

Caution to readers: The estimates produced from IRS earnings and SSA benefit paid data in this report were later updated to include refinements to the analytic methodology and data. The specific variables affected are: Total earnings, Employment, Earnings above BYA, Earnings above 2XBYA, Earnings above 3XBYA, Total SSDI benefits paid, Number of months with SSDI payments, Total SSI benefits paid, and Number of months with SSI payments. The data and statistical methods used to produce these estimates have been updated over the course of the demonstration, making the published estimates in this report out of date. For the most up-to-date estimates, please refer to the Final Evaluation Report which will be available in late 2018.

BOND Implementation and Evaluation 2017 Stage 2 Interim Process, Participation, and Impact Report

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Acronyms Used in This Report

AEE	Annual Earnings Estimate	FTE	Full-Time Equivalent
AIME	Average Indexed Monthly Earnings	GP	Grace Period
BODS	BOND Operations Data System	I&R	Information and Referral
BOND	Benefit Offset National Demonstration	IRP	Initial Reinstatement Period
BPP	BOND Participation Period	IRS	Internal Revenue Service
BS&A	Benefits Summary and Analysis	MBI	Medicaid Buy-In
BSAS	BOND Stand Alone System	MBR	Master Beneficiary Record
BTS	Beneficiary Tracking System	MEF	Master Earnings File
BYA	BOND Yearly Amount	ORDES	Office of Research, Demonstration and Employment Support
CDR	Continuing Disability Review	PHUS	Payment History Update System
CPE	Centralized Post Entitlement	SGA	Substantial Gainful Activity
CWIC	Community Work Incentive Coordinators	SSA	Social Security Administration
DAC	Disabled Adult Child	SSDI	Social Security Disability Insurance
DAF	Disability Analysis File	SSI	Supplemental Security Income
DBAD	Disabled Beneficiary and Dependent files	SSR	Supplemental Security Record
DWB	Disabled Widow/Widowers Benefits	SVRA	State Vocational Rehabilitation Agency
EN	Employment Network	TWP	Trial Work Period
EOYR	End of Year Reconciliation	WIC	Work Incentive Counseling, Or Counselor
EPE	Extended Period of Eligibility	WIPA	Work Incentives, Planning, and Assistance
EXR	Expedited Reinstatement		
EWIC	Enhanced Work Incentives Counseling, Or Counselor		

Terminology

1. **BOND subjects:** Beneficiaries assigned to any of the five BOND treatment or control groups, at either stage (see **Exhibit 1-1**). Terms for subjects in specific groups are as follows:
 - a. **Treatment subjects:** All subjects offered the use of the benefit offset, including:
 - i. **T1 subjects** or **Stage 1 treatment subjects:** Those offered the offset at Stage 1.
 - ii. **Stage 2 treatment subjects:** Those offered the offset at Stage 2, including:
 - (1) **T21 subjects:** Stage 2 volunteers offered the offset, but not offered enhanced work-incentives counseling.
 - (2) **T22 subjects:** Stage 2 volunteers offered both the offset and enhanced work-incentives counseling.
 - b. **Control subjects:** Those whose benefits will continue to be determined by current law.
 - i. **C1 subjects:** Those assigned to the Stage 1 control group.
 - ii. **C2 subjects:** Stage 2 volunteers assigned to the Stage 2 control group.
2. **BOND users:** Those treatment subjects who take up a BOND treatment. These include:
 - a. **Offset users** – All treatment subjects who have their benefits reduced by the offset.
 - b. **EWIC users** – All treatment subjects who use EWIC services. They can only be subjects in the T22 group.
 - c. **WIC users** – All treatment subjects who use WIC services. They can be subjects in the T1 or T21 groups.

Executive Summary

As part of the Ticket to Work (TTW) and Work Incentives Improvement Act of 1999, Congress directed the Social Security Administration (SSA) to test alternative Social Security Disability Insurance (SSDI) work rules designed to increase the incentive for SSDI beneficiaries to work and reduce their reliance on benefits. In response, SSA has undertaken the Benefit Offset National Demonstration (BOND), a random assignment test of alternative SSDI program rules governing work and other supports. BOND tests a \$1 for \$2 benefit offset applied to annual earnings above the BOND Yearly Amount (BYA)—the annual equivalent of SSDI’s substantial gainful activity amount. As a result, beneficiaries in the treatment group are able to retain some of their monthly cash benefits while earning more than BYA.

The BOND project includes two stages. The purpose of Stage 1 is to learn how a national benefit offset would affect earnings and program outcomes for the entire SSDI population. The purpose of Stage 2 is to learn more about impacts on those beneficiaries most likely to use the offset (recruited and informed volunteers who are not also receiving Supplemental Security Income) and to determine the extent to which enhancements to counseling services (enhanced work incentives counseling, or EWIC) affect impacts compared to less intensive work incentives counseling (WIC). To achieve these goals, Stage 2 uses three-way random assignment into an offset-plus-WIC group, an offset-plus-EWIC group, and a current law control group.

This report is the second of two Stage 2 Interim Process, Participation, and Impact Reports. It (i) documents results of the process and participation analyses through the sixth year of implementation (2016), (ii) describes the prevalence and size of SSDI benefit overpayments for subjects through the fourth year of implementation (2014), (iii) reports impacts on earnings and benefit outcomes during the fifth calendar year of implementation (2015), and (iv) presents impacts on beneficiaries’ knowledge, perceived barriers to employment, health, and employment experience after three years of BOND study participation. Readers should keep in mind that the results are statistically representative only of SSDI beneficiaries who would have volunteered to enroll in the study if given the opportunity and who met two eligibility criteria (SSDI-only and ages 18-59 at enrollment).

Summary of Key Findings

1. Offset Usage, Beneficiaries’ Knowledge of Offset Rules, and Counseling

As of December 2016, 15 percent of beneficiaries subject to the benefit offset rules were known to have had their benefits adjusted according to those offset rules. There is no evidence that EWIC resulted in higher benefit offset use compared to WIC. Limited understanding of the offset rules may have reduced the extent to which treatment subjects used the offset. After three years of BOND participation, only about half of the Stage 2 treatment subjects provide responses consistent with an accurate understanding of how the benefit offset works—in particular, how earnings affect SSDI benefits under the offset. The results also show that the responses of subjects assigned to EWIC are only slightly more accurate than those subjects assigned to WIC.

Assignment to EWIC significantly increased the likelihood of counseling receipt in 2015 and 2016, when 47 percent assigned to the offset plus EWIC received work incentives counseling compared to 5 percent of those assigned to the offset plus WIC. The three most common EWIC-specific services delivered in 2015 and 2016 were service coordination, barriers and needs assessments, and referrals. Nearly half of

survey respondents reported at least some unmet need for an outside employment support service; there is no evidence that EWIC reduced unmet need compared to WIC.

2. Administrative Processes and Overpayments

As in earlier years of the demonstration, benefit adjustment continues to lag initial use of the benefit offset. For the Stage 2 treatment subjects whose first adjustments occurred in 2016, SSA identified that 80 percent actually had used the offset prior to 2016. For all offset users with first adjustments in 2013 through 2016, the median duration from the first month of offset use to the first adjustment was 15 months, or slightly more than one year. Lags in benefit adjustment during the demonstration are primarily due to the limited number of SSA staff assigned to complete pending work Continuing Disability Reviews for BOND treatment subjects. Because a benefit adjustment conveys important information to a beneficiary (either new information about how earnings affect benefits, or confirmation of expectations), lengthy adjustment delays may mean that beneficiaries' understanding of how the offset works is less accurate or less certain than if adjustments had occurred more quickly.

Ninety-one percent of offset users from 2011 to 2014 had at least one work-related benefit overpayment or incorrect payment. For those with an overpayment, the mean amount of the overpayment was \$4,309 across that entire period. Among treatment subjects who used the offset both before and after first offset adjustment, the size and prevalence of overpayments were higher during the period before relative to the period after first offset adjustment. Overpayments were more prevalent for treatment subjects than for subjects in the control group, but smaller on average.

3. Earnings and Benefit Impacts

Consistent with findings for earlier years, there is no confirmatory evidence of an impact of the offset, compared to current law, on average annual earnings in 2015. Consistent with findings for 2014, there is strong evidence of a positive impact on SSDI benefits paid in 2015. WIC and EWIC treatment subjects were paid, on average, \$515 and \$543 more than control group subjects, respectively, each approximately 4.4 percent more than the current law average. There is no confirmatory evidence that, relative to WIC, EWIC led to different earnings or SSDI benefits.

Although the confirmatory analysis found no evidence that the offset affected average earnings in 2015, exploratory analyses suggests that the benefit offset rules—compared to current law—slightly increased the proportion of beneficiaries with earnings that exceed the threshold at which benefit adjustment occurs (after the trial work period). The benefit offset rules also led to increases in several other measures of employment activity such as any employment since demonstration entry and hours worked, but with small measured impacts.

The Final Evaluation Report will synthesize these and all earlier findings of both Stage 1 and Stage 2, and will also present a cost-benefit analysis for each stage.

1. Introduction

The Benefit Offset National Demonstration (BOND) is a random assignment demonstration that tests a variant of Social Security Disability Insurance (SSDI) program rules governing work and other supports. This report, the second of two Stage 2 *Interim Process, Participation, and Impact Reports*, concerns Stage 2 of BOND, which was designed to learn about the impacts of the benefit offset for those most likely to use it (recruited and informed volunteers), and to determine the marginal effects of the delivery of more intensive work incentives counseling services compared to those offered under current law.

Previous reports evaluated Stage 2 from its beginning in 2011 through 2014. This report documents results of the Stage 2 process and participation analyses through the sixth calendar year of implementation (2016). Another main feature of this report is a large set of impact findings on self-reported beneficiary outcomes three years after random assignment, including knowledge and understanding of offset rules, perceived barriers to employment, employment services and other services used to facilitate employment, workforce outcomes and health outcomes. This report also documents impacts on earnings and benefit outcomes during the fifth calendar year of implementation (2015), observed in administrative data.

There is a parallel series of reports for Stage 1, which examines how a national benefit offset would affect earnings and program outcomes for the entire SSDI population. The *Final Evaluation Report* in the fall of 2017 will summarize findings across years and across Stages 1 and 2, and also present a benefit cost analysis.

This introductory chapter describes the benefit offset and Stage 2 of the demonstration, describes the purpose of this report in light of the primary findings to date, and ends with an outline of the remainder of the report.

The BOND Evaluation Team

Abt Associates, in partnership with 25 other organizations, is implementing and evaluating the Benefit Offset National Demonstration (BOND) under contract to the U.S. Social Security Administration. To ensure the objectivity of the evaluation, separate teams conduct the implementation (the “Implementation Team”) and evaluation (the “Evaluation Team”) components of the project. The current report reflects exclusively the views of the evaluation team, led by Evaluation Co-Directors Stephen Bell of Abt Associates and David Stapleton of Mathematica Policy Research. These individuals have no role in implementing or overseeing the BOND intervention they are studying, nor do any members of their evaluation team. Separation of implementation and evaluation does not extend throughout the project, however. The Abt Project Director (Michelle Wood) is responsible for coordinating the implementation and evaluation efforts, including, respectively, managing the day-to-day operations of the project and overseeing the effective and efficient implementation of the BOND design. Within this structure, full authority over and responsibility for the content of all evaluation reports rests with the Evaluation Co-Directors.

1.1. The BOND Policy Test

Under current program rules, SSDI beneficiaries lose all SSDI benefits after a sustained period of substantial earnings and risk potential loss of other (non-SSDI) benefits.¹ Specifically, SSDI benefits are lost if a beneficiary's countable monthly earnings exceed the monthly Substantial Gainful Activity (SGA) amount after completing a nine-month Trial Work Period (TWP) and a three-month grace period (GP). In 2015, the year for which Stage 2 impacts are analyzed for this report, the SGA amount was \$1,090 per month for non-blind beneficiaries and \$1,820 per month for blind beneficiaries. The complete loss of benefits for sustained earnings in excess of the SGA amount is sometimes called the "cash cliff." Economic theory suggests that the cash cliff discourages some beneficiaries from working at all and encourages those who work and could earn above the SGA level to keep their earnings below that level.

For beneficiaries assigned to the treatment group, BOND replaces the cash cliff with a "ramp" (benefit offset) by which benefits are slightly reduced as earnings increase (reduction of \$1 in benefits for every additional \$2 in earnings). This change has the policy objective of encouraging beneficiaries who can work above the SGA level to increase their earnings and reduce their reliance on benefits. The benefit offset is expected to increase the earnings of some who otherwise might not work at all, or would earn less than the SGA amount. If such individuals engage in SGA under the benefit offset rules, their benefits eventually will be reduced. Countering the possible reduction in SSDI benefit outlays are benefits paid under offset rules to those who would have had earnings above the SGA amount in the absence of the offset. In fact, a decrease in earnings is expected for those who would be earning enough above SGA such that their benefits would be fully offset, as they might reduce earnings in order to qualify for partial benefits. Thus, the direction of the net impact on mean earnings and benefits of all beneficiaries will depend on the size of the impacts for beneficiaries who would not engage in SGA under current law, relative to the size of the impacts for those who would. Those in the latter group lose their benefits entirely under current law, whereas, under the benefit offset, many will be eligible for a partial SSDI benefit.

BOND also changes the administrative processes used to adjust benefits, and replaces the monthly SGA calculation with an annualized measure of SGA, referred to as the BOND Yearly Amount (BYA). BYA is equal to 12 times the monthly SGA amount (in 2015, \$13,080 for non-blind and \$21,840 for blind treatment subjects). The benefit offset reduces benefits by \$1 for every \$2 in countable annual earnings in excess of the BYA following the completion of the Grace Period (GP). The annualized measure of SGA can be helpful to beneficiaries who have variable monthly earnings in instances in which annual earnings stay below BYA even though certain months have earnings above SGA. SSA pays benefits monthly under offset rules, but the monthly payment amount is based on expected annual earnings. In the following calendar year, SSA reconciles payments to actual countable earnings, based on information provided by the Internal Revenue Service (IRS), documentation provided by the beneficiary, or both.

¹ Other benefits include Medicare for those on the rolls for at least 24 months. These benefits are extended for a lengthy period following suspension of SSDI benefits, but not indefinitely. Some SSDI beneficiaries also receive Supplemental Security Income (SSI), Medicaid, or other public or private benefits that can be reduced or eliminated as earnings increase.

Treatment group beneficiaries can use the offset during a 60-month participation period, which begins the month after random assignment for those who completed the Trial Work Period (TWP) before that point and in the month after the beneficiary's TWP ends for others, provided that the TWP is completed by September 30, 2017. Those who did not complete the TWP by that date will lose their opportunity to use the offset. SSA will not terminate SSDI entitlement because of work during the BOND participation period, even if benefits fall to zero because of earnings that are well above the benefit-offset threshold. SSA will apply current rules at the end of the participation period and will terminate the benefits of those engaged in SGA after the point when all remaining GP months have been used.²

BOND includes two stages—Stages 1 and 2—that test the benefit offset's impact for, respectively, the overall SSDI population and for those who have signaled interest in using the offset. The goal of Stage 1 is to examine how a national benefit offset and changes to ancillary supports would affect earnings and program outcomes for the entire SSDI population. To test the benefit offset, Abt Associates randomly selected ten SSA Area Offices as study sites to statistically represent the nation. In Stage 1 (see Exhibit 1-1), the demonstration randomly assigned beneficiaries to a treatment group receiving the offset (T1 subjects) or to a control group continuing under standard rules (C1 subjects). By design, T1 and C1 subjects were to have access to counseling of comparable intensity: C1 subjects were to have access to counseling under an existing program—work incentives planning and assistance (WIPA)—whereas treatment subjects were to have access to similar counseling services, customized to the special rules that apply to their benefits—work incentives counseling (WIC). The two groups differ only in access to the BOND intervention. It follows that any statistically significant differences in outcomes between T1 and C1 subjects can confidently be attributed to the intervention—the basic impact measurement strategy in a randomized experiment. The Stage 1 analysis sample contains a total of 968,713 subjects, spread across T1 (77,115) and C1 (891,598).³

Stage 2 also uses an experimental design to learn about the impacts of the benefit offset for those beneficiaries most likely to use it—recruited and informed volunteers—and to determine the effects of the delivery of more intensive enhanced work incentives counseling (EWIC) services relative to current law and relative to WIC services. To achieve these goals, Stage 2 uses three-way random assignment into an offset-plus-WIC group (T21 subjects), an offset-plus-EWIC group (T22 subjects), and a current-law benefits group (C2 subjects). Concurrent beneficiaries—SSDI beneficiaries who also were receiving Supplemental Security Income (SSI) at the time of random assignment—were included in Stage 1 but excluded from Stage 2, because the expectation was that the BOND benefit offset would be less attractive to concurrent beneficiaries than to those receiving SSDI only, due to the interaction between the SSI earnings rules and the offset rules.⁴

² Three months before the BOND participation period end date, the Implementation team sends a letter to notify the beneficiary about the end of the BPP and to inform them of the steps to take after return to SSDI current law rules. SSA then sends a notice one month before the BPP ends.

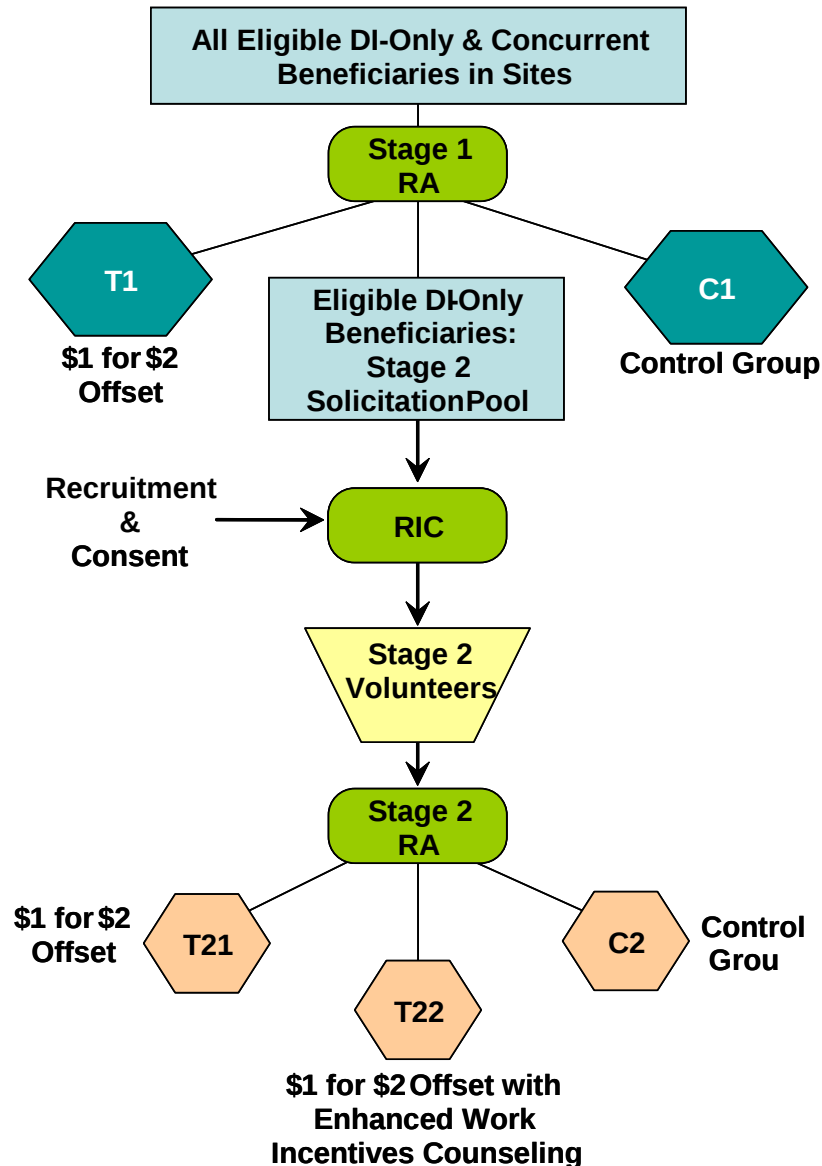
³ See Stapleton et al. (2014) for details of the sample size determination.

