. Likewise, information on the use of AB Plus services covers information through July 2010, while Chapter 4 focuses on the year following random assignment. Appendix P compares observed and projected costs.

As shown in Table 7.1, the average cost per program group member for the AB health plan was \$31,370. Because most program group members (91 percent) used the health plan at some point during the demonstration, the per service user costs were only slightly higher (\$34,662) than the per program group member costs. Health claims costs were almost entirely made up of claims payments, with administrative fees and precertification costs accounting for approximately 3 percent of costs. This administrative fee is comparable to the average fee for Medicare plans and is lower than typical fees for private plans.¹

AB Plus services cost \$3,322 per program group member. The cost per service user was only slightly higher (\$3,677) because most AB Plus group members at least completed intake. Across services, employment and benefits counseling had the highest spending per program group member (\$1,625), followed by the Progressive Goal Attainment Program (PGAP; \$752), ongoing service coordination across AB Plus services (\$487), medical case management (\$311), and intake (\$147). Costs per service user were much higher for medical case management, PGAP, and employment and benefits counseling because participation was less than 50 percent for each of these services. The higher cost for employment and benefits counseling compared with PGAP is likely a result of differences in cost per unit: employment and benefits counseling counselors were paid \$72 per hour, including fringe benefits, while coaches were paid \$40 per hour.

Although AB sought to increase employment as a final outcome, its provision of a health plan makes it unique in attempting to improve SSDI beneficiaries' health outcomes and is more costly than prior SSA efforts to primarily encourage employment. For example, the costs of Project Network, which provided employment-focused case management services to adult SSDI and SSI beneficiaries, cost \$5,000 per participant in 2007 dollars.² Although AB represents a large financial commitment, its costs should be viewed in the context of the outcomes that the demonstration was attempting to promote. For example, while AB cost more, it was the only SSA demonstration to increase the use of medical services, reduce unmet medical

¹Litow (2006).

²Rangarajan, Wittenburg, Honeycutt, and Brucker (2008).

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Table 7.1

Costs, per Participant, of the AB Health Plan and AB Plus Services, by Program Group

All Program Group Members Randomly Assigned Through January 21, 2009

Costs (\$)	Per Program Group Member	Proportion with Service Use	Per Service User
<u>Average total AB health plan costs, observed plus projected (AB and AB Plus) through end of follow-up</u>			
Total paid claims	31,370	0.905	34,662
Administrative fee	30,508		
Precertifications	824		
	39		
<u>Average total AB Plus service costs (AB Plus only)</u>			
Intake	3,322	0.903	3,677
Ongoing service coordination	147	0.903	163
Medical case management	487	0.756	644
Progressive Goal Attainment Program	311	0.465	668
Employment and benefits counseling	752	0.434	1,734
	1,625	0.445	3,650

SOURCES: Calculations from AB health plan claims, POMCO expenditure reports, records of CareGuide OneCareStreet management information system, and CareGuide/AHH and TransCen invoices.

NOTES: The sample size for AB health plan costs is 1,011; the sample size for AB Plus service costs is 611.

The end of the follow-up period for observed AB health plan costs is July 2010.

The period covered by projected AB health plan costs is from August 2010 through January 2011.

The end of the follow-up period for estimating AB Plus service costs is July 2010.

needs, and improve health. The AB Plus intervention component is more comparable to other SSA demonstrations, in that its services had the goal of increasing employment. At \$3,322 per program group member, AB Plus services were generally much less costly than previous SSA demonstrations, which largely reflects the fact that AB Plus services were delivered telephonically whereas other demonstrations delivered services primarily in person.

Assessing Future Impacts

Unless there are unexpectedly large impacts on future outcomes, it is unlikely that the demonstration will become cost-neutral to SSA. To break even for SSA, a large number of beneficiaries would have to leave the SSDI program. Additional savings for the federal and state governments could come through reduced Medicare and Medicaid use.

To provide a comprehensive evaluation of the net cost of the AB demonstration, additional information is needed to assess whether the demonstration met its ultimate objectives, including its effects on:

- **Publicly funded health expenditures, especially Medicare and Medicaid.** Of the three ultimate outcomes, early impacts suggest the greatest promise for reducing future spending for public health insurance programs. Reduced unmet health care needs and improved health should lead to lower health care use by program group members than control group members. This could result in substantial savings, given that annual spending on Medicare for disabled beneficiaries was about \$11,000 per person in 2008.³
- **Long-term employment.** AB Plus services increased the use of employment services, and this could translate into longer-term impacts on employment. The use of vocational rehabilitation and Ticket to Work services is especially promising if these beneficiaries use these services to find employment that results in benefit reduction. However, the impacts on employment are likely to be small, given the modest gains in the use of employment services and the lack of impacts for the AB group. Further, the characteristics of the population — especially their age and the substantial number of functional limitations — suggest that the potential for benefits is likely to be small, at least relative to potential savings in Medicare costs.
- **SSDI payments.** Because SSA spends more than \$1,000 per SSDI beneficiary each month and most beneficiaries remain on the rolls for a substantial length of time, even modest increases in the number of people leaving the rolls could provide considerable savings to SSA.⁴ For example, if one person leaves the rolls rather than staying on benefits for 10 years, SSA would save up to \$120,000. The impact findings presented in this report — especially the lack of impacts on functioning measures, such as work limitations or the ability to perform daily activities — indicate that impacts on SSDI benefits are likely to be small. Nonetheless, the financial implications of even a small benefit reduction suggest the importance of continuing to track SSDI payments. Moreover, impacts on health and functioning could continue to grow during the second half of the intervention and beyond, which could lead to larger effects on employment.

AB also has the potential to have continuing impacts on several mediating outcomes, including health. Health is an especially important outcome from both the member's and society's perspective, and improved health is usually the main goal of a health intervention such as AB. While health improvement is an important achievement on its own, it can also result in direct savings to the government if it reduces long-term dependency on other public supports,

³Medicare Payment Advisory Committee (2010).

⁴Social Security Administration (2010a).

most notably, Medicare. Additionally, if participants' functioning improves enough to allow family caregivers to return to work, it could also be an additional benefit to society even if the participant does not work. By tracking health status in future evaluations, the important role that health plays in influencing all of the demonstration's mediating and ultimate outcomes can be assessed more fully.

The ability to track outcomes from AB depends on the amount of data that will be available in the future. All three main outcomes can be tracked with administrative data. Social Security Administrative Master Earnings Files contain annual earnings data for all beneficiaries and can be used to track employment and earnings over the long term. SSA program records from the Ticket Research File include longitudinal information on all SSDI program participants and can be used to track SSDI in the future. Finally, the Center for Medicare and Medicaid Services maintains claims information from Medicare and Medicaid that can be used to track the types of health care used and the expenditures on health care for all program group members.

While there are no plans at present to collect additional survey data, a future follow-up survey could provide information on AB's longer-term effects on mediating outcomes. For example, a survey could be conducted in 2011 or 2012 to provide a four- to five-year follow-up on the unmet medical needs, health, and economic outcomes of program group members. The strong success of AB's telephone-only follow-up survey indicates that a long-term follow-up might not be costly to implement, particularly if responses could be obtained primarily by telephone.

At this point, it is difficult to predict how large the potential benefits of the AB Demonstration will be without additional data. While there are some promising indicators that offer hope for long-term impacts — particularly on health and the use of Medicare — impacts in other areas, particularly employment, are likely to be more limited. For this reason, it will be essential to collect longer-term follow-up data on employment, health care use, and other outcomes in this report.

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