⁴ See Bell et al. (2011) for more details on the random assignment process and reasons for excluding concurrent beneficiaries from Stage 2 but not Stage 1.

Random assignment for Stage 2 occurred between March 1, 2011 and September 28, 2012, with 40 percent of volunteers enrolling in the study in 2011 and 60 percent of volunteers enrolling in 2012. In total, the Stage 2 analysis sample includes 12,744 beneficiaries. The random assignment ratio for the T21, T22, and C2 assignment groups was 8:5:8; ultimately, 4,854 volunteers were assigned to the T21 group, 3,041 were assigned to the T22 group, and 4,849 were assigned to the C2 group.

Exhibit 1-1. Overview of BOND Random Assignment Process

BOND Sample Enrollment



DI = disability insurance; RA = random assignment; RIC = recruitment and informed consent.

Treatment subjects who complete TWP before September 2017 enter a 60-month BOND Participation Period (BPP) during which the benefits are reduced under the \$1 for \$2 benefit offset if earnings exceed the BOND Yearly Amount (BYA). This arrangement ends in the 61st month, when BOND treatment subjects who have not completed a TWP transition back to current-law SSDI rules.⁵ Eight percent of subjects completed their BPP by the end of 2016.⁶ The process and participation study results in this report include implementation data and qualitative data through 2016, and thus their associated findings are affected by the end of BPP. The impact study reviews outcomes measured through 2015, before any beneficiary received formal notification of end of BPP (although, through the informed consent process, all were notified about BOND rules).

1.2. Key Findings to Date and Research Questions Answered in This Report

Abt Associates, in partnership with Mathematica Policy Research, is conducting a comprehensive evaluation of the BOND interventions, including studies of demonstration implementation, beneficiary participation, impacts on beneficiaries' lives, and net social costs and benefits. The evaluation is ongoing. Five earlier reports provide findings from the analyses of Stage 2. After this report, one additional report (the project Final Report) will also provide findings from Stage 2. (Exhibit 1-2).

Exhibit 1-2. Reports on BOND Participation, Process, and Impact Analyses for Stage 1 and Stage 2

Analysis	Stage 1 Reports	Stage 2 Reports
Participation and Process Analysis	• <i>Stage 1 Early Assessment Report</i> (Wittenburg et al. 2012) • <i>Process Study Report</i> (Derr et al. 2015)	• <i>Stage 2 Early Assessment Report</i> (Gubits et al. 2013) • <i>Process Study Report</i> (Derr et al. 2015)
Impact Analysis	• <i>First-Year Snapshot of Earnings and Benefit Impacts for Stage 1</i> (Stapleton et al. 2013) • <i>Second-Year Snapshot of Earnings and Benefit Impacts for Stage 1</i> (Stapleton et al. 2014) • <i>Third-Year Snapshot of Earnings and Benefit Impacts for Stage 1</i> (Wittenburg et al. 2015)	• <i>First- and Second-Year Snapshot of Earnings and Benefit Impacts for Stage 2</i> (Gubits et al. 2014) • <i>Third-Year Snapshot of Earnings and Benefit Impacts for Stage 2</i> (under review at SSA)
Integrated Participation and Process Analysis and Impact Analysis	• <i>2016 Stage 1 Interim Process, Participation, and Impact Report</i> (Hoffman et al. 2017) • <i>2017 Stage 1 Interim Process, Participation, and Impact Report</i> (under review at SSA)	• <i>2015 Stage 2 Interim Process, Participation, and Impact Report</i> (Gubits et al. 2017) • <i>2017 Stage 2 Interim Process, Participation, and Impact Report</i> (this report)
• <i>Final Evaluation Report</i> (forthcoming in fall 2017)		

⁵ See Chapter 7 for additional detail about the BPP. The BPP could be less than 60 months in certain situations, such as if the beneficiary ceases to have a disabling impairment (as determined through an SSA medical review) or reaches full retirement age and transitions to the Old-Age and Survivors Insurance program. (However, because there were age-related eligibility criteria at the start of the demonstration, no subjects reached full retirement age before 2017.)

⁶ This number and proportion reflect BTS records as of March 2017 and is subject to increase. See Chapter 7 for detail.

This section presents several key findings to date and highlights the relation of previous findings to the research questions addressed in this report.

Offset plus EWIC (T22) subjects received more counseling services than offset plus WIC (T21) subjects through 2014.

Consistent with study design, EWIC subjects received more counseling services than offset plus WIC subjects. Counseling services are defined as talking to someone about how work and earnings affect Social Security benefits, receiving needs assessments, or receiving referrals to employment supports. Consistent with the design, the demonstration operations data measuring counseling activity (from BODS, described in Chapter 2) imply that the main differences between EWIC and WIC services, as implemented, were that, compared to WIC staff, EWIC staff (1) contacted beneficiaries proactively, (2) followed up with beneficiaries and referral organizations, and (3) used a more systematic beneficiary assessment process (Gubits et al. 2013; Derr et al. 2015; Gubits et al. 2017).

In this report, we examine counseling use (Chapter 4) over a longer period (through 2016) to address the following research questions, as originally specified in the *Evaluation Analysis Plan*:

- How did the implementation of counseling evolve over time? (*Process Analysis*)
- Were WIC and EWIC services implemented as designed? To what extent did EWIC services differ from WIC services? (*Process Analysis*)
- To what extent do subjects in each treatment group work use employment services and work incentives counseling? (*Participation Analysis*)

One year after random assignment, roughly half of the treatment subjects demonstrated understanding of the offset rules; the other half did not.

About one year after random assignment, roughly half of the treatment subjects demonstrated an understanding of how earnings affect SSDI benefits under the offset. In addition, there was no evidence that EWIC had substantially improved beneficiary understanding of the offset offer compared to WIC (T22 versus T21), one of its key purposes. The results for the control group subjects also showed a relatively high amount of confusion about the standard SSDI program rules and the relationship of earnings to benefits. Only about half of control group subjects provided responses consistent with an accurate understanding of the current-law rules that apply to them (Gubits et al. 2017). In this report, we examine beneficiary understanding of the offset over a longer period. Using data from a 36-Month Survey of beneficiaries, this report addresses whether the design of EWIC compared to WIC led to greater understanding of the offset three years after random assignment (Chapter 5).

In the first year after random assignment, offset-plus-EWIC (T22) subjects were more likely to report using services intended to lead to employment or higher earnings.

In addition to effects on counseling receipt, the *2015 Stage 2 Interim Process, Participation, and Impact Report* provides evidence that assignment to T22 relative to T21 increased beneficiary activities that are intended to lead to employment or higher earnings, including use of vocational rehabilitation services, completion of a work or job assessment, receipt of assistance in finding a job, enrollment in school or classes, and receipt of advice about modifying a job or work place to accommodate a disability. These differences, based on self-reported data in the 12-Month Survey, were smaller in magnitude (13

percentage points or less), than the large differential in work incentives counseling received as measured in the demonstration's operations data system (59 percentage points) (Gubits et al 2017).

In this report, we examine the use of employment and training programs through the first three years since random assignment, as well as the barriers that beneficiaries report in seeking employment or higher earnings (Chapter 6). Specifically, we address the following research question, as specified in the *Evaluation Analysis Plan*, using the 36-Month Survey data:

- To what extent do subjects in each treatment use employment services? (*Participation Analysis*)

As of the end of 2014, the proportion of offset-plus-EWIC (T22) subjects known to have at least one month of benefit offset use was larger than for the offset-plus-WIC (T21) subjects.

Using demonstration operations data measuring counseling activity, the *2015 Stage 2 Interim Process, Participation, and Impact Report* states that by the end of 2014 the proportion of the offset-plus-EWIC group with at least one month of offset use (11.0 percent) was 2.2 percentage points greater than the corresponding proportion for the offset-plus-WIC group (8.8 percent). Several beneficiary characteristics are associated with benefit adjustment in or before December 2014. Young age, good or very good general health status, back disorders, other musculoskeletal disorders or injuries as primary impairments, baseline employment, high baseline average indexed monthly earnings, and residence in a county with a high employment rate among people with disabilities were all associated with an increased likelihood of benefit adjustment, holding other characteristics constant (Gubits et al. 2017).

Due to administrative delays in processing benefit offset adjustments, we had expected that the proportion of offset users would increase (for the same reported time period) due to newly reported cases. Chapter 7 provides an update on this factor and further reports of offset use through December 2016. In particular, Chapter 7 includes an analysis the following research questions:

- Who uses the offset? (*Participation Analysis*)
- What characteristics distinguish offset users from others? (*Participation Analysis*)

Through 2014, benefit adjustment under the offset rules was significantly delayed.

For example, in early 2013 6.3 percent of Stage 2 treatment subjects had earnings at a level that should have resulted in benefit adjustment under the offset but only 2.2 percent had received an offset adjustment (Gubits et al. 2017). The direct result of delays in benefit adjustments is an extended period of time over which beneficiaries may accumulate improper payments.

The *2015 Stage 2 Interim Process, Participation, and Impact Report* identifies three main sources of delays in benefit adjustment as of the end of 2014. First, the failure of some offset-eligible beneficiaries to report their earnings delays the start of the benefit adjustment process. Second, delays in the process of Work Continuing Disability Reviews (work CDR) also delay the start of the benefit adjustment process. Finally, in early years of the demonstration, deficiencies in a data system built to process benefit adjustments in the demonstration (the BOND Stand Alone System) caused substantial delays in automated reconciliation and, early on, in some other processes, thereby delaying benefit adjustment for some first-time offset users. Chapter 7 of this report examines whether the delays in benefit offset adjustment for Stage 2 subjects persist through 2015 and 2016.

No prior report has examined overpayments in Stage 2. Because Stage 1 uses the same systems and staff for processing benefit adjustments as Stage 2, the Stage 1 results offer a preview for the likely impact of benefit adjustment delays on overpayments for Stage 2. The *2017 Stage 1 Interim Process, Participation, and Impact Report* describes that a large majority of offset users in the Stage 1 treatment group (87 percent) had an overpayment during the first four years of the demonstration. The mean amount of overpayments accrued as of that point in the demonstration (for those with any overpayment) totaled \$6,171 (Hoffman et al 2017). The prevalence and size of overpayments tended to decrease after the initial offset adjustment.

The current report examines overpayments among Stage 2 treatment subjects (Chapter 8) that result from delays in benefit offset adjustment.. Together, Chapters 7 and 8 address the following related research questions as specified in the *Evaluation Analysis Plan*:

- Were the processes for reporting earnings, determining TWP completion, and making benefit adjustments for Stages 1 and 2 implemented as designed? How well did they perform? (*Process Analysis*)
- What are the likely implications for demonstration outcomes? (*Process Analysis*)

Through 2014, the Stage 2 analysis showed no evidence of impacts on earnings, but some evidence of impacts on SSDI benefits.

The offset is predicted to have two countervailing effects on earnings: a *positive* effect on average earnings for those who would not engage in SGA under current law (i.e. without the offset) and a *negative* effect on average earnings for those who would earn above the SGA level under current law. The net result of these two changes can be an earnings impact in either direction or no earnings effect at all. In all prior years examined, there was no evidence of an impact of the offset plus EWIC or the offset plus WIC on mean calendar-year earnings (Geyer et al. 2017). However, in all prior years examined, the impact analysis has found exploratory evidence of an impact on the employment rate and the proportion with earning above BYA (Geyer et al. 2017; Gubits et al. 2017).

The offset is also predicted to have two countervailing effects on benefits: a *negative* effect on benefits paid for those who would not engage in SGA under current law and a *positive* effect on benefits for those would earn above the SGA level under current law. Out of the four years examined, only in 2014 was there some evidence that assignment to the offset plus EWIC or the offset plus WIC had an impact on SSDI benefits paid (estimated positive effects of \$423 and \$372, respectively, increases of 3.5 and 3 percent) (Geyer et al. Forthcoming). There was no detectable evidence that SSDI benefits paid were different for beneficiaries in the EWIC group versus the WIC group. By necessity, the impact estimates in this report and in prior reports focus on benefits paid *in* a given year rather than impacts on benefits paid *for* a given year. Benefits paid *for* a given year are not available for this report and, could potentially be quite different because benefits paid *in* a given year can include retroactive adjustments for previous years' benefits, as well as errors in current-year benefits. Future reports will include estimates of the impact of BOND on benefits paid *for* the years in the evaluation period. Chapter 9 of this report offers impact estimates on 2015 earnings and SSDI benefits paid in 2015 and in earlier years.

Twelve months after demonstration entry, survey data showed that the offset (with WIC, and with EWIC) led to more beneficiaries earning about BYA and to more hours of work per week versus current law—but did not affect self-reported health status or marital status.

Chapter 10 examines impacts on these and other outcomes using a beneficiary survey administered 36 months after random assignment, i.e. from March 2014 to February 2016, reflecting the 20-month Stage 2 enrollment period. The chapter focuses on employment-related outcomes and a range of household circumstances including dwelling place, marital status, health status, income assistance benefits, health insurance, and time use. For a larger set of outcomes in these and other domains, Chapter 10 addresses the following research questions:

1. What is the **impact of the benefit offset rules on outcomes of SSDI-only beneficiaries who volunteer for BOND**, compared to current law? (T21 versus C2)
2. What is the **impact of the benefit offset rules plus enhanced work incentives counseling** on outcomes of SSDI-only beneficiaries who volunteer for BOND, compared to current law? (T22 versus C2)
3. What is the **incremental effect of enhanced work incentives counseling when added to the benefit offset** (i.e., EWIC vs. WIC), for SSDI-only beneficiaries who volunteer for BOND? (T22 versus T21)

1.3. Organization of the Report

The remainder of the report is structured in ten chapters. Chapter 2 describes the data sources and analytic methods used in the report. Chapter 3 updates contextual information concerning the BOND study sites, including the strengths of their labor markets and their disability service environments.

Seven further chapters then address the topic areas discussed in the previous section:

- Receipt of work incentive counseling (Chapter 4);
- Beneficiary understanding of the offset (Chapter 5);
- Employment assistance and barriers (Chapter 6);
- Offset use (Chapter 7);
- Overpayments (Chapter 8);
- Impacts on beneficiary earnings and SSDI benefits (Chapter 9); and
- Impacts on other beneficiary outcomes (Chapter 10).

A final chapter of the report provides a summary of its key findings (Chapter 11).

2. Data Sources and Methodology

The analyses in this report are based on data from several sources, including the Stage 2 36-Month Survey, SSA administrative data, program implementation information from demonstration operations, and semi-structured interviews and focus groups with BOND staff and Stage 2 participants. This chapter describes the data sources and methodology that support the three components of the evaluation addressed in this report: the process analysis (Section 2.1), the participation analysis (Section 2.2), and the impact analysis (Section 2.3). The fourth component, cost-benefit analysis, will be considered in future reports only. Except for nonresponse weights for the 36-Month Survey, the methods described here are unchanged from previous reports (Hoffman et al. 2017; Gubits et al 2017).

The goals for the Stage 2 evaluation are to learn about the impacts of the benefit offset for those most likely to use it and to determine the extent to which significant enhancements to the basic BOND-focused work incentives counseling affect offset utilization and impacts. To answer the research questions for Stage 2, the sample is restricted to beneficiaries most likely to use the offset (recruited and informed volunteers). Stage 2 therefore required beneficiary outreach and recruitment activities.

Two aspects of the strategy for selecting the sample ensured that Stage 2 subjects would be likely to use the offset. First, Stage 2 sample does not include concurrent beneficiaries. The interaction between SSI and SSDI substantially diminishes the value of the SSDI offset to concurrent beneficiaries, so the design team expected that relatively few SSI beneficiaries would use the SSDI offset. Second, in contrast to the Stage 1 sample (which is randomly selected from all eligible SSDI beneficiaries), the Stage 2 sample is composed of self-selected volunteers. The Implementation Team recruited randomly selected eligible SSDI-only beneficiaries who responded to a solicitation to participate in BOND.

Given the self-selected nature of the Stage 2 sample, the impacts from Stage 2 do not generalize to the national SSDI caseload or to any easily identifiable subpopulation. Instead, the Stage 2 impacts presented in this report generalize to those who would have volunteered in the nation had they been solicited.

2.1. Process Analysis

This section summarizes the data sources and methods used to conduct the process analysis, with emphasis on the new data collected during the most recent round of data collection in 2016.⁷ Results from the process analysis are presented in Chapter 4 (counseling), Chapter 7 (pathway to the offset), and Chapter 8 (overpayments).

2.1.1. Data Sources for the Process Analysis

The process analysis involves eight rounds of data collection over the course of the demonstration. As part of these efforts, the Evaluation Team has collected data from beneficiary focus groups conducted during site visits to the BOND sites, beneficiary interviews conducted by telephone, focus group

⁷ Earlier reports describe previous data collection efforts for the process analysis. For detailed information on earlier rounds, refer to the *Process Study Report*, *Stage 1 Early Assessment Report*, *Stage 2 Early Assessment Report*, and *2015 Stage 2 Interim Process, Participation, and Impact Report*.

discussions with WIC and EWIC providers conducted by telephone, interviews with the SSA BOND operations team, and interviews with BOND Implementation Team members from Abt Associates, Mathematica Policy Research, and other implementation partners. The current report uses information from eight rounds of data collection covering BOND implementation through 2016. To assess BOND implementation, the Evaluation Team also used administrative data from the BOND Operations Data System (BODS) on the delivery of demonstration services and beneficiary status. This section provides an overview of the qualitative data collection activities from the most recent round of data collection.

In this report, we analyze qualitative data from the following data collection efforts: (1) telephone interviews with work-oriented treatment subjects, (2) telephone/online focus groups with WIC and EWIC supervisors and counselors during July and August 2016 and (3) telephone interviews with key members of the BOND Implementation Team and SSA BOND operations team conducted in late 2016. Data collection topics included: documenting the changes in BOND implementation since the previous round of data collection; identifying successes, challenges, and lessons in implementing BOND and how they might influence the impact of the demonstration; and learning about the functioning of processes designed to help treatment subjects transition back to current law benefits as they complete their BOND Participation Periods.

In the rest of this subsection, we describe the three qualitative data collection efforts used for this report:

Telephone interviews with work-oriented treatment subjects. In September and October 2015, members of the Evaluation Team conducted in-depth, one-on-one telephone interviews with a total of 60 work-oriented BOND treatment subjects. Half of the respondents (30) were T1 subjects. The remaining respondents were Stage 2 subjects (T21 and T22 subjects) and are included as a data source for this report. The primary purpose of the interviews was to gain the perspectives of beneficiaries who appear to be work-oriented with respect to the following questions:

1. Why do some beneficiaries work but not to the point at which they take advantage of the benefit offset?
2. Why do other beneficiaries take advantage of the offset but only for a short time?
3. Why does a third group of beneficiaries use the offset for a long period of time?

For operational purposes, we defined work-oriented BOND subjects as those with a disability cessation date; in other words, SSA had determined that the subjects engaged in SGA after completing their TWP.⁸ Subjects who work but not to the point of disability cessation could also be considered work-oriented, but

⁸ SSA determines disability cessation dates by conducting work CDRs to determine whether beneficiaries have completed their TWP. A disability cessation date is placed on a beneficiary's record if the beneficiary has worked above Substantial Gainful Activity for 8 months within a 60-month rolling window. These disability cessation dates for work above the SGA level may have occurred several years before the CDR, in some cases even before the beneficiary was randomly assigned to the T21 or T22 group. Despite the elapsed time, we consider such subjects to be work-oriented because their past engagement in work needed to reach disability cessation is evidence of work since becoming a SSDI beneficiary and signals potential interest in using the offset during the demonstration period.

we have no way to use administrative data to distinguish between those within this group for whom the benefit offset would and would not be salient.⁹ Among those with disability cessation dates, we identified three subgroups: (1) those that did not use the offset; (2) those who used the offset in a single calendar year between 2011 and 2015 before discontinuing use (short-term offset users); and (3) those who used the offset for three or more consecutive years between 2011 and 2015 (long-term offset users).¹⁰ To identify the three subgroups, we used data extracted from the Beneficiary Tracking System (BTS; a core component of BODS) in June 2015, which contains records for all treatment subjects and includes information on cessation dates and whether or not the beneficiary used the offset during each calendar year.

Within each of the three subgroups (those that did not use the offset, short-term offset users, and long-term offset users), we approximated a random sample by calling treatment subjects in the sequence in which they appeared on a randomly ordered list until we completed interviews with 10 subjects.¹¹ Because we did not make repeated attempts to contact non-respondents to the initial attempt, interviewees in each subgroup may not be representative of all members of the respective subgroup. Nevertheless, we have no reason to think that their responses systematically misrepresent the experiences of their subgroup. We mailed beneficiaries who participated in an interview a \$25 check for their time. The interviews lasted about 20 to 30 minutes. Interviewers used a semi-structured guide with several sections: initial reaction to BOND; understanding of BOND and the offset; employment patterns (including key questions about factors affecting work and earnings); experience with the BOND counselor; the benefit adjustment process (if applicable); experience with over- and underpayments; and overall experience with the demonstration.

Telephone Focus Groups with WIC and EWIC Staff. In summer 2016, the BOND Evaluation Team conducted eight telephone focus groups with 45 WIC and EWIC supervisors and counselors from the 10 BOND sites (Exhibit 2-1). The team organized the groups to collect data separately from (1) sites in which post-entitlement responsibilities belong to a centralized team versus those in which these responsibilities remained with WIC and EWIC staff;¹² (2) supervisors versus counselors; and (3) those involved in delivering WIC versus EWIC services. To identify potential participants, the Evaluation Team asked the Implementation Team to recommend WIC and EWIC supervisors and counselors who had sufficient experience to speak broadly about supervisor and counselor roles at each site. The team

⁹ The offset is likely to be of most salience to beneficiaries with cessation dates. Although some beneficiaries without a cessation date may be motivated by the offset to work or earn more, the use of readily available cessation dates is a practical way to find subjects for whom the offset is likely to be salient.

¹⁰ To heighten the contrast between short-term and long-term offset users, we did not include those who used the offset for two (and only two) years in any subgroup.

¹¹ We sorted each beneficiary interview list so that the randomly-assigned BOND Evaluation ID, an 8-digit code the Evaluation Team used as a unique identifier to track beneficiaries, was in alphabetical order. At the start of the demonstration, the Evaluation ID was generated randomly using an SQL script. Regardless of the randomness of the Evaluation ID, the telephone sample is not representative of BOND beneficiaries.

¹² Post-entitlement responsibilities began shifting from WICs and EWICs to a centralized team in December 2013 for the majority of the BOND sites. Refer to Section 3.5 for additional information on the centralization of post-entitlement activities.

polled supervisors and counselors about their availability and scheduled the focus groups when the majority of participants were available. The team sent an official email invitation two to four weeks before the focus groups, followed by an email reminder one to two days ahead of the meeting. Overall, more than three-quarters of those invited to participate attended a focus group.

During each 90-minute focus group, trained facilitators led the telephone discussion using protocols and conducted an online poll to capture answers to multiple-choice questions. The facilitators asked staff to respond to the poll questions, waited for responses, and then began the group discussion. In that way, responses to the poll questions were not influenced by the group discussion. The focus group topics included the disability service environment, BOND organizational and staffing infrastructure, WIC/EWIC services, payment problems associated with the benefit adjustment process, preparing for the end of BOND, influence of the offset on beneficiaries' behavior, and successes and challenges. The facilitators invited (but did not require) participants to respond to an online, multiple-choice poll. Of the 45 participants, 80 percent (36) responded to at least one poll question (Exhibit 2-2).

Exhibit 2-1. Qualitative Data Collection – Summer 2016 WIC/EWIC Focus Groups

	Date Convened	Focus Group	Sites Represented	Number of Focus Group Participants	Poll Respondents ^a
Supervisors					
1	July 25, 2016	WIC Centralized Group (supervisors, pilot)	Arizona/SE California, Colorado/Wyoming, DC Metro, Detroit, Northern New England, South Florida, Wisconsin	7 ^b	5
2	August 4, 2016	EWIC Non-Centralized Group (supervisors)	Alabama, DC Metro, Western New York, Wisconsin	5	4
3	August 22, 2016	EWIC Centralized Group (supervisors)	Colorado/Wyoming, Northern New England, South Florida	6	5
Counselors					
4	July 27, 2016	WIC Centralized Group 1 (counselors, pilot)	Arizona/SE California, Colorado/Wyoming, DC Metro, Northern New England, Wisconsin	8	6
5	August 2, 2016	EWIC Non-Centralized Group (counselors)	Alabama, DC Metro, Western New York	3	2
6	August 8, 2016	WIC Non-Centralized (counselors and supervisor)	Western New York	4	4
7	August 15, 2016	EWIC Centralized Group (counselors)	Arizona/SE California, Colorado, Detroit, Northern New England	7	5
8	August 24, 2015	WIC Centralized Group 2 (counselors)	Colorado, DC Metro, Detroit, Northern New England, Wisconsin	6	5
Total	—	8 groups	All BOND sites^c	45^d	36

^a The count of poll respondents includes participants who responded to at least one online poll question during a focus group.

^b One of the 7 focus group participants was a project manager.

^c Feedback from the Houston site was provided via email.

^d Forty-five participants attended the focus groups. One participant (an EWIC supervisor who also carried a caseload of beneficiaries in a non-centralized site) attended two groups.

Exhibit 2-2. Poll Responses by Question

	Question	Total Responses
Supervisors		
1	Since we last spoke, which was about two years ago, what is the most important change in the service environment that may affect BOND?	15
2	Approximately how often have referrals to employment support services helped BOND beneficiaries served by your organization begin, maintain or increase work?	15
Counselors		
1	Approximately how often have referrals to employment support services helped BOND beneficiaries in your caseload begin, maintain or increase work?	20
2	Approximately what percentage of BOND beneficiaries in your caseload have experienced an incorrect payment or overpayment when first entering the offset?	19
3	Approximately what percentage of BOND beneficiaries in your caseload have experienced an underpayment when first entering the offset?	20
4	Approximately what percentage of BOND beneficiaries in your caseload have experienced an incorrect payment or overpayment in later years of offset use?	21
5	Approximately what percentage of BOND beneficiaries in your caseload have experienced an underpayment in later years of offset use?	21
6	Approximately what percentage of offset users in your caseload have indicated that they will maintain or increase work after their BPP end dates?	20
7	Approximately what percentage of offset users in your caseload have indicated that they will reduce work after their BPP end dates?	20

Telephone Interviews with SSA and BOND Implementation Team. In late 2016 and early 2017, the Evaluation Team conducted seven telephone interviews with 13 key members of the BOND operations team at SSA and the Abt-led BOND Implementation Team (which, as noted in Chapter 1, is separate from the Evaluation Team). Interviewees included (i and ii) the director and deputy director of implementation, (iii) the liaison to all BOND sites, and (v-x) the lead and five members of the team providing technical assistance to WIC and EWIC staff and conducting centralized post-entitlement work (which we refer to as the post-entitlement team). In addition, we interviewed three members of the BOND operations staff from the SSA's Office of Research, Demonstration and Employment Support (ORDES). ORDES staff are responsible for a variety of tasks, such as overseeing the BOND Stand Alone System (BSAS, a computer program that interfaces with SSA's data systems to adjust SSDI benefits for treatment subjects according to BOND rules) and processing work Continuing Disability Reviews (CDRs). For interviews with the Implementation team and with ORDES, we selected team members most familiar with BOND processes, changes to processes, and the reasons for those changes, and completed interviews with all identified individuals.

Interviewers used a protocol tailored to the role of each respondent to conduct the telephone interviews. The interviewers focused on clarifying the information discussed during the staff focus groups and identifying key changes to implementation. The discussion topics relevant to Stage 2 included staffing changes in 2016, work CDR collection and processing, Annual Earnings Estimate (AEE) collection and processing, BSAS functioning, improper payments, activities supporting the end of the BOND participation period, and WIC and EWIC staffing and services.

2.1.2. Methods for the Process Analysis

This sub-section describes the methods used to analyze data collected from telephone focus groups with WIC and EWIC staff and interviews with SSA and Implementation Team staff in Round 8 of the Process Study.¹³

To identify key themes from the 2016 WIC/EWIC staff focus groups, the Evaluation Team coded and analyzed responses within and across respondent subgroups. We analyzed subgroup responses based on staff role (WIC or EWIC) and site type (centralized or non-centralized post-entitlement work). We also analyzed the online, multiple-choice poll responses across all of the WIC/EWIC focus groups and identified themes within each focus group. This approach mirrors the methods used to analyze the data from the focus groups with WIC and EWIC counselors and supervisors in 2014, as well as data from semi-structured interviews with work-oriented T1 subjects in 2015.

Unless otherwise noted, we use counts and percentages to describe participants' responses to polling and open-ended discussion questions. We indicate the number or percent of counselors with certain responses to poll questions. For open-ended discussion questions, we note the number of focus groups in which one or more counselors reported a similar experience. We mention any exceptions where they occur. For example, in some cases, we indicate that a number of focus group participants mentioned a specific topic, but we also note that we did not discuss the topic during all of the eight focus groups.

To analyze the data from the interviews with SSA and the Implementation Team, the Evaluation Team reviewed responses from the interviews for details, illustrations, and other information on how BOND was implemented. We used the responses to understand and contextualize findings from the analysis. For example, we used information from interviews with SSA's BOND operations team to understand the factors that facilitated recent progress on processing a backlog of work CDRs and the implications of this progress for offset use and improper payments.

2.2. Participation Analysis

This section describes the data sources and methods used to conduct the participation analysis, including the analysis of overpayments. Results from the process analysis are presented in Chapter 4 (counseling), Chapter 7 (pathway to the offset), and Chapter 8 (overpayments).

2.2.1. Data Sources for the Participation Analysis

The participation analysis relies on demonstration operations data, information from the beneficiary survey, and SSA administrative data.

The **BOND Operations Data System (BODS)** is a data management system designed specifically for BOND. The Beneficiary Tracking System (BTS), which is a core component of BODS, includes

¹³ For additional information about the methods used to analyze data from Rounds 1 through 7 of data collection (including semi-structured interviews with T1 beneficiaries, focus groups with beneficiaries, and past rounds of interviews and focus groups with BOND staff), refer to past reports such as the *Process Study Report, Stage 1 Early Assessment Report, Stage 2 Early Assessment Report*, and *2016 Stage 1 Interim Process, Participation, and Impact Report*.

documentation of beneficiaries' contacts with the demonstration and use of WIC and EWIC counselors. BODS also includes information obtained from SSA administrative data on whether SSA has determined that beneficiaries' disability has ceased because they have work above SGA. Such information is used to identify BOND subjects who may be eligible for a benefit adjustment under the offset. In addition, BODS tracks steps associated with benefit offset adjustment. This report reflects BTS data from BODS for the period March 2011 through March 2016.

The **Disabled Beneficiary and Dependent (DBAD)** files provide monthly snapshots of SSDI program activity. The files reflect program activity at the time the data were pulled (once per month) rather than the most up-to-date SSA data (which may include retroactive adjustments). Each snapshot lists up to 35 effective dates and associated actions with each date. The actions apply during the time range of effective date n to effective date $n + 1$. That is, the information is relevant from the effective date listed until a new effective date appears in a future monthly extract. We exploit documentation of changes in SSA actions over time both across and within DBADs to construct monthly measures of work-related overpayments.¹⁴ For this report, we use DBAD data from May 2011 through October 2016.

2.2.2. Methods for the Participation Analysis

In the participation analysis, the Evaluation Team used BODS data to create descriptive statistics on WIC and EWIC counselors' caseloads, beneficiaries' receipt of BOND counseling, the percentage of T21 and T22 subjects who completed steps toward benefit adjustment, and the duration of offset use. We used a combination of BODS data and SSA administrative records to identify beneficiary characteristics associated with offset use. We also used Master Beneficiary Record (MBR) data to track the percentage of T1 subjects in the offset over time. Finally, we used the DBAD files to create statistics on overpayments, and a combination of BODS data and DBAD files to identify overpayments that occurred at different points in the benefit adjustment process, as described below.

Overpayments

Work-related overpayments and incorrect payments occur when beneficiaries' earnings exceed thresholds that require SSA to reduce or withhold SSDI benefits but, for a variety of reasons, SSA paid the beneficiaries more than they were owed.¹⁵ In the remainder of this report, we use "overpayments" to refer to work-related overpayments and incorrect payments.¹⁶ The statistics presented include overpayments and incorrect payments, and exclude overpayments for reasons unrelated to work.

¹⁴ Overpayments and incorrect payments occur when SSA pays beneficiaries a higher SSDI benefit amount than they are entitled to receive (Section 6.1). Those that are work-related occur because earnings exceeded designated program thresholds.

¹⁵ Underpayments may occur if beneficiaries receive less in benefits than they are entitled to receive. There are no readily available statistics on underpayments. To identify work-related underpayments would require a distinct algorithm. Consistent with the *Evaluation Analysis Plan*, this analysis focuses on overpayments.

¹⁶ Conceptually, overpayments and incorrect payments are identical and are treated as such by the overpayment identification method. They both apply to cases in which a beneficiary was paid more than he or she was owed. They are distinguished administratively by the payment recovery procedures—an incorrect payment occurs within the accounting period (e.g., the current calendar year for BOND treatment subjects) and is recovered immediately and fully. An overpayment is discovered after the accounting period (e.g., after the end of the calendar year in which the payment error occurred) and is eligible for appeal and repayment arrangements.

SSA does not produce readily available statistics indicating the number and amount of overpayments that accrued over a specific period. Rather, SSA's Recovery of Overpayments, Accounting, and Reporting System lists overpayments according to when SSA identified them.¹⁷ Because overpayments are identified with lags of varying lengths and information on the lag duration is not available for most cases, we cannot use this data system to identify overpayments that accrued during BOND. To address this challenge, we developed a method that uses the DBAD files to estimate overpayments that accrued to both treatment and control subjects while in BOND.

The sample for the overpayment analysis includes disabled-worker beneficiaries in the Stage 2 impact sample who are entitled to SSDI on the basis of their own earnings histories only. We focused on these beneficiaries to avoid potential complications to our method associated with the dually entitled and auxiliary beneficiaries in the sample, all of whom are entitled as Disabled Adult Children. Specifically, it is difficult to distinguish between benefit changes due to the primary beneficiary's earnings and those due to the auxiliary beneficiary's earnings. All statistics pertain to overpayments for the disabled-worker's own benefits and do not include overpayments for auxiliary benefits.

For this report, we analyze benefits overpayments made during the first 44 months of BOND for T22 and T21 subjects: May 2011 through December 2014. Although we are interested in overpayments beyond 2014, we limited our analysis to this period because of the often lengthy lag between overpayment occurrence and SSA's discovery of the overpayment. Because SSA may continue to identify new overpayments as it receives and processes information, the statistics we present are lower-bound estimates of the prevalence of overpayments.

Overpayments may occur at several points in the benefit adjustment process. To understand whether the number and amount of overpayments differ before beneficiaries' first offset adjustments versus after the first offset adjustment, we linked data on overpayments from DBAD files to data on the timing of the first offset adjustment from BODS.

The computation of an overpayment is the difference between benefits due as initially recorded for a given beneficiary in that month and benefits due after SSA has received and processed information about work that may retroactively affect benefits. Both of these elements are "benefits due" (conditional on having been paid a positive benefit) rather than "benefits paid" because "benefits paid" may include lump-sum amounts to reconcile previous payment errors and thus not solely reflect benefits due as a result of earnings in the relevant period. Appendix D presents additional details about construction of the overpayment measure.

2.3. Impact Analysis

The central issue in the BOND evaluation is the benefit offset's impact on beneficiaries' employment, earnings, and benefit receipt. Stage 2 also examines the additional impacts of enhancements to work

¹⁷ Recovery of Overpayments, overpayments, accounting, and reporting data indicate the overpayment accrual dates in a minority of cases. This does not allow us to identify the universe of overpayments accrued during the BOND period.

incentive counseling (EWIC versus WIC). This report presents estimates of the impacts of the two Stage 2 treatments (i.e., WIC or EWIC) on both administrative outcomes and self-reported outcomes. In this section, we describe the administrative data and analytic methods used to estimate the impacts.

2.3.1. Data Sources for the Impact Analysis

The data sources for the impact analyses are listed below:

- 2015 calendar-year earnings are measured from the SSA Master Earnings File (MEF), which contains longitudinal information on wages and self-employment income reported to the IRS. The MEF records were almost 100 percent complete for calendar year 2015 when SSA extracted them for this report.¹⁸
- 2015 calendar-year benefit outcomes are measured from SSA's Payment History Update System (PHUS) for SSDI and the Supplemental Security Record (SSR), for SSI. The benefit records were complete.
- We supplement the administrative data with self-reported outcomes measured using the BOND 36- Month Survey which was administered from March 2014 to February 2016, reflecting the 20-month Stage 2 enrollment period. Respondents to the 36-Month Survey represent 76 percent of all Stage 2 subjects.¹⁹ The mean and median timing of response were 39 months after study enrollment. When analyzing data from the survey, we use nonresponse weights to reduce the risk of nonresponse bias (see Appendix A).
- The analysis also uses self-reported outcomes measured using the BOND Baseline Survey. Study participants completed the Baseline Survey just before they were randomized to one of the treatment arms. The response rate of the Baseline Survey was 99.3 percent.²⁰ In this report, we use the Baseline Survey to describe participants' pre-BOND employment status, earnings, health status, and understanding of SSDI benefits. We also use baseline survey data for covariates in the impact regressions (Chapter 2.3.2).

One of the main outcomes of interest is earnings. The administrative earnings measure we use in this report, and all BOND reports, includes only "Social Security earnings." Social Security earnings are

¹⁸ Because the data are collected by the IRS and are therefore subject to IRS access rules, SSA staff have direct access to MEF data, but contractors do not. Consequently, qualified SSA staff accessed the data, submitted programs developed by the BOND Evaluation Team to estimate impacts, reviewed output to ensure that it complied with privacy requirements, and then transmitted the output to the evaluation team. The MEF earnings data are updated annually. The 2013 earnings data for this report were extracted in February 2015.

¹⁹ Stage 2 subjects entered the survey sample at 36 months after random assignment. During the fielding period of the 36-Month Survey, the evaluation team received monthly updates from the implementation team identifying Stage 2 subjects who had died or withdrawn from the study prior to entering the survey sample. A total of 806 subjects did not enter the survey sample due to death or withdrawal from the study. Of the 12,148 subjects who did enter the survey sample, 9,830 subjects completed the survey, a completion rate of 81 percent.

²⁰ All 12,954 BOND subjects enrolled in Stage 2 completed a baseline survey. However, for 85 cases (less than one percent of the Stage 2 sample), the processing errors corrupted the baseline data on the laptops and the evaluation team could not recover the data. Baseline data are missing for these 85 cases.

earnings that are taxable for Social Security purposes. About 6 percent of the U.S. workforce holds jobs not covered by Social Security taxes. Furthermore, Social Security earnings are capped at a maximum taxable amount, \$118,500 for 2015. In 2015, less than 0.01 percent (one one-hundredth of a percent) of all Stage 2 subjects had earnings at or above \$118,500. Beneficiaries who had earning at or above that amount are unlikely to have a behavioral response to the offset.

Non-covered jobs constitute a larger omission. It is not feasible for this evaluation to obtain a more comprehensive measure of earnings from administrative data. As a result, reported estimates of earnings, employment, and the proportion with earnings above BYA have a small downward bias. The impact of the offset would be downwardly biased if some who are encouraged to work have jobs not covered by Social Security. On the other hand, the estimate could have a slight upward bias due to the fact that the offset may induce some people with under the table earnings to report them. Measures of weekly earnings and employment taken from survey data should not be subject to the same source of bias (though they are subject to other biases; in particular, recall bias and non-response bias).²¹

The next subsections of this chapter review the outcome definitions, anticipated impacts, estimation methodology, and analysis sample.

2.3.2. Administrative Outcome Definitions and Theoretical Impacts

The nine administrative outcomes for this report include two confirmatory outcomes (total earnings and total SSDI benefits paid in 2015) and seven exploratory outcomes (related to employment and benefits). The exploratory earnings outcomes include indicators for earnings in excess of each of three annual earnings thresholds defined by multiples of BYA (one, two, and three times BYA) and an indicator for employment during 2015 (defined as any earnings in 2015). The exploratory benefit outcomes include number of months with SSDI payments, total SSI benefits paid, and number of months with SSI payments²²—each in 2015. In the discussion that follows, we consider the expected direction of benefit offset impacts on these outcomes, abstracting from administrative factors that could themselves influence the impacts. We then turn to a discussion of administrative factors and their potential influence on impacts.

Although the goal of BOND is to test whether eliminating the SGA cash cliff and replacing it with the \$1 for \$2 offset ramp would increase return to work and earnings, and reduce beneficiary's reliance on SSDI benefits (Bell et al. 2011), the theoretical direction of impacts of the benefit offset on mean earnings and benefits is ambiguous. As described in detail in Bell et al. (2011), this ambiguity arises because the incentives created by the benefit offset vary with what the beneficiary's earnings would be under current law. T21 and T22 subjects who would have had earnings below BYA under current law are expected, on average, to have higher earnings and lower SSDI benefits if the benefit offset were available to them.

²¹ For a discussion on income measurement in surveys, see Moore et al (2005)

²² Although eligibility criteria for Stage 2 required that beneficiaries not be receiving SSI benefits at the time the study team determined eligibility (in the first six months of 2011), Stage 2 subjects could potentially become SSI recipients (for example, after spending down their assets enough to meet the resource test). Therefore, SSI benefits are included as an outcome variable.

Conversely, some T21 and T22 subjects who would have had earnings above BYA under current law are expected to have lower mean earnings and higher mean SSDI benefits under the benefit offset.²³

The impact estimates from a random assignment study (such as those reported below) combine those in both groups. In order to estimate a positive impact on the mean earnings, the positive impact for those whose earnings would be less than BYA under current law would have to be larger than the expected negative impact for those who would earn more than BYA under current law.

Similarly, the predicted impact on benefits depends on what the earnings of the beneficiary would have been under current law. For those who would receive full benefits because they have earnings below BYA under current law, the offset's predicted impact on benefits is negative because some of the beneficiaries would choose to earn above BYA, which would reduce their benefits, if the offset were available to them. Conversely, for those who would have had earnings above BYA under current law, benefits for many under the offset are expected to be higher because they will be eligible for a partial benefit rather than no benefit at all, as under current law. Hence, to generate a reduction in mean benefits paid, the reduction in benefits paid to those whose earnings would be less than BYA under current law must exceed the increase in benefits paid to those who would earn more than BYA under current law.

Unlike for earnings and benefits paid (just discussed), theory does predict the signs of the impacts for five other outcomes, all of them exploratory. Theory predicts positive impacts on (i) employment, on the (ii) percentage of beneficiaries with earnings above BYA, and on (iii) months with SSDI payments. Theory also predicts negative impacts on (iv) SSI benefits and (v) months with SSI payments. These predictions can be verified by comparing the proportion of BOND subjects working below and above BYA in T21 and T22 versus the proportion in C2. As indicated earlier, for those who would have earnings below BYA under current law, theory predicts that the offset will increase both the percentage employed and the percentage of beneficiaries with earnings above BYA. Those who would have earnings above BYA under current law will have a stronger incentive to keep their earnings above BYA under the offset than they do under current law—even though some might work and earn less under the offset.

Theory also predicts that the impact on SSI benefits paid will be negative. The offset might have an impact on SSI payments to T21 and T22 subjects who are SSDI-only beneficiaries at the outset of the demonstration and whose SSDI benefits are below the maximum federal SSI benefit amount. Under current law, some such subjects are likely to enter SSI after they spend down their assets to the point at which they satisfy the SSI resource test. Higher earnings under the offset might reduce or slow the entry of such SSDI-only subjects into SSI.²⁴

For the two remaining exploratory outcomes—earnings above two times BYA and earnings above three times BYA—it is not possible to predict the direction of impacts. For those treatment beneficiaries whose earnings would be less than BYA under current law, the offset is expected to have a positive average earnings effect, perhaps increasing the proportions with earnings above two times BYA and above three

²³ Empirically, there is evidence that some high-earning beneficiaries will reduce their earnings, but not reduce employment. Weathers and Hemmeter (2011) found evidence of a reduction in earnings by beneficiaries earning above SGA before random assignment in the Benefit Offset Pilot Demonstration.

²⁴ See Riley and Rupp (2012).

times BYA. Conversely, for those who would have had earnings above BYA under current law, the offset is expected to have a negative average earnings effect, perhaps decreasing the proportions with earnings above two times BYA and above three times BYA. Since the magnitudes of these opposing expected effects are not predicted by theory, it not possible to predict the overall direction of impact for any earnings threshold well above the BYA level. Exhibit 2-3 lists the administrative outcomes, provides a definition of each outcome, and indicates the predicted sign of the impact (positive, negative, or ambiguous).

Exhibit 2-3. Definitions of Confirmatory and Exploratory Administrative Outcomes and Predicted Signs of Impacts

	Definition	Predicted Sign
Confirmatory Outcomes		
Total earnings in 2015	2015 Social Security earnings	?
Total SSDI benefits paid in 2015	Sum of SSDI benefit payments from January through December 2015; for SSDI workers, this includes benefits for dependent spouses and minor children, but not for DAC ^a ; for DAC and DWB, it includes only benefits payable to the DAC or DWB	?
Exploratory Outcomes		
Earnings Outcomes (January–December 2015)^b		
Employment in 2015	Indicator for any 2015 Social Security earnings	+
Earnings above BYA	Indicator for 2015 Social Security earnings greater than or equal to \$13,080 (non-blind subjects) or \$22,840 (blind subjects)	+
Earnings above 2 × BYA	Indicator for 2015 Social Security earnings greater than or equal to \$26,160 (non-blind subjects) or \$43,680 (blind subjects)	?
Earnings above 3 × BYA	Indicator for 2015 Social Security earnings greater than or equal to \$39,240 (non-blind subjects) or \$66,520 (blind subjects)	?
Benefit Outcomes (January–December 2015)		
Number of months with SSDI payments	Number of months with SSDI benefits paid above zero	+
Total SSI benefits paid	Sum of SSI benefit payment amounts from January through December 2015	–
Number of months with SSI payments	Number of months with SSI benefits paid above zero	–

Notes: Bell et al. (2011) provide detailed discussion on the hypothesized impacts of benefit offset.

^a For details on family benefits, see <https://www.socialsecurity.gov/pubs/EN-05-10024.pdf>; accessed May 27, 2014.

^b Earnings relative to BYA is based on earnings reported in the MEF.

2.3.3. Administrative Features of the Offset That May Influence Impacts

The previous discussion highlights administrative features of the benefit offset that the study team designed and implemented to facilitate use of the offset by T21 and T22 (and also T1) beneficiaries. As described in Bell et al. (2011), because these processes are necessarily different from current law processes, they are part of the T21 and T22 interventions being tested under BOND.

In the first years of BOND, the administrative factors most likely to affect outcomes concern the administrative processes leading to the adjustment of benefits—the special processes implemented for T21 and T22 subjects and the current processes that apply to C2 subjects. For T21 and T22 subjects, that

process started shortly after their enrollment date, when subjects learned their random assignment status. Some of those eligible to use the offset informed the demonstration of their work activity as recommended and their benefits were eventually adjusted via an administrative process set up for that purpose. Others eligible to use the offset early did not contact the demonstration, however. Instead, SSA discovered their high earnings in its annual review of earnings reported to the IRS, and then initiated the process to adjust their benefits. As a result, those beneficiaries may have received overpayments.

The benefits measures for this report are based on benefits paid *in* 2015, rather than benefits paid *for* 2015, which includes all future retroactive adjustments for 2015 benefits. These two measures will diverge according to the dollar value of retroactive adjustments made for 2015 benefits. Although this dollar value is not yet known, we know that there must be retroactive adjustments of some dollar amount for the treatment subjects who did not pro-actively inform SSA of earnings above BYA. The BOND administrative data as of January 2017 show that 77 percent of Stage 2 subjects who used the offset did not have benefits adjusted until at least six months after they first qualified to receive the offset; 60 percent did not have benefits adjusted until at least one year. This implies that some adjustments to benefits paid to T21 and T22 subjects for 2015 are not reflected in benefits paid *in* 2015, and that there will be at least some discrepancy between benefits paid *in* 2015 and benefits paid *for* 2015.

The direction and size of the impacts of this administrative factor depend on how the processes for the T21 and T22 groups compare to the corresponding processes for C2 subjects. The most striking difference is that T21 and T22 subjects had to be notified about a change in the earnings rules before the benefit adjustment process could start, whereas C2 subjects were subject to rules that had been in place for many years. Also, T21 and T22 administrative processes had not been previously implemented on a large scale, resulting in start-up delays,²⁵ whereas the C2 processes have been in place for many years.

The change from monthly to annual accounting also seems likely to have a positive impact on benefits paid *for* 2015, and possibly on benefits paid *in* 2015, but an ambiguous impact on 2015 earnings. As discussed in Chapter 7 of this report, the justification for annual accounting was to simplify administration of the offset and to align with the expected future accounting procedure should the benefit offset become national policy. While not the purpose of this change, the move to an annual accounting period is expected to help beneficiaries with highly variable earnings (for example, seasonal workers) to a significant degree. Under monthly accounting, earnings above SGA in any month reduce benefits for that month, but under annual accounting the benefit reduction for those same earnings might be smaller or zero because of earnings below the SGA amount in other months of the same year. Holding earnings constant, this administrative change is expected to increase the benefits paid to some beneficiaries; any increase in earnings due to this factor will reduce benefits (and correspondingly, any decrease in earnings will increase benefits). The theoretical sign of the impact of this administrative change on earnings is ambiguous.

2.3.4. Impact Estimation Methodology

To estimate impacts, we compare mean outcomes for the T21, T22, and C2 groups to each other. For outcomes derived from administrative data, the sample means are weighted for differences in site-

²⁵ This issue is described in Gubits et al. (2013) and Derr et al. (2015).

selection probabilities and in sampling rates into the solicitation pool across sampling strata. For outcomes derived from 36-Month Survey data, in addition to the factors for which the administrative data are weighted, the sample means are weighted for propensity to respond to the survey, in order to address the possibility of non-response bias. For both these types of outcomes, the means are adjusted for the effects of small random differences in baseline characteristics. The adjustments for differences in baseline characteristics also serve to reduce the standard errors. For each specific outcome, we test the null hypothesis of no impact. Each individual test uses a specified level of significance. For example, a 10 percent significance level means that if the null hypothesis is true, there is only a 10 percent chance that the test will mistakenly reject it. Appendix A of the *2015 Stage 2 Interim Process, Participation, and Impact Report* describes the estimation procedure in detail.

The impact estimates are “intent to treat” estimates. For example, the benefit offset impacts capture the mean impact of the applicability of the benefit offset rules to the earnings of all T21 subjects, whether or not those subjects work and use the offset. Likewise, the benefit offset plus EWIC impacts capture the impact on all T22 subjects, whether or not they work. Hence, the impact estimates reflect “no impacts” for those treatment subjects who would not have any earnings under current law or the offset.

The Stage 2 impact analysis has a total of six confirmatory hypothesis tests: tests of impacts on the two confirmatory outcomes in each of the three pairwise comparisons. We adjust the p-values of these tests to compensate for multiple comparisons. In the absence of some correction, performing multiple hypothesis tests makes the probability of at least one Type I error (rejecting a true null hypothesis) larger than the significance level for the individual tests. To adjust for this effect, we adjust the test statistics for the confirmatory tests so that the probability of rejecting the null hypothesis of no impact within the group of tests is equal to the specified significance level if the null hypothesis of no impact on any outcome in the group. We group the four tests in the T21 vs. C2 and T22 vs. C2 comparisons together because both of these comparisons involve impacts of the benefit offset rules compared to current law. We perform a separate multiple comparison procedure to adjust the p-values of the two confirmatory tests in the T22 vs. T21 comparison which compares the benefit offset rules plus EWIC to the benefit offset rules plus WIC. Appendix A of the *2015 Stage 2 Interim Process, Participation, and Impact Report* describes the procedure for multiple comparisons adjustment.

We make no multiple comparison adjustment to the tests for exploratory outcomes. Readers are advised to give less evidentiary weight to any individual significant result from an exploratory test than they would to an equally significant result from a confirmatory test.

2.3.5. Impacts on Beneficiary Subgroups

We estimate impacts on administrative outcomes for the full Stage 2 assignment groups and for seven pairs of subgroups. We treat all subgroup analyses, including the tests of earnings and SSDI benefits paid, as exploratory. The first subgroup pair is defined by duration of SSDI benefit receipt at the point of solicitation into the demonstration.²⁶ The duration subgroups are of interest because prior research and

²⁶ We measure the duration of SSDI receipt from the outreach release date rather than from the date of random assignment in order to prevent endogenous selection into the duration subgroups. Some beneficiaries may have responded faster to outreach than others and the speed of their response may be correlated with their earnings and benefit outcomes. A short-duration beneficiary who took a long time to respond to outreach before

program rules suggest that subjects who have been on the rolls for a *short duration* (defined here as three years or less) may respond to the benefit offset differently from those who have been on the rolls for a *long duration* (more than three years). More specifically, we expect more short-duration subjects to work in comparison to long-duration subjects. However, we expect it will take longer for short-duration subjects to actually have their benefits adjusted, because they will have completed fewer TWP and GP months at the outset of the demonstration in comparison to long-duration subjects.

The second subgroup pair is defined by whether the participant lived in a state with a Medicaid Buy-In program.²⁷ Most states have a Medicaid Buy-In program for persons with disabilities, who may otherwise be concerned that they will lose their Medicaid coverage if they enter or return to the workforce. Commercial or employer-based health insurance might not provide coverage for services and supports that enable people with disabilities to work and live independently. Therefore, theory would predict that study subjects with access to a Medicaid Buy-In program would be more likely to seek employment than study subjects without access to a Medicaid Buy-In program.

Two subgroup pairs are defined by specific disabilities: a primary impairment of Major Affective Disorder at baseline, and a primary impairment of Back Disorder at baseline. The incidence of Major Affective Disorder as a primary impairment has grown significantly in recent years, and there has been some expectation that we might see stronger treatment effects for subjects with this primary impairment. Similar to Major Affective Disorder, the incidence of Back Disorder as a primary impairment has increased in recent years, generating suspicion that we might see stronger treatment effects for subjects with this disorder than subjects with a different primary disability.

The remaining three subgroup pairs are defined by (i) employment status at baseline, (ii) age at baseline, and (iii) education at baseline. We expect that subjects who are employed, younger, or have higher education levels are more likely to use the offset because they face higher opportunity costs of not working. For example, those who are already working at baseline may be able to increase earnings to take advantage of the offset more readily than beneficiaries not already working. Beneficiaries with higher education may have more employment options than those with lower levels of education, in part because higher education may give more options for changing fields—for example, from construction to information systems. They may also be better able to understand the offset rules and, therefore, be more likely to change their behavior in response. Beneficiaries who are younger may also face more economic opportunity by changing fields through job training or other means than older beneficiaries, because they have more years before retirement to gain earnings and invest in a new career.

enrolling in the study may have crossed the threshold into the long-duration definition (37 months or more of SSDI receipt) if duration is measured from random assignment. In order to rule out the possibility of subjects determining their subgroup membership after exposure to the study (which occurred when subjects first received solicitations to enroll), we measure duration from outreach release date.

²⁷ Some BOND sites serve participants from more than one state, and in some cases, state Medicaid Buy-In availability changed between 2011 and 2012 during the recruitment and randomization period. The majority of BOND participants at the Alabama (100%), Colorado/Wyoming (88%), and South Florida (99%) sites did not have access to Medicaid Buy-In at baseline; some in the DC Metropolitan Area (24%) also did not have access to Medicaid Buy-In at baseline. All others had access to Medicaid Buy-In (including Arizona/Southeast California, Greater Detroit, Greater Houston, Northern New England, Western New York, and Wisconsin).

2.3.6. Analysis Sample Sizes

Exhibit 2-4 presents the sizes for the full sample and impact analysis sample. The full sample includes all Stage-2 enrollees whether or not some were later deemed sources of contamination, while the impact analysis sample excludes the sources of contamination. The full sample is the relevant data for the process analysis because counselors and staff were responsible for serving all enrolled subjects as prescribed in the BOND Study Design. The full sample is also the relevant data for the participation analysis because the analysis focuses on those who could participate due to their enrollment in Stage 2.

The impact analysis focuses on the slightly smaller set of Stage 2 subjects (210 fewer). The impact analysis excludes beneficiaries who live with a family member also enrolled in a different BOND treatment arm (Stage 1 or Stage 2). A key assumption in the BOND logic model is that a beneficiary has to understand the benefit offset rules in order to consider a behavioral response to the new rules. If a beneficiary lives with a family member enrolled in a different BOND treatment arm, the family member could influence the beneficiary's decision making and behavior, which is deemed a source of contamination. The Stage 2 impact analysis sample contains a total of 12,744 subjects, spread across T21 (4,854), T22 (3,041), and C2 (4,849).

Exhibit 2-4. Stage 2 Analysis Sample Composition

Random Assignment Group	Full Sample	Impact Analysis Sample
T21	4,936	4,854
T22	3,089	3,041
C2	4,929	4,849
TOTAL	12,954	12,744

Source: BOND Operations Data System (BODS).

Notes: The Stage 2 analysis sample excludes 210 beneficiaries who are related to other BOND subjects (e.g., a primary and a DAC or two DACs with the same primary) to avoid contamination effects that might arise from the fact that almost all such beneficiaries (204 of the 210) were assigned to different BOND groups (see Appendix A of the *2015 Stage 2 Interim Process, Participation, and Impact Report* for details on this adjustment). Because only six of these beneficiaries would have been able to be retained, it was not feasible to replicate the approach used for the Stage 1 analysis (where we were able to include pairs in which both members were assigned to the same group and revise the weights so that impact estimates reflect impacts for all beneficiary pairs with at least one member in Stage 1 (Stapleton et al. 2013)).

This exhibit shows 1 additional T21 subject and 1 fewer C2 subject than Exhibit 2-2 in Gubits et al. 2014. The random assignment status of one Stage 2 subject was recorded as T21 and C2 in different subcomponents of BODS. We identified this discrepancy in March of 2015 and corrected it by placing the subject in the T21 group.

As would be expected if random assignment was properly implemented (and given the large sample sizes), the differences in baseline characteristics between assignment groups are small and appear to be due to chance (Gubits et al. 2013). An omnibus test for differences across all the characteristics shows that there is not a statistically significant difference between groups (Gubits et al. 2013). Baseline equivalence bolsters the case that any study findings of statistically significant impacts represent real impacts of the interventions, rather than systematic preexisting differences between the three groups or their environments.

3. Study Sites and Disability Service Environment

BOND was designed to produce valid, nationally representative estimates of the impact of the benefit offset for all SSDI and concurrent beneficiaries (Stage 1), and for recruited and informed SSDI-only volunteers (Stage 2). Toward that goal, the 10 randomly selected BOND sites reflect national variation in the local economies, service delivery systems, and other contextual characteristics. Although the evaluation does not estimate site-specific impacts, knowledge of site-level variation in background characteristics and changes in site environments during BOND contribute to understanding the study findings.

The BOND sites differ in six salient ways: (1) geographic characteristics; (2) strength of the local economic environment; (3) presence of non-BOND SSDI benefits counseling services; (4) number and staffing configuration of BOND benefits counseling providers; and (5) availability of employment services and other work-focused, disability-related resources. We have previously described the site differences in the *2015 Stage 2 Interim Process, Participation, and Impact Report*, the *Process Study Report* and the *Stage 2 Early Assessment Report*. Sections 3.1 to 3.5 of this chapter briefly summarize this information and, where relevant, describe changes and new observations in 2015 and 2016.

3.1. Geographic Characteristics

Sites vary in population density, geographic dispersion of SSDI beneficiaries, and the number of states and communities included in their catchment areas, as shown in Exhibit 3-1. As discussed in Section 2.2 of the *Process Study Report*, this geographic variation has implications for the demonstration. Service delivery is more complex in sites where staff at BOND service providers (WIC/EWIC administrators, supervisors, benefits counselors, and other field staff) must understand and navigate multiple sets of state and community policies and resources, and tailor service delivery accordingly. For example, the four-state Northern New England site relies on four state vocational rehabilitation agencies (SVRAs) to provide services to beneficiaries. In contrast, the Greater Detroit site is contained entirely within the state of Michigan. Benefits counseling staff also stated that beneficiaries in rural areas may face additional challenges regarding access to jobs and employment support services compared to beneficiaries in urban areas.

3.2. Economic Indicators

The U.S. economy improved from 2011 through 2015, but not uniformly across BOND sites. We observe variation in the employment rates for individuals with and without disabilities in the 15 states represented by the 10 BOND sites. Past research suggests, however, that improvements in local economic conditions may or may not increase the impact of the benefit offset on employment and earnings.

In two ways, the relative strength of the local economic environment may affect beneficiaries' opportunities to engage in SGA, a necessary step toward using the benefit offset. First, if there are few job openings, individuals with disabilities may experience difficulty in finding employment. Evidence suggests that, while job opportunities for all workers deteriorate in a recession, opportunities deteriorate even more for individuals with disabilities than for others (Livermore et al. 2012). Second, in a weak economy, declines in state revenues often lead to funding cuts for support services for people with disabilities (Johnson et al. 2011). Both of these factors affect employment options for treatment group and control group members; therefore, we cannot confidently predict the direction of the effect of various

Exhibit 3-1. Characteristics of BOND Sites

Site	Number of States	Population Density ¹	Geographically Dispersed ²	Number of BOND Benefits Counseling Providers	Types of Providers	Dispersed Staffing	Centralized Post-Entitlement Process
Alabama	Single	94 (AL)	X	1	• Nonprofit		X (WIC only)
Arizona/ SE California	Multiple (1 full, 1 partial)	56 (AZ) 239 (CA)		2*	• Nonprofit		X
Colorado/ Wyoming	Multiple (2)	49 (CO) 5.8 (WY)	X	2	• Nonprofit • SVRA	X (WIC)	X
DC Metro	Multiple (1 full, 3 partial)	9,856 (DC) 203 (VA) 595 (MD) 77 (WV)		4*	• For-profit • Nonprofit • Other ³		X (WIC only)
Greater Detroit	Partial	175 (MI)		1	• Nonprofit		X
Greater Houston	Partial	96 (TX)		1	• Nonprofit	X (WIC)	X
Northern New England	Multiple (3 full, 1 partial)	147 (NH) 43 (ME) 839 (MA) 68 (VT)	X	5	• Nonprofit • SVRA • University • Medical Center	X (ME,WIC; VT,WIC)	X
South Florida	Partial	96 (FL)		1	• Nonprofit		X
Western New York	Partial	411 (NY)		5*	• Nonprofit • Advocacy Organization	X (WIC)	
Wisconsin	Partial	105 (WI)	X	7	• Nonprofit • State Health Agency • University	X (EWIC, WIC)	X (WIC only)

Sources: Based on BOND Operations Data System, staff interviews, and additional data collection from BOND site visits.

N/A = Not applicable.

* Indicates sites that rely on Virginia Commonwealth University (VCU) to provide telephonic EWIC services to some or all T22 subjects, depending on the site. VCU is included in the count of benefits counseling providers for these sites.

¹Population density indicates number of individuals per square mile of land in 2010. The average population density for the United States in 2010 was 87 individuals per square mile.

²Geographic dispersion defined as 20 percent of the SSDI population living outside the Metropolitan Statistical Area (MSA). See Section 2.2 of the *Process Study Report*.

³Association of disability service providers.

local economic conditions on demonstration impacts. Some evidence suggests that employment-related interventions have greater impacts when local economic conditions are stronger (for example, Bloom et al. 2003; Greenberg et al. 2003), but there is also evidence for the opposite relationship—greater impacts during periods of weaker economic conditions (Card et al. 2015). Thus, it is plausible that the offset would have a larger impact in a stronger labor market, but there is no guarantee.

For people with disabilities, the employment rate—the number of individuals working as a share of the total population age 18 to 64, including those not looking for work—provides a more useful measure of the strength of the labor market than the oft-reported unemployment rate (Burkhauser et al. 2003). That is because the employment rate's denominator contains all potential workers, including discouraged workers (those who have stopped looking for work), while the unemployment rate excludes such workers. Many discouraged workers are people with disabilities. Given that a large number of potential workers become discouraged and no longer seek work during economic downturns, the employment rate tends to fluctuate more than the unemployment rate over the business cycle, providing a measure that is more sensitive to the work engagement of the adult population, especially among people with disabilities.

Leading up to BOND enrollment in 2011, the national employment rate among people without disabilities age 18 to 64 had fallen from 75.0 percent in 2007 (before the 2008 recession) to 72.8 percent in 2011, a 2.9 percent decline.²⁸ For people with disabilities age 18 to 64, the national employment rate had fallen from 36.2 to 32.6 percent, a substantially larger relative decline of 9.9 percent.²⁹ Similar changes were observed in the rates for the 15 states represented in the 10 BOND sites. In those states, the employment rate for people without disabilities fell from 76.3 percent in 2007 to 74.5 percent in 2011, a 2.4 percent decline. For those with disabilities, the corresponding decline was from 38.1 to 34.9 percent, an 8.4 percent drop.

From 2011 to 2015, the period of the impact analysis for this report, the national employment rates recovered to pre-recession levels for people with and without disabilities: from 32.6 percent to 34.9 percent for people with disabilities, a 7.1 percent increase, and from 72.8 percent to 76.0 percent for people without disabilities, a 4.4 percent increase (Exhibit 3-2). The average rates in the states represented in the BOND sites increased by similar amounts for people with disabilities, from 34.9 percent to 36.3 percent (a 6.7 percent increase), and for people without disabilities, from 74.5 percent to 77.2 percent (a 3.8 percent increase).

²⁸ See notes to Exhibit 3-2 for sources for 2011. For 2007, data come from Tables 16 and 17 of the 2009 Annual Disability Statistics Compendium, based on data from U.S. Census Bureau, 2007 American Community Survey, American FactFinder, Table B18120; <http://factfinder2.census.gov>; accessed by compendium authors on April 16, 2009.

²⁹ As is true for all surveys, there is some sampling error in the Current Population Survey, the source for these employment rates. The sampling error is greater for people with disabilities than for the larger sample of people without disabilities. Because of the sampling error, estimates of changes in employment rates may be lower or higher than the actual change.

Exhibit 3-2. Employment Rates in the BOND Sites, 2011 and 2015

Site	State(s) Partially or Totally Included in Site	Employment Rate for People Without Disabilities, age 18–64 (%)			Employment Rate for People with Disabilities, age 18–64 (%)		
		2011	2015	Percent Change	2011	2015	Percent Change
Alabama	Alabama	70.2	71.8	2.3	26.5	27.9	5.3
Arizona/SE California	Arizona	69.9	73.1	4.6	32.8	34.2	4.2
	California	69.5	73.1	5.2	31.4	33.8	7.6
Colorado/Wyoming	Colorado	76.3	79.3	3.9	41.4	40.8	-1.5
	Wyoming	80.1	79.1	-1.3	47.8	57.1	19.5
DC Metro	District of Columbia	71.5	77.5	8.4	30.0	31.4	4.7
Greater Detroit	Michigan	70.2	75.4	7.4	28.9	30.9	6.9
Greater Houston	Texas	73.5	75.5	2.7	36.9	38.6	4.6
Northern New England	Maine	78.1	79.7	2.5	31.4	29.6	-5.7
	Massachusetts	76.9	79.5	3.4	31.7	35.1	10.7
	New Hampshire	79.5	82.9	4.3	36.8	39.5	7.3
	Vermont	80.0	81.0	1.3	36.2	41.0	13.3
South Florida	Florida	70.6	74.1	5.0	29.2	31.1	6.5
Western New York	New York	72.1	74.9	3.9	31.3	33.0	5.4
Wisconsin	Wisconsin	78.7	82.3	4.6	38.7	41.2	6.5
Average Across 15 Included States¹	--	74.5	77.2	3.8	34.1	36.3	6.7
Entire United States²	--	72.8	76.0	4.4	32.6	34.9	7.1

Source: American Community Survey. Data for 2015 come from Tables 2.1 and 2.2 of the 2016 Annual Disability Statistics Compendium, based on data from U.S. Census Bureau, 2015 American Community Survey, American FactFinder, Table B18120; <http://factfinder2.census.gov>. Data for 2011 come from Tables 2.1 and 2.2 of the 2012 Annual Disability Statistics Compendium, based on data from U.S. Census Bureau, 2011 American Community Survey, American FactFinder, Table B18120; <http://factfinder2.census.gov>; accessed by compendium authors on September 24, 2012.

¹ Unweighted arithmetic average.

² Figures include the 50 states, District of Columbia, and Puerto Rico, weighted by relative population size.

During the same time period, the change in state-level employment rates among people with disabilities varied across the 15 states in the BOND sites. The employment rate for people with disabilities fell by 5.7 percent in Maine (in the Northern New England site) and by 1.5 percent in Colorado (in the Colorado/Wyoming site). The remaining 13 states all experienced increases in the employment rate for people with disabilities. The states with the largest increases in the employment rate from 2011 to 2015 happen to be within the same multistate BOND sites as the two states that experienced declines in the employment rate: Wyoming (19.5 percent), followed by two of the other Northern New England states (13.3 percent in Vermont and 10.7 percent in Massachusetts).

The state-level employment rates for people with disabilities at the end of 2015 varied across the 15 states. Seven of the 10 sites included at least one state with an employment rate for people with disabilities lower than the national average. Wyoming had the highest 2015 employment rate among people with disabilities, at 57.1 percent; Alabama experienced the lowest employment rate for the same population, at 27.9 percent.

The qualitative data from the focus groups with WIC and EWIC supervisors and counselors in 2016 are consistent with these statistics. In four focus groups, several counselors reported noticeable improvements in the availability of jobs for people with disabilities between 2014 and 2016. Most of the counselors who described improvements attributed them to stronger economic conditions. However, several counselors countered that they had not observed similar improvements in their sites.

3.3. Non-BOND SSDI Counseling Services

The WIPA program offers benefits counseling to SSDI beneficiaries who are subject to current law, including the BOND control groups. For BOND treatment beneficiaries, WIC services are offered to T21 subjects and enhanced counseling services known as EWIC services are offered to T22 subjects. The WIC services provided to T21 subjects are intended to be similar in design and intensity to the WIPA services available to the control groups, though reflective of the different benefit rules under the offset. In contrast, the EWIC services provided to T22 subjects feature enhancements compared to WIC and WIPA that are designed to increase the impacts of the benefit offset on earnings and benefits.

This section summarizes two changes to the availability and delivery of WIPA services that might have affected differences between WIPA and WIC services, and might therefore have affected the impact of BOND on employment and benefit outcomes. Qualitative findings suggest, however, that the changes to WIPA were minor enough that they were unlikely to affect impacts.³⁰

The first change was a 14-month suspension of funding for WIPA when authority for the program ended in June 2012. Most BOND sites maintained some level of counseling services for current-law beneficiaries in the demonstration control group during this time but some control group subjects may have experienced disruptions in the availability of counseling services. The lapse of WIPA funding did not affect funding for WIC or EWIC services to T21 and T22 subjects, nor did it affect the nature of those services.

³⁰ For additional detail on the changes to the WIPA program, refer to Section 3.3 of the *2016 Stage 1 Interim Process, Participation, and Impact Report*.

The second change to WIPA occurred in August 2015, when SSA awarded a new round of grants following a competitive application process.³¹ The new round of grants instituted 10 changes to the WIPA program, with the goal of providing more targeted, comprehensive, and intensive services with a larger use of remote delivery. After consulting with the BOND Implementation and Evaluation Teams, SSA decided not to change WIC services in response to these WIPA changes because the latter were not expected to affect to an appreciable degree the outcomes for the control group subjects.

During the 2016 focus groups with BOND staff, several WIC counselors reported differences in the level of support offered by WIC and WIPA services; however, counselors' perspective on which type of service was more intensive varied by site and the counselors' role in conducting post-entitlement work. In two focus groups, several WIC counselors reported that they believe that WIPA counselors do not provide the same level of attention and support to beneficiaries as do WIC providers, especially for beneficiaries who are not yet working.³² By contrast, several WIC counselors (who perform earnings reporting and other operational functions required for BOND) suggested that their time allocated to BOND has not been sufficient to provide benefits counseling as timely as can be provided by WIPA counselors.

After the end of the BOND Participation Period, the earnings rules for treatment subjects revert to current law rules, and beneficiaries must pursue WIPA services if they want benefits counseling.

3.4. Availability and Use of Employment Services and Other Work-Focused, Disability-Related Resources

To engage in SGA and use the benefit offset, some beneficiaries might need the help of employment services. Providers of these services include SVRAs and other providers acting as employment networks (ENs) under SSA's Ticket to Work program. WIC and EWIC counselors can refer BOND subjects to such providers, just as WIPA counselors do for control group subjects and other SSDI beneficiaries subject to current-law rules. For example, a counselor might refer a beneficiary in need of career counseling or assistive technology to an EN.

WIC and EWIC counselors have reported that these resources have not been consistently available because of waiting lists at SVRAs, the small numbers of other local ENs, and variations in the quality of services. During the 2016 focus group discussions, counselors in four of the eight focus groups reported that they do not typically refer beneficiaries to employment support services because their recent experience suggests that there will be a long wait time and that beneficiaries will lose interest while waiting. Counselors' mixed experiences with employment support services are reflected in their responses to an online poll that asked them how often referrals to employment support services helped BOND beneficiaries in their own caseloads begin, maintain, or increase work. About 14 percent (5 out of 35 respondents) responded "usually", 57 percent (20 out of 35) responded "some of the time," and 26 percent

³¹ The announcement for Funding Opportunity Number WIPA-WIP-15-001 is available here: <https://www.ssa.gov/oag/grants/wipa-15-001/index.html>.

³² The WIC counselors who made these observations were from sites where a centralized team conducted post-entitlement work, as described in Section 2.1. These staff may have had more time to spend with beneficiaries than WIC counselors who continued to perform post-entitlement work.

(9 out of 35) responded “rarely.”³³ Two counselors reported that employment support services were less helpful for beneficiaries with relatively high levels of education or work experience because services were tailored to individuals seeking entry-level employment or employment in a new occupation.

Stage 2 beneficiaries reported low satisfaction with employment support services. During in-depth interviews with work-oriented T21 and T22 subjects (defined as having a disability cessation date, see Section 2.1) in 2015, less than a third of interviewees (8 of 30) reported receiving employment services since becoming eligible for BOND. Among the eight beneficiaries who received services, seven described the services they received as unhelpful and only one beneficiary said that the services were helpful.³⁴ Seven of the 21 respondents who did not receive services said that they did not need them. These results are not necessarily representative of all Stage 2 beneficiaries and should therefore be interpreted with caution. In Section 6.3 of this report, we provide additional beneficiary perspectives on the use of employment support services, as drawn from the Stage 2 36-Month Survey.

Counselors and supervisors have noted that beneficiaries’ experiences with employment support services may be influenced by counselors’ role in the referral process. In 2016, counselors in two focus groups indicated that beneficiaries were more likely to follow through with referrals if the WIC or EWIC provided the beneficiary with detailed information about what to expect from SVRA services, including the timeline for receiving services, how often the beneficiary would interact with the service provider, and what types of services the beneficiary would receive. Two EWIC counselors noted that having a close working relationship with SVRA counselors made it easier to support beneficiaries in their caseloads during the referral process and enhanced beneficiaries’ experience with SVRA services.

Although it is possible that inconsistent or limited access to employment services has made it difficult for some beneficiaries to use the offset, issues with access to employment services would presumably affect their earnings under current law as well. Issues with access to employment services might help explain the absence of a significant impact on use of employment services for T21 subjects compared to C2 subjects (see Exhibit 6-2), but there are other important reasons to expect no detectable impact for this comparison. First, under current law, a large majority of SSDI beneficiaries who earn at the SGA level long enough to have their benefits suspended do not use employment services under the Ticket to Work program.³⁵ Second, we expected that a large percentage of those induced to earn above BYA under the offset would already be working, and it seems likely that such workers would have lower need for additional employment services than those who were not working. In fact, our impact estimates for 2013 indicate that about two-thirds of Stage 2 treatment subjects induced to earn above BYA under the offset

³³ In addition, one counselor participating in the online poll responded “Don’t Know” when asked how often employment support services helped beneficiaries in his caseload begin, maintain, or increase work.

³⁴ One of the thirty Stage 2 beneficiaries who participated in the in-depth interviews did not clearly articulate whether he had received employment support services.

³⁵ Liu and Stapleton (2011) found that of the SSDI awardees in 1996 who had their benefits suspended for work within the next 10 years, only 21 percent had used employment services. Hyde and Stapleton (2015) report that among all beneficiaries whose benefits were suspended or terminated because of work in 2010, only 10.6 percent had used Ticket to Work.

were already working when they were enrolled in BOND.³⁶ Taken together, these factors suggest that receipt of employment services would be smaller and harder to detect than impacts on outcomes such as employment and earnings above BYA.

3.5. Sites' Arrangements for Providing BOND Benefits Counseling

To deliver BOND WIC and EWIC services to treatment subjects (Chapter 4.3), the BOND Implementation Team contracted with local providers already engaged in disability service delivery. Cross-site variation in available providers and geographic coverage areas led to cross-site variation in BOND provider arrangements. As detailed in Exhibit 3-1, arrangements varied by several factors, including: the number of providers in a site; the type of provider organizations (for example, nonprofit agency, SVRA, or educational institution); and the providers' staffing models (dispersed, in which staff allocate a portion of their time to BOND, versus consolidated, in which most staff involved in the demonstration devote all of their time to BOND).

Differences across sites in provider arrangements affected several aspects of implementation, including (1) providers' ability to accommodate planned reductions in the number of their full-time equivalent (FTE) positions over the course of the demonstration, (2) the need for coordination and oversight, (3) counselors' knowledge of local systems, (4) accessibility of services to beneficiaries, and (5) currency of counselors' skills and training. In particular:

- The number of providers and their staffing arrangements affected the proximity and content of services offered to beneficiaries. Sites that covered larger geographic areas, especially more than one state, were more likely to have multiple providers or dispersed staffing structures. Such arrangements placed counselors closer to beneficiaries across the site and employed counselors with knowledge of local resources.
- Relative to sites with fewer providers or more consolidated staffing structures, sites with more providers and dispersed staffing structures required greater coordination and oversight from the Implementation Team to ensure that providers and staff conducted demonstration activities consistently and as intended.
- Provider and staffing configurations affected counselors' ability to maintain their skills and engage in related training. Staff in sites with fewer providers and more consolidated staffing structures found it easier to consult with their on-site colleagues for support, meet their training obligations, build expertise, and otherwise keep abreast of BOND policies and procedures. These factors in turn may have affected the quality of post-entitlement work, such as calculating

³⁶ Gubits et al. (2017) report that 1,909 Stage 2 treatment subjects were employed at baseline and 5,927 were not employed. They also report point estimates of impacts on the percentage of each group with earnings above BYA in 2013 of 5.50 and 1.08 percentage points, respectively (Exhibit B-9). These estimates imply point estimates for the number induced to earn more than BYA from the two groups of 105 and 64, respectively. Although we find that those employed at baseline account for about two-thirds of those induced to earn above BYA in the demonstration, the corresponding ratio in a national program could be quite different because the standard errors for these estimates are substantial (32 and 37, respectively).

AEEs.³⁷ A review by the BOND Implementation Team found that, relative to WIC providers with a consolidated staffing model, WIC providers with a dispersed staffing model made more errors in BOND post-entitlement work.

- Providers' staffing arrangements and overall size affected their ability to respond to the demonstration's planned reductions in FTEs. Larger providers such as SVRAs had more options for reassigning staff hours to non-BOND work in response to planned reductions in FTEs and to fluctuating workloads. Similarly, sites with dispersed staffing structures had greater flexibility to accommodate changes because multiple staff members combined part-time BOND counseling roles with work supported by other funding sources.

In addition, two changes affected most or all BOND counseling providers. The first change for WIC and EWIC providers was a reduction in FTEs for counseling staff in December 2014. The Implementation Team had planned this reduction in expectation of smaller caseloads of WIC and EWIC clients as the demonstration proceeded.³⁸ Second, to improve the quality of post-entitlement work, in December 2013, the Implementation Team shifted the majority of post-entitlement work to a centralized team.

Centralization of this work was implemented in Arizona/Southeastern California (WIC and EWIC), Colorado/Wyoming (WIC and EWIC), DC Metro (WIC only), Greater Houston (WIC and EWIC), Northern New England (WIC and EWIC), South Florida (WIC and EWIC), and Wisconsin (WIC only) in December 2013 and in Alabama (WIC only) in January 2015. Detroit implemented centralization for EWIC staff in December 2013 and for WIC staff in January 2016.

Finally, changes to the WIPA program in 2012 and 2015 led to changes in BOND staffing because many organizations provide both WIPA and BOND counseling services. Specifically, the loss of WIPA funding after June 2012 led to WIC and EWIC staffing changes in 6 of the 10 BOND sites (see Exhibit 2-3 in the *Process Study Report*).

The August 2015 award of a new round of WIPA grants had a more limited effect on BOND counseling providers, resulting in BOND staffing changes in only two of the 10 sites. In Alabama, the sole WIC provider had been a WIPA provider who did not receive a new grant award. As a result, the one counselor providing WIC services left the WIPA provider in that site, even though she was working full-time on BOND at the time. The service provider replaced the counselor with the WIC supervisor who already had significant prior experience as a WIC counselor. In Northern New England, the organization providing EWIC services in Massachusetts gained a WIPA contract. After obtaining approval from the WIPA organization and from SSA, a EWIC counselor at the organization began providing WIPA services to control subjects, in addition to EWIC services for T22 subjects.

³⁷ In Chapter 7, we discuss post-entitlement work, which refers to the activities required to facilitate the BOND benefit adjustment process.

³⁸ As detailed in the Implementation Team's internal planning documents, the team anticipated smaller caseloads over time because of expectations that (1) treatment subjects who took up counseling services earlier in the demonstration would need less support as time elapsed and (2) relatively few beneficiaries would take up counseling services for the first time later in the demonstration.

3.6. Summary

This chapter has described the diversity of the employment and service delivery environments in the BOND sites. As discussed in later chapters, this diversity led to variation in implementation practices within BOND. We would expect to see comparable variation in the implementation of a national program similar to the BOND benefit offset, because the randomized site selection process was designed to ensure that the environmental diversity in the selected sites is similar to the diversity across all areas of the nation.

Several changes in site environments during the demonstration period to date, along with cross-site differences, may influence results of the BOND impact evaluation. First, in most sites employment rates have improved substantially between 2011 and 2015, reflecting the continuation of the economic recovery. This trend may have made it easier to find a job and take advantage of work incentives available. (In contrast, an economic recession would dampen the possibility of detecting earnings impacts because increasing earnings would have been difficult, regardless of generosity of work incentives.)

Second, the availability of employment support services for BOND beneficiaries has varied across sites. WIC and EWIC counselors have reported that, for some beneficiaries, access to employment services has posed challenges to working and using the offset.³⁹ WIC, WIPA, and EWIC counselors do not provide employment support services, but refer beneficiaries to these services. Even if EWIC counselors are very effective at reaching T22 subjects, capacity constraints in employment support services may prevent evaluators from seeing an impact of EWIC on receipt of employment support services or an impact of EWIC on outcomes that result from receipt of employment support services (such as employment and earnings).

³⁹ There is no indication that either the economic environment or the availability and quality of service referrals differed for treatment subjects versus control subjects, with one apparently minor exception: the 14-month interruption in funding for WIPA may have influenced the availability of counseling services (including referrals made by counselors) for some control group subjects but not for treatment group subjects during that period. Even during this period, however, some control subjects had access to counseling services.

4. BOND Work Incentives Counseling

Work incentives counseling is a key component of BOND. The intention of the counseling developed for BOND is to enable beneficiaries to understand and take advantage of the offset. BOND includes two types of counseling: (1) basic work incentives counseling (WIC) for the Stage 2 T21 group and the Stage 1 T1 group, which is by design comparable to the counseling available under current law; and (2) enhanced work incentives counseling (EWIC) for the Stage 2 T22 group. The *Process Study Report* and *2015 Stage 2 Interim Process, Participation, and Impact Report* describe the BOND work incentives counseling through 2014. This report focuses on work incentives counseling in 2015 and 2016.

4.1. Design of BOND Counseling

Like SSDI beneficiaries not participating in BOND, the Stage 2 volunteers assigned to C2 are eligible to receive work incentives counseling from a Work Incentives, Planning, and Assistance (WIPA) project. The primary objective of WIPA is to equip beneficiaries to make the best use of work incentives to increase their employment. In 2015 and 2016, SSA funded 83 WIPA projects that provide counseling to SSDI beneficiaries on using work incentives. Front-line WIPA staff assist beneficiaries in making informed choices about the potential effects of work on SSDI and other benefits. The WIPA projects offer beneficiaries services that range from providing basic information and referral (I&R) to assistance with developing and carrying out long-term plans to use SSA work incentives and other employment supports. WIPA projects also refer beneficiaries to employment support programs, such as state vocational rehabilitation agencies (SVRAs) or employment networks (ENs).

Stage 2 volunteers assigned to T21 (as well as Stage 1 subjects assigned to T1) are eligible to receive basic work incentives counseling (WIC). WIC was designed to mirror WIPA in the type and intensity of service. The only intended difference, relative to WIPA, is that WIC counselors assist beneficiaries in making informed decisions about the potential effects of work on SSDI with respect to the benefit offset rules, as opposed to current law.

Stage 2 volunteers assigned to the T22 group receive EWIC. The primary difference between EWIC and WIC is that EWIC staff take a proactive approach to contacting beneficiaries on an on-going basis to inform them about the BOND demonstration, work incentives, and opportunities for employment services. EWIC staff were instructed to contact all T22 beneficiaries within two weeks of random assignment and contact them thereafter at least once per month over the course of BOND. The requirements for EWIC contact were modified in early 2014 after all T22 subjects had received at least 18 months of monthly contact. From that date forward, EWIC staff were to contact all engaged T22 subjects at least quarterly, with monthly contacts for those deemed likely to use the offset. In contrast, WIC staff are tasked with providing the same type of information about the offset rules as EWIC staff, but only to beneficiaries who contact them.⁴⁰ Counselors that provide EWIC to T22 subjects do not provide WIC to other treatment subjects.

⁴⁰ For additional details on the design of EWIC and WIC, the reader is referred to Section 5.1 of the Stage 2 Early Assessment Report (Gubits et al. 2013) and Section 5.2 of the BOND Final Design Report (Stapleton et al 2010).

Additionally, compared to WIC, EWIC includes extra services. The more intensive components of EWIC services include the development of a detailed employment support plan based on assessments of vocational skills and interests, and assistance in helping beneficiaries obtain the resources and support they need to find employment, as well as the ongoing support they need to keep it. WIC staff are not supposed to conduct the assessments of vocational skills and interests or develop the employment support plan that are both part of the EWIC design.

Staff at a limited number of sites are also tasked with providing BOND post-entitlement services, defined as collecting information from the beneficiary to develop an annual earnings estimate (AEE), collecting and reviewing documentation for non-countable income (this includes impairment-related work expenses, paid time off and the value of employer subsidies, all of which SSA deducts from earnings prior to calculation of benefits), assisting beneficiaries who wish to appeal an SSA decision, and assisting beneficiaries with submitting this information to SSA. Staff at these non-centralized sites report that they spend the majority of their time focused on post-entitlement work, but that work incentives counseling does not get overlooked because they incorporate it into the post-entitlement work. In the other sites, centralized staff from the BOND Implementation Team assumed responsibility for providing post-entitlement services in 2013.⁴¹ All WICs and EWICs have real-time access to individual BTS records so they can see activities completed by other BOND staff.

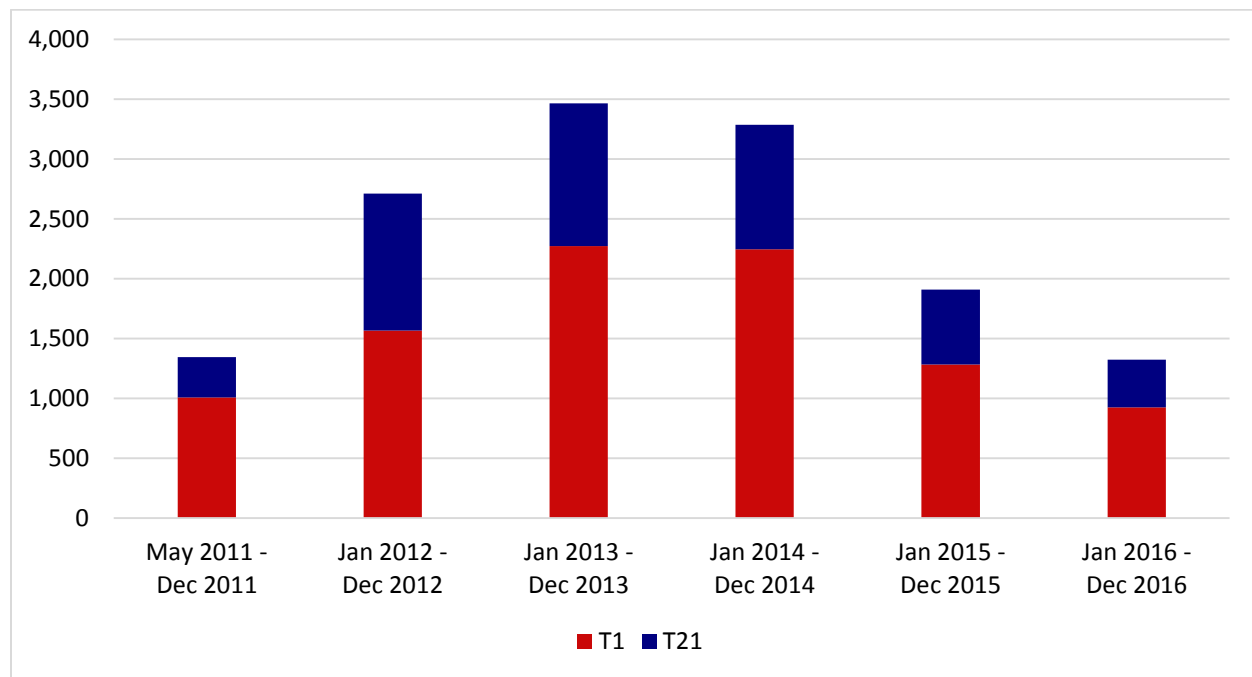
4.2. Caseloads

The design of WIC and EWIC services has important implications for the potential evolution of the caseload over the course of the demonstration. We discuss both services in turn, below.

The WIC caseload is determined by T1 and T21 requests for counseling. T1 and T21 subjects may choose to reach out to WIC staff for the first time at any point up until September 2017. The *2017 Stage 1 Interim Process, Participation, and Impact Report* describes the size of the WIC caseload through 2016. The caseload is defined as the number of beneficiaries who have ever contacted WIC, and is thus non-decreasing through September 2017 (the end of BOND participation for most subjects). By design, a beneficiary may contact a counselor one or more times. However, WIC counselors are not obligated to continue contact or to complete specific steps with WIC recipients. Therefore, the BOND Implementation team developed the term “active” to describe the workload facing counselors at a given point in time, recognizing that some beneficiaries do not continue to seek assistance.

Active cases are defined as beneficiaries who have had contact with WIC within the last year and are shown in Exhibit 4-1. The number of active WIC cases (both T1 and T21) within a calendar year more than doubled from 2011 to 2013, peaking at a high of nearly 3,500 across all BOND sites in 2013. The number then dropped slightly from 2013 to 2014, and more sharply to 2015, to about 45 percent of the 2013 peak. The number of active WIC cases continued to drop from 2015 to 2016, but the decline was less substantial. In 2016, the active caseload was 1,324, which was nearly identical to the caseload for the last eight months of 2011 (1,345)—the beginning of the demonstration.

⁴¹ The *2015 Stage 2 Interim Process, Participation, and Impact Report* describes this change (Gubits et al 2017).

Exhibit 4-1. Active WIC Cases by Year

Source: 2017 Stage 1 Interim Process, Participation, and Impact Report, Exhibit 4-1.

Note: The active WIC caseload is defined as the number of T1 and T21 beneficiaries for whom a counselor made a contact attempt or case note in the designated time period. The exhibit includes T21 subjects because T1 and T21 subjects combined make up the total WIC caseload, which is the focus of this subsection. Data from 2011 represent a partial year, as labeled.

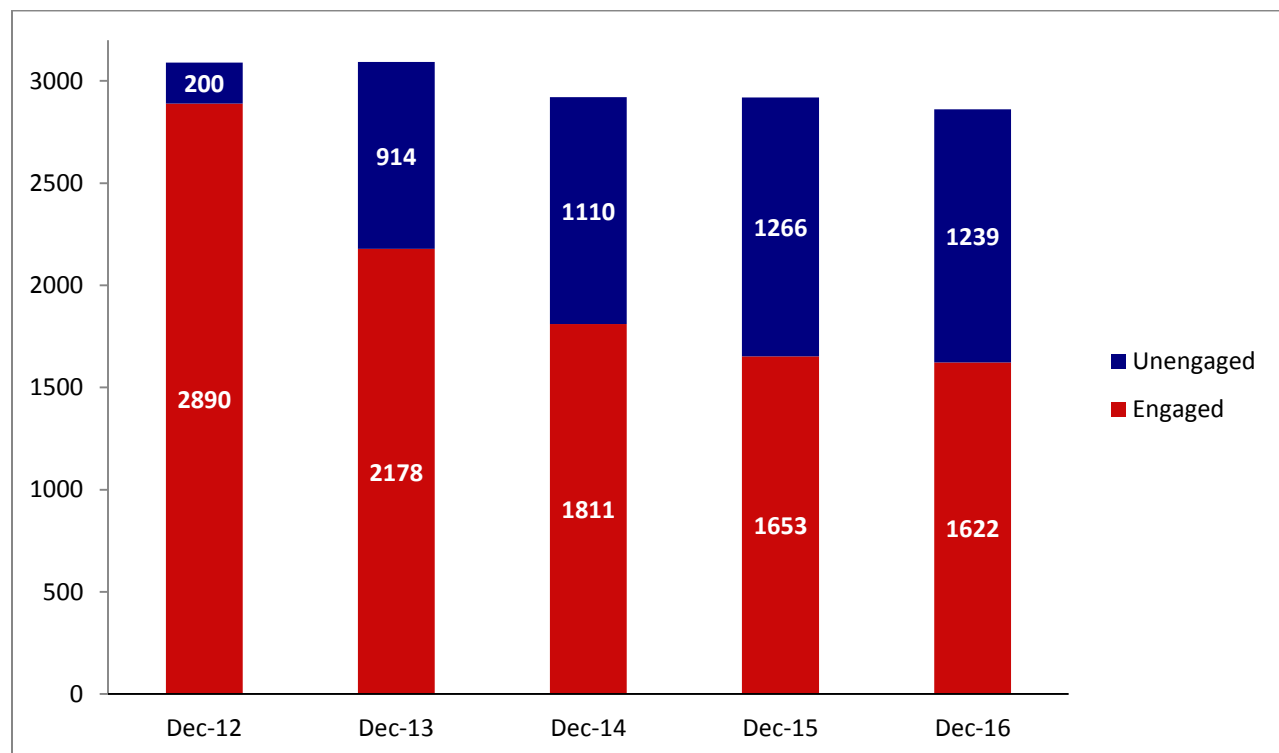
In contrast to the WIC caseload, the EWIC caseload was determined by the number of subjects randomly assigned to T22. As a result, the maximum EWIC caseload was fixed as of September 2012. As expected and shown in Exhibit 4-2, the EWIC caseload did not increase after Stage 2 enrollment ended in September 2012. While T21 subjects enter the WIC caseload when they contact a counselor for the first time, all T22 subjects are counted as part of the EWIC caseload from the first day of their enrollment in the study. A T22 subject is removed from the EWIC caseload only if the subject withdraws from BOND or dies during the study period. Thus, the EWIC caseload declined only slightly (7.4 percent) from September 2012 to December 2016.

While with WIC the Implementation Team infers inactivity by absence of contact, for EWIC activity is most often driven by counselors' outreach to beneficiaries. Therefore, instead of using the term "active" (as for WIC clients), the Implementation uses the term "(un)engaged" to describe T22 subjects. A T22 subject is engaged unless a counselor designates the beneficiary as unengaged because a beneficiary is incarcerated, asks not to be contacted, is not responsive to repeated contact attempts, or is not interested in employment at this time. The unengaged T22 subjects receive two letters per year reminding them that they are in BOND and providing them with contact information of EWIC staff. If an unengaged subject is found to need a work CDR or AEE, either a WIC or EWIC or centralized post-entitlement team member will work with the beneficiary to obtain the AEE, despite the "unengaged" status. So even if a beneficiary is designated as unengaged from EWIC he or she will receive assistance to submit an AEE if one is needed. Moreover, "unengaged" is not a permanent status: unengaged subjects can return to engaged status whenever they request to do so by reaching out to an EWIC counselor. For EWIC staff, the number

of engaged beneficiaries is the most accurate representation of the number of “active” clients, and all service benchmarks are defined for this group.

In addition to displaying the EWIC caseload, Exhibit 4-2 plots the number of engaged T22 subjects. The number of engaged T22 subjects declined from December 2014 (when we last reported engagement statistics) to December 2016 by 10.4 percent.

Exhibit 4-2. EWIC Caseloads Over Time



Source: BTS data as of March 15, 2017 and as reported in Gubits et al. 2017.

As illustrated in Exhibit 4-2, the share of T22 subjects classified as unengaged increased from 38 percent in December 2014 (when last reported in the *2015 Stage 2 Interim Process, Participation, and Impact Report*) to 43 percent in December 2016.⁴² Exhibit 4-3 displays the number of engaged EWIC cases at each BOND site. Although the share of engaged subjects decreased in all but one site, changes were particularly large in some sites. The number of engaged subjects in Arizona/Southern California, for example, decreased by 27.3 percent since December 2014, the same site that also saw the largest decrease during the 2014 calendar year (43.6 percent; as reported in Gubits et al. 2017). Exhibit 4-3 also displays the percentage of cases that are classified as engaged: there is wide variation across sites. The Implementation Team reports that unengagement rates vary across sites because of differences in site philosophy. Some EWIC providers are reluctant to categorize beneficiaries as unengaged even if they are

⁴² The share of T22 subjects classified as unengaged increased from 38 percent in December 2014 ($1110/2921 = 0.38$) to 43 percent in December 2015, staying steady at 43 percent in December 2016 ($1239/2861 = 0.43$).

unresponsive to contacts for several months. Other providers believe that if a beneficiary is unresponsive to contacts for an extensive period, the unresponsiveness indicates unwillingness to engage with EWIC.

The last column of Exhibit 4-3 shows the percentage of engaged T22 subjects who received counseling beyond information and referral services in 2016. It varies from 20 percent to 98 percent. One possible explanation for this variation is sites' varying definitions of "engaged", i.e. sites with a broader definition of "engagement" might have lower rates of counseling beyond information and referral. However, this explanation is not sufficient. Exhibit 4-3 shows sites with both high engagement rates and higher-than-typical rates of counseling beyond I&R, for example the DC Metro site. There are many other factors that could explain variation in counseling receipt across sites in the sixth year of the demonstration, including variation in local job markets. In earlier years of the demonstration when EWICs conducted more uniform outreach activities, counseling receipt was more uniform across sites. In the next section, we compare counseling receipt of T22s to counseling receipt of T21s.

Exhibit 4-3. Engaged EWIC Cases from December 2014 to December 2016.

	Engaged EWIC Cases			Change in Caseload from Dec-14 to Dec-16 (percentage)	Percent Engaged in Dec-16	Percent Engaged who Received Counseling Beyond IR in 2016
	Dec-14	Dec-15	Dec-16			
Alabama	104	115	111	6.7	40	31
Arizona/Southeastern California	110	82	80	-27.3	24	20
Colorado/Wyoming	192	174	171	-10.9	74	25
DC Metro	187	172	165	-11.8	71	77
Greater Detroit	216	220	216	0.0	83	54
Greater Houston	151	148	146	-3.3	60	98
Northern New England	203	157	156	-23.2	57	28
South Florida	250	225	221	-11.6	58	59
Western New York	221	198	197	-10.9	70	27
Wisconsin	177	162	159	-10.2	47	65
TOTAL	1,811	1,653	1,622	-10.4	57	50

Source: BTS data as of March 15, 2017 and as reported in Gubits et al. 2017.

4.3. Analysis of Counseling Receipt

The BOND Beneficiary Tracking System (BTS) contains records on the dates and services delivered to T21 and T22 subjects. This section compares counseling receipt of T21 and T22 subjects, but not C2 subjects because administrative data on WIPA participants are tracked outside of BOND. These analyses use the same impact analysis methods used for the main outcomes (i.e., benefits paid and earnings; see Chapter 2).⁴³ In brief, we conduct multivariate regression analysis to control for beneficiaries' baseline characteristics and apply sample weights to produce estimates that are nationally representative for beneficiaries who would volunteer for the offset.

4.3.1. Receipt of Work Incentives Counseling

As intended by BOND's design (Stapleton et al 2010), there are clear differences in the amount of counseling received by T21 and T22 subjects. Because subjects were randomly assigned, observed differences in post-randomization counseling can be attributed to differences in the WIC and EWIC models, including differences in outreach by counseling staff, caseload sizes, and service delivery instructions.

Exhibit 4-4 displays the percentage of subjects in each Stage 2 treatment group who received any work incentives counseling, including those who only received I&R and those who received counseling beyond I&R. By the end of 2016, 96 percent of T22 beneficiaries had received work incentives counseling since study enrollment, and 30 percent had received work incentives counseling in 2016. By contrast, 39 percent of T21 beneficiaries received work incentives counseling since study enrollment, and 2 percent received work incentives counseling in 2016. The large difference in the proportion of subjects receiving counseling is consistent with the design, due to the EWIC mandate to conduct initial and ongoing outreach to all T22 subjects. The estimated impacts of EWIC compared to WIC on counseling receipt are large and statistically significant in every time period. In the most recent calendar year, 2016, T22 subjects were 28 percentage points more likely to receive work incentives counseling than T21 beneficiaries. Since study enrollment, T22 subjects were 57 percentage points more likely to receive work incentives counseling than T21 subjects.

⁴³ The sample in this chapter includes subjects who are excluded from the impact study. Unlike the impact analysis in Chapters 9 and 10, analyses in this chapter include beneficiaries who are related to other BOND subjects; for example, a primary and a DAC or two DACs with the same primary. Chapters 4, 5, and 6 are process and participation studies. There is no compelling reason to exclude these subjects from the process and participation studies.

Exhibit 4-4. Receipt of Work Incentives Counseling (through December 2016) by T21 and T22 Subjects

Time Period	Percentage of Subjects Who Received Any Work Incentives Counseling in Time Period		
	Offset and EWIC (T22)	Offset and WIC (T21)	Estimated Impact on Counseling Receipt (T22 vs T21)
Enrollment - December 2016(Full time Period)	95.9	38.8	57.1*** (3.3)
Random assignment - December 2012	89.6	28.2	61.4*** (3.6)
January 2013 - December 2013	79.6	14.2	65.4*** (4.3)
January 2014 - December 2014	61.5	8.8	52.8*** (6.5)
January 2015 - December 2015	40.0	3.9	36.0*** (6.5)
January 2016 - December 2016	30.1	2.0	28.0*** (6.5)

Source: Analysis of BTS records, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 4,936 and T22 = 3,089.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom.

For subgroups defined by baseline employment status, the *2015 Stage 2 Interim Process, Participation, and Impact Analysis Report* showed that for T22s, counseling receipt from random assignment through 2014 was roughly similar (Gubits et al. 2017). For T21 subjects, beneficiaries who were employed or looking for work at baseline were more likely to have received I&R and counseling beyond I&R than beneficiaries who were not working and not looking for work at baseline. This relationship between counseling and baseline employment status for T21 subjects is expected because T21 subjects who are working or looking for work are more likely to be affected by the offset and thus seek counseling. For both T21 and T22 subjects, beneficiaries with greater workforce attachment were more likely to have received a BS&A than their respective counterparts with less attachment. This relationship between BS&A receipt and baseline employment status was expected because a BS&A is more relevant for beneficiaries who are employed or looking for work.

Consistent with patterns in previous years, Exhibit 4-5 shows that counseling receipt in 2015 and 2016 was highest among subjects who were employed at baseline compared to subjects not employed but looking for work at baseline. Both of these subgroups had much high rates of counseling receipt than subjects not employed and not looking for work at baseline. These patterns hold true for both T22 and T21.

Exhibit 4-5. EWIC and WIC Rates of Counseling Receipt (Four and Five Years After Random Assignment) by Baseline Employment Status

	Working for Pay at Baseline	Not Working But Looking for Work at Baseline	Neither Working Nor Looking for Work at Baseline
T22			
Percentage who received any counseling	58.2	50.7***	41.0†††
Percentage who received counseling beyond I&R	37.3	49.1***	39.3†††
Percentage who received a BS&A	9.3	4.9***	3.0†††
Percentage who received a referral	12.1	12.5*	12.3
T21			
Percentage who received any counseling	7.9	6.4***	3.8†††
Percentage who received counseling beyond I&R	7.0	5.2***	3.3†††
Percentage who received a BS&A	3.3	2.4***	1.3†††
Percentage who received a referral	0.3	0.2*	0.1†††

Source: Analysis of BTS records, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 1,229, 1,079, and 2,589 for subjects working for pay at baseline, subjects looking for work at baseline, and subjects neither working nor looking for work at baseline respectively. T22 = 720, 701, and 1,645 for subjects working for pay at baseline, subjects looking for work at baseline, and subjects neither working nor looking for work at baseline respectively.

*/**/*** Group that was not working and looking for work at baseline is significantly different from those working at baseline at the .10/.05/.01 levels, respectively, using a Chi-square test.

†/††/††† Group that was neither working nor looking for work at baseline is significantly different from those working or looking for work at baseline at the .10/.05/.01 levels, respectively, using a Chi-square test.

4.3.2. Types of Work Incentives Counseling

Among those who received work incentives counseling, receipt of services beyond I&R was somewhat greater for T22 subjects than for T21 subjects (Exhibits 4-6 and 4-7). Unlike WIC providers, EWIC providers are expected to meet counseling benchmarks. For example, EWIC providers are expected to conduct barriers and needs assessments for 90 percent of T22 subjects (Derr et al. 2013). Of the T21 subjects who received work incentives counseling through December 2016, 84 percent received counseling that was more extensive than I&R (Exhibit 4-6). Of the T22 subjects who received work incentives counseling through December 2016, 99 percent received more counseling that was more extensive than I&R (Exhibit 4-7). Moreover, the counseling “beyond information and retrieval” was presumably more intensive for T22 subjects than for T21 owing to the use of EWIC-specific tools. Column (4) of Exhibit 4-7 examines the use of EWIC-specific tools or assessments that were available only to T22 subjects. EWIC services for almost all T22 subjects who received work incentives counseling beyond an I&R include one or more of the these tools or assessments.

Exhibit 4-6. WIC Services for T21 Subjects by Site (through December 2016)

BOND Site	Percent of T21s Receiving WIC (1)	Of T21s Receiving WIC, Percent Only Information and Referral (2)	Of T21s Receiving WIC, percent with Additional WIC Services (3)
Alabama	23.9	20.0	80.0
Arizona/SE California	37.1	18.5	81.5
Colorado/Wyoming	27.9	5.5	94.5
DC Metro	30.0	28.2	71.8
Greater Detroit	50.5	11.2	88.8
Greater Houston	35.4	2.7	97.3
Northern New England	43.0	17.1	82.9
South Florida	44.8	19.7	80.3
Western New York	44.7	23.6	76.4
Wisconsin	40.2	11.2	88.8
T21 Total	38.2	16.0	84.0

Source: Analysis of BTS records. Sample size = 4,936. Columns (2) and (3) sum to 100 percent of those receiving WIC.

Exhibit 4-7. EWIC Services for T22 Subjects by Site (through December 2016)

BOND Site	Percent of T22s receiving EWIC (1)	Of T22s Receiving EWIC, Percent Only Information and Referral (2)	Of T22s Receiving EWIC, Percent with Additional EWIC Services (3)	Of T22s Receiving EWIC, Percent with Use of One or More EWIC-Specific Tools or Assessments (4)
Alabama	95.8	0.7	99.3	99.0
Arizona/SE California	91.9	0.3	99.7	98.3
Colorado/Wyoming	100.0	0.0	100.0	100.0
DC Metro	96.7	0.0	100.0	100.0
Greater Detroit	98.6	1.1	98.9	98.2
Greater Houston	99.2	0.0	100.0	100.0
Northern New England	96.9	2.1	97.9	97.9
South Florida	88.4	1.1	98.9	96.4
Western New York	98.6	0.3	99.7	99.3
Wisconsin	95.0	1.2	98.8	98.3
T21 Total	95.6	0.7	99.3	98.6

Source: Analysis of BTS records. Sample size = 3,089. Columns (2) and (3) sum to 100 percent of those receiving EWIC.

EWIC counselors delivered the majority of their services between participant enrollment and December 2012. Each year thereafter has seen a substantial decrease in the level of each EWIC counseling activity (Exhibit 4-8). This decrease is consistent with program design. Some activities are intended to be recurring and therefore continue at a higher frequency (such as referrals) than the one-time activities (such as barriers and needs assessment). Several of the EWIC-specific activities are intended to be one-time services, although counselors and beneficiaries may revisit them if personal circumstances change. For example, a Benefits Summary and Analysis (BS&A) may be revised when earnings change because the BS&A summarizes current benefits and provides case-specific information on how the offset and other work incentives would affect the beneficiary's SSDI and other possible benefits, such as Supplemental Nutrition Assistance Program (SNAP) benefits and health care coverage. In 2016, the most common service provided was service coordination among those with documented need (received by 20 percent of T22 subjects).

Exhibit 4-8. Receipt of EWIC Services by T22 Subjects by Calendar Year

	Percent of T22 subjects who received service					
	Enrollment - Dec 2012	Jan. - Dec. 2013	Jan. - Dec. 2014	Jan. - Dec. 2015	Jan. - Dec. 2016	Enrollment - Dec 2016
Recurring Services						
Any Contact	99.6	94.4	76.2	68.1	62.0	99.9
Service coordination among those with documented need	81.0	67.9	43.6	30.4	19.9	91.6
Referral	46.5	27.0	12.1	6.8	5.1	63.7
One-time services						
Barriers and needs assessment	77.7	25.2	11.2	7.3	7.6	88.4
Skills assessment	67.8	28.1	9.5	4.7	5.6	77.4
Benefits Summary and Analysis (BS&A)	34.1	19.3	3.5	1.3	2.5	54.0
WIP	33.5	17.4	2.1	2.1	0.8	52.9
Employment Support Plans (ESP)	60.9	22.4	3.3	4.2	3.5	77.2
I&R assessment	82.6	10.9	3.3	2.7	2.2	90.4
Baseline assessment	75.4	10.3	0.6	0.5	0.2	87.0

Source: Analysis of BTS records. Sample size 3089

Unlike the general trend of decreasing service receipt, 2016 saw a slight increase in the proportion of T22 subjects who had a barriers and needs assessment, skills assessment, or BS&A. During focus groups in 2016, EWIC counselors reported that some beneficiaries engaged for the first time or re-engaged after multiple years without contact because their health improved; they recently started work; or, they received a BPP end date notice or other letter from SSA. In some cases, the “other” letters were an initial notice of offset use and overpayments. These notices were sent in 2016 due to extra administrative efforts to reduce a back-log of Continuing Disability Reviews (see Chapter 7). Others received a letter about the end of the BOND Participation Period (BPP). As described in the *2017 Stage 1 Interim Process, Participation, and Impact Report*, beneficiaries approaching the end of BPP receive a letter 3 months in advance of the end of the BPP, describing the upcoming change from benefit offset rules to current-law

policies. EWIC counselors were instructed to assist beneficiaries to prepare for the upcoming transition to current law by being available to answer the beneficiaries' questions, and offering to do a barriers and needs assessment, skills assessment, or BS&A, if relevant.

The *2015 Stage 2 Interim Process, Participation, and Impact Report* showed that from random assignment through 2014, there was strong evidence that assignment to T22 resulted in higher rates of service receipt than did assignment to T21 (Gubits et al. 2017). In this report, we estimate the impact of assignment to T22 compared to assignment to T21 on the receipt of specific services in the fourth and fifth year of the demonstration: 2015 and 2016. Exhibit 4-9 shows that assignment to T22 had a substantial impact on the receipt of counseling and counseling beyond I&R—a 42 percentage point increase in both cases. There is also evidence that assignment to T22 also increased the likelihood of receiving a referral.

Exhibit 4-9. EWIC Vs. WIC Impact Estimates (T22 Vs. T21) on Counseling Receipt in 2015 and 2016

	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome with Offset and WIC (T21) (2)	Estimated Impact on Counseling Receipt (T22 vs T21) (3)
All Subjects			
Percentage who received any counseling	47.3	5.4	41.9*** (7.2)
Percentage who received counseling beyond I&R	45.8	4.7	41.1*** (6.6)
Percentage who received a BS&A	5.0	2.1	3.0 (2.3)
Percentage who received a referral	12.1	0.2	12.0*** (3.0)

Source: Analysis of BTS records, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 4,936 and T22 = 3,089.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom.

Exhibit 4-10 considers counseling receipt in 2015 and 2016 for subgroups based on employment status at baseline. For counseling receipt and counseling receipt beyond I&R, the impact of EWIC compared to WIC was higher for beneficiaries employed or looking for work at baseline, compared to beneficiaries not employed or not working at baseline.

Exhibit 4-10. EWIC vs WIC Impact Estimates (T22 vs T21) on Counseling Receipt (Four and Five Years after Random Assignment) by Baseline Employment Status

Outcome	Employed or Looking for Work			Not Employed or Looking for Work			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome with Offset and WIC (T21) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome with Offset and WIC (T21) (5)	Impact Estimate (6)	
Percentage who received any counseling	54.35	7.18	47.18*** (7.43)	41.00	3.82	37.18*** (7.26)	10.00††† (2.62)
Percentage who received counseling beyond I&R	53.20	6.16	47.04*** (7.06)	39.15	3.28	35.87*** (6.51)	11.17††† (2.43)
Percentage who received a BS&A	7.25	2.90	4.35 (3.52)	3.03	1.28	1.75 (1.29)	2.60 (2.28)
Percentage who received a referral	12.24	0.23	12.00*** (2.82)	12.07	0.08	11.99** (3.72)	0.01 (2.56)

Source: Analysis of BTS records with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Employed or Looking for Work T22 = 1,421, Employed or Looking for Work T21 = 2,308, Not Employed or Looking for Work T22 = 1,668, Not Employed or Looking for Work T21 = 2,628.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

4.4. Conclusion

Evidence presented in this chapter is consistent with earlier findings that offset-plus-EWIC group is receiving more counseling service than the offset-plus-WIC group, as intended by BOND's design. Based on demonstration administrative data, by December 2016, 96 percent of subjects assigned to the offset plus EWIC had received work incentives counseling compared to 39 percent of subjects assigned to the offset plus WIC. Even in 2015 and 2016, when delivery of counseling services was expected to be much lower, 47 percent of the offset-plus-EWIC group received work incentives counseling compared to 5 percent of the offset-plus-WIC.

This chapter presents evidence that EWIC increased beneficiary receipt of work incentives counseling. That counseling is presumably intended to lead to employment or higher earnings, including use of vocational rehabilitation service, a work or job assessment, receipt of assistance in finding a job, enrollment in school or classes, and receipt of advice about modifying a job or work place. The next chapter examines whether the impacts on increased counseling service receipt for EWIC versus WIC coincide with impacts on subjects' understanding of the offset.

5. Knowledge of How Earnings Affect Benefits among Stage 2 Subjects

This chapter presents information about how subjects in the Stage 2 treatment and control groups believe their earnings affect their benefits and benefit eligibility. The findings are based on responses to the 36-month Survey of Stage 2 beneficiaries.⁴⁴ The chapter begins with a review of the importance of understanding the offset in the BOND logic model.

5.1. Role of Understanding the Earnings Rules in the BOND Logic Model

The BOND Final Design Report (Stapleton et al. 2010) states two objectives of the demonstration:

- Establish and test a cash benefit system with better work incentives, to improve financial returns of working.
- Develop and test work incentive counseling systems to improve beneficiary understanding of work incentives and ability to use them.

The BOND logic model posits that the offer of the benefit offset may eventually lead to increased earnings, reduced benefits, and other positive long-term impacts. Implicit in the logic of BOND is that beneficiaries need to understand the benefit offset offer in order to change their behavior in response to this new work incentive. While there is much to understand about how the offset works (see Chapter 7 for an explanation of the process of using the offset), it seems reasonable that, at a minimum, treatment subjects need to grasp how they gain from the offer—that they will not lose all their SSDI benefits when earning above the SGA level—in order for them to make a change in their employment behavior in response to the offer. The model also assumes that current law subjects, represented by C2, have a basic understanding of the rules under current law. Difference in treatment and control outcomes presumably represent behavioral differences due to differences in the two groups understanding of the rules. Hence, if either group has a poor understanding of its own rules, the impacts observed may be substantially different than if both groups understood the rules well.

For a treatment subject, full understanding of the offset involves understanding how his or her combined income from benefits and earnings will vary at different levels of earnings. This is a complex relationship, relatively difficult to absorb from either a graphical or narrative presentation. During the development of BOND's design, SSA and the design team were concerned that study subjects would have difficulty achieving this full understanding, reflecting reports about such difficulty in the Benefit Offset Pilot Demonstration. It was thought that additional work incentives counseling might be necessary to facilitate the use of the offset offer. To address this perceived possible need for additional work incentives counseling, the enhanced work incentives counseling (EWIC) component was incorporated into the Stage 2 test of the offset as the T22 treatment condition. Stapleton et al. (2010) states that: "EWIC is expected to increase the impact of the offset by improving beneficiary understanding of how higher earnings will affect SSDI and other benefits."

⁴⁴ The overall response rate to the interim survey was 84 percent. The response rates for the T21 and T22 groups (85.4 percent for T21 and 85.5 percent for T22) were somewhat higher than for the C2 group (81.6 percent).

To allow individuals to provide informed consent, the implementation team explained the benefit offset rules and how they differ from current law to all Stage 2 subjects at the time of demonstration entry (prior to random assignment). Presumably, those that volunteered had some understanding which spurred them on to enroll. After enrollment, work incentives counselors were available to explain the offset and other services provided by BOND to treatment subjects. For control subjects, WIPA services and other services in the community were available to explain the current law rules about how earnings affect benefits.⁴⁵

To directly measure understanding of rules, the Stage 2 Baseline, 12-month, and 36-Month Surveys asked all subjects about how their benefits and benefit eligibility are affected by earning above the SGA limit. Their 12-month and 36-Month Survey responses allow us to address the important questions of “How well do study subjects in each group understand the basics of how their earnings will affect their benefits as of 12/36 months after random assignment?”, “Does EWIC improve understanding of the offset?” and “Has understanding or the effect of EWIC changed between 12 and 36 months?” The following sections describe the survey questions and the responses of the Stage 2 subjects.

5.2. How Stage 2 Subjects Think SGA-Level Earnings Would Affect Benefits at Three Years after Random Assignment

In the baseline, 12-month, and 36-Month Surveys, all Stage 2 subjects were asked about how their monthly disability cash benefits would change if they were to earn more than the SGA limit after the Trial Work Period (TWP). The evaluation team expected that baseline responses to these questions would be no different across assignment groups because the baseline survey was administered prior to random assignment. In contrast, the evaluation team expected that the 12-month and 36-month follow-up responses of the treatment group members would be sharply different from those of the control group members because they are subject to different rules (i.e., offset rules versus current-law rules). It was also expected that the greater amount of counseling in EWIC would lead to more accurate responses for T22 beneficiaries compared to T21 beneficiaries.

The questions on the survey were:

Introduction: “Under the current rules of the Social Security Disability Insurance program, disability beneficiaries are allowed to earn up to \$1010 per month without a change to your benefits. This limit is called the level of Substantial Gainful Activity or SGA and Social Security increases this limit each year to adjust for inflation. When disability beneficiaries go to work while receiving disability benefits, SSA ignores the cap of \$1,010 for up to 9 months, no matter how much a beneficiary earns from work.
(*The SGA for a blind beneficiary is \$1690.*)”⁴⁶

⁴⁵ WIPA services were unavailable during the period from July 2012 to July 2013. During this period, call center staff at the Ticket to Work Help Line provided basic information and referral services to C2 subjects. See Gubits et al. 2017 for more details.

⁴⁶ The SGA level stated in the survey item was updated for each survey wave.

“We’d like to know which of the following things you think would happen to your monthly disability cash benefits if you were to work and earn more than the SGA limit of \$1010 per month after those initial months have passed. ([IF NEEDED:] The SGA for a blind beneficiary is \$1690.) Thinking about the amount of your disability cash benefits, if you earned more than \$1010 after those initial months...”

- Do you think your benefits would stay the same?
- Do you think you would lose your monthly benefits completely?
- Do you think your benefits would be reduced but that you would be able to keep receiving some of your monthly disability benefits?
- How do you think those benefits would be reduced?

From their responses to these questions, the evaluation team classified subjects as having one of these five perceptions.

- Benefits would stay the same
- Benefits would be reduced but not to \$0
- Benefits would be reduced to \$0
- Benefits would neither stay same, nor be reduced
- Don’t know whether benefits would change

If subjects stated that they thought that their benefits would be reduced but not to \$0, they were further classified by their perception of the reduction amount:

- By full amount of benefits (equivalent to “reduced to \$0”)⁴⁷
- By half, \$1 reduction for \$2 in earnings
- By other amount
- Don’t know how much reduction

The *2015 Stage 2 Interim Process, Participation, and Impact Report* found, as expected, that responses at baseline were roughly equivalent across the three assignment groups. About 70 percent of subjects thought benefits would be suspended as a result of above-SGA earnings after the TWP (correct answer for current law), and 22 percent thought partial benefits would be paid (correct answer for the offset rules). Both of these proportions may have been affected by the fact that subjects had just heard descriptions of current-law and offset rules during informed consent. The report also found differences in responses between Stage 2 treatment and control subjects at the time of the 12-Month Survey, as expected.

⁴⁷ This category is for the few subjects who gave the inconsistent answers that they did not think they would lose their benefits completely but that they thought their benefits would be reduced by the full amount of their benefit.

However, at 12 months, only about half of the treatment subjects demonstrated an accurate understanding of how the benefit offset works. The understanding of how higher earnings affect SSDI was not substantially more accurate for T22 subjects than for T21 subjects despite the expectation that EWIC would improve this outcome.⁴⁸ The responses of the control group were less consistent with current law than at baseline: 52 percent thought benefits would be suspended and 40 percent thought partial benefits would be paid. As shown in this chapter, the basic pattern of responses to the 36-Month Survey is very similar to that found earlier in the 12-Month Survey.

As at 12 months, the evaluation team expected that at the three-year mark the responses of treatment subjects in the T21 and T22 groups would more often be consistent with the offset rules than responses of the C2 subjects. The expected responses for treatment subjects who understand the offset are that “Benefits would be reduced but not to \$0,” and that benefits would be reduced “by half, \$1 reduction for \$2 in earnings.” The evaluation team further expected that if there was a difference in the understanding of what would happen to benefits after the TWP, that the offset-plus-EWIC subjects of T22 would be better informed than the offset-plus-WIC subjects of T21 because of the greater contact with counseling staff for those in T22. Finally, it was expected that C2 subjects would provide the response consistent with current law, that “benefits would be reduced to \$0.”

Exhibit 5-1 shows the 36-Month Survey responses of all Stage 2 subjects. We find that there are some differences in response pattern between treatment and control subjects, but that the differences are not large and substantial minorities in each group provided answers that are incorrect for their group’s earnings rules. About half of the treatment subjects gave the correct response that benefits would be reduced but not to \$0, but another roughly 40 percent of treatment subjects gave the incorrect response that benefits would be reduced to \$0. Likewise, about half of control subjects (54 percent) gave the correct response that benefits would be reduced to \$0, while another 37 percent gave the incorrect response that benefits would be reduced but not to \$0. Consistent with expectations, a greater proportion of the T22 group compared to the T21 group gave the correct response that benefits would be reduced but not to \$0. The difference was 4 percentage points (52 percent compared to 48 percent).

⁴⁸ The correct answer to the survey question is that benefits would be reduced by half (\$1 reduction for \$2 earnings). Compared to WIC, EWIC increased the proportion of subjects who gave the correct answer by four percentage points, from 40 percent to 44 percent. Although this difference was statistically significant, it is small.

Exhibit 5-1. Knowledge of How Earnings Affect Calculation of Benefits and Future Benefit Eligibility and How Stage 2 Subjects Describe BOND

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
All Stage 2 Subjects (N = 9,830)						
If earnings above SGA-level beyond TWP months, percent of subjects who think:						
Benefits would stay the same	1.8	2.4	1.9	-0.1 (0.4)	0.4 (0.6)	0.6 (0.5)
Benefits would be reduced but not to \$0	48.0	51.9	36.7	11.3*** (1.7)	15.2*** (1.8)	3.9** (1.5)
Benefits would be reduced to \$0	43.2	39.8	53.9	-10.6*** (1.8)	-14.1*** (1.8)	-3.5** (1.5)
Benefits would neither stay same, nor be reduced	1.6	0.9	1.3	0.3 (0.3)	-0.3 (0.3)	-0.6* (0.3)
Don't know whether benefits would change	5.4	5.0	6.3	-0.8 (0.7)	-1.3 (0.7)	-0.4 (0.7)
Of those who think reduced but not to \$0, percent of subjects who think reduction amount would be:^a						
By full amount of benefit (equivalent to "reduced to \$0")	0.6	0.5	0.8	-0.2 (0.2)	-0.2 (0.3)	-0.1 (0.2)
By half, \$1 reduction for \$2 in earnings	36.6	40.1	23.3	13.4*** (1.7)	16.8*** (2.2)	3.5 (2.0)
By other amount	6.9	7.3	7.7	-0.9 (1.0)	-0.4 (0.9)	0.5 (1.0)
Don't know how much reduction	3.9	3.9	4.8	-0.9 (0.6)	-0.9 (0.6)	0.0 (0.6)

Source: Analysis of BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses. Unlike the outcomes analysis in Chapters 9 and 10, analyses in this chapter include 146 respondents who are related to other BOND subjects; for example, a primary and a DAC or two DACs with the same primary randomly assigned to a different treatment group.

^a The four rows of this panel sum to the percent who think benefits would be reduced but not to \$0.

Unweighted sample sizes: T21 = 3,785, T22 = 2,384, C2 = 3,661

Impact estimates are regression-adjusted for baseline characteristics. Weekly equivalent of BYA = (7/365) × BYA.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

The second panel of Exhibit 5-1 shows the percentages of the assignment groups with different responses about the benefit reduction amount. The wording of the survey questions leaves some ambiguity about what would be the correct response for those beneficiaries subject to the offset rules. Among the T21 group, 44 percent gave one of the two possible correct responses (that benefits would be reduced by half or by some other amount⁴⁹). The proportion giving either of these two correct responses in the T22 group

⁴⁹ The wording of the survey question said that benefits would be reduced "by half the amount of your benefits, that is a \$1 reduction in benefits for every \$2 you earn for work." This is technically incorrect, as offset rules

is statistically significantly higher than in the T21 group (at the 0.05 level, 47 percent vs. 44 percent).⁵⁰ In the control group, 23 percent of subjects thought that their benefits would be reduced by half, implying that they mistakenly believed they were eligible for the offset.

How might nearly a quarter of C2 beneficiaries have given a response consistent with offset rules rather than the current-law rules they are subject to? It seems plausible that these C2 beneficiaries were influenced by their contact with the demonstration, and might have given different responses had they never directly encountered BOND. At the time of their recruitment into the study, these C2 beneficiaries were provided an explanation of how the \$1 for \$2 offset works. The 36-Month Survey mentioned the benefit offset twice prior to these questions about benefit rules. The information provided during study recruitment and the mentions of the offset in the survey may have created confusion about what the benefit rules are for those C2 beneficiaries who gave incorrect responses.

Overall, Exhibit 5-1 suggests that about half of the treatment beneficiaries did not demonstrate an understanding of what would happen to benefits if they earned above the SGA-level after the TWP at the time of the survey. Only about half of each assignment group gave correct responses for how their benefits would be calculated and a little less than a quarter of C2 subjects mistakenly thought their benefits would only partially be reduced. There is some evidence that EWIC improves understanding of how higher earnings affect benefits relative to WIC. However, this difference (3.9 percentage points) is small relative to the 41 percentage point gap in receipt of benefit counseling beyond information and referral shown in Chapter 4 (Exhibit 4-9). This is the same picture that emerged at the 12-month follow-up point. All proportions shown in Exhibit 5-1 are within 5 percentage points of the analogous 12-month proportions.

Exhibit 4-4 in Chapter 4 shows that a much higher share of the T22 group received benefits counseling than the T21 group in the calendar years between the 12-month and 36-Month Surveys (62 percentage points higher in 2013, 53 percentage points higher in 2014, and 36 percentage points higher in 2015). Despite this higher receipt of benefits counseling between surveys, the EWIC versus WIC impacts are substantively unchanged at the later survey. All impacts of EWIC compared to WIC at 36 months are within 4 percentage points of the analogous impacts at 12 months.

Exhibit 5-2 examines whether understanding of how benefits would be affected by high earnings differs according to baseline employment. The same outcomes as above are presented separately for the three subgroups of (a) working for pay at baseline, (b) looking for work at baseline, and (c) not working or looking for work at baseline. We expect that those working at baseline would be most cognizant of the offset rules given that these rules are more likely to make a material difference in their total income in the near term than they are for those not working at baseline.

reduce benefits \$1 for every \$2 a beneficiary earns *above the BYA amount*, rather than for the entire earnings amount.

⁵⁰ The estimated standard error for this test is 1.53 percent. See Appendix A of Gubits et al. 2017 for discussion of instability in standard error estimates.

Perhaps the most notable feature of the results in Exhibit 5-2 for the T21 and T22 groups is the small amount of substantive variation across these subgroups. In addition, those working at baseline are not the most cognizant of the offset rules. A lack of substantive variation and no better knowledge for those working at baseline were also found at one year after random assignment. The proportions of treatment subjects giving responses consistent with the offset rules are very similar to the analogous proportions at 12 months.

Exhibit 5-2. Three-Year Follow-up: How Stage 2 Subjects Think Benefits Would Change as a Result of Earnings above SGA, by Baseline Employment Status

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Working for Pay at Baseline (N = 2,438)						
If earnings above SGA-level beyond TWP months, percent of subjects who think:						
Benefits would stay the same	1.7	2.0	1.1	0.5 (0.7)	0.9 (1.0)	0.4 (0.9)
Benefits would be reduced but not to \$0	46.5	51.3	29.6	16.9*** (3.7)	21.7*** (3.2)	4.8 (3.2)
Benefits would be reduced to \$0	44.9	41.7	62.4	-17.5*** (4.5)	-20.8*** (3.2)	-3.2 (3.2)
Benefits would neither stay same, nor be reduced	1.9	1.2	1.6	0.3 (0.7)	-0.4 (0.8)	-0.7 (0.6)
Don't know whether benefits would change	5.1	3.8	5.3	-0.2 (1.3)	-1.5 (1.4)	-1.3 (0.9)
Of those who think reduced but not to \$0, percent of subjects who think reduction amount would be:^a						
By full amount of benefit (equivalent to "reduced to \$0")	0.4	0.6	0.8	-0.4 (0.4)	-0.2 (0.5)	0.2 (0.4)
By half, \$1 reduction for \$2 in earnings	36.5	40.6	18.3	18.2*** (3.7)	22.3*** (3.3)	4.0* (2.1)
By other amount	6.2	5.9	5.2	1.0 (1.3)	0.8 (1.5)	-0.2 (1.0)
Don't know how much reduction	3.4	4.2	5.1	-1.7 (1.1)	-0.9 (1.2)	0.8 (1.0)
Looking for Work at Baseline (N = 2,162)						
If earnings above SGA-level beyond TWP months, percent of subjects who think:						
Benefits would stay the same	0.7	1.4	1.6	-0.9 (0.6)	-0.2 (0.7)	0.7 (0.9)
Benefits would be reduced but not to \$0	47.8	49.8	35.4	12.4*** (3.0)	14.4*** (3.6)	2.0 (3.5)
Benefits would be reduced to \$0	45.9	42.5	54.6	-8.7** (3.1)	-12.1*** (3.6)	-3.4 (3.1)
Benefits would neither stay same, nor be reduced	1.7	0.4	2.0	-0.3 (0.9)	-1.5* (0.7)	-1.3** (0.5)
Don't know whether benefits would change	3.8	5.8	6.3	-2.5* (1.3)	-0.5 (2.1)	2.0 (2.1)

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Of those who think reduced but not to \$0, percent of subjects who think reduction amount would be:^a						
By full amount of benefit (equivalent to "reduced to \$0")	1.1	0.8	0.8	0.3 (0.6)	-0.0 (0.5)	-0.3 (0.2)
By half, \$1 reduction for \$2 in earnings	37.6	38.8	23.9	13.7*** (3.1)	15.0*** (3.6)	1.3 (3.4)
By other amount	5.3	7.0	7.0	-1.7 (1.3)	0.1 (1.6)	1.8 (1.3)
Don't know how much reduction	3.9	2.9	3.8	0.1 (1.1)	-0.9 (1.1)	-1.0 (1.1)
Not Working or Looking for Work at Baseline (N = 5,165)						
If earnings above SGA-level beyond TWP months, percent of subjects who think:						
Benefits would stay the same	2.3	3.0	2.4	-0.1 (0.6)	0.5 (0.9)	0.6 (1.0)
Benefits would be reduced but not to \$0	48.9	53.1	40.6	8.2*** (2.0)	12.5*** (2.1)	4.2** (1.5)
Benefits would be reduced to \$0	41.3	37.7	49.4	-8.1*** (1.9)	-11.7*** (2.1)	-3.6* (1.7)
Benefits would neither stay same, nor be reduced	1.2	1.0	0.8	0.4 (0.4)	0.2 (0.4)	-0.2 (0.3)
Don't know whether benefits would change	6.3	5.2	6.7	-0.4 (0.9)	-1.5 (1.0)	-1.1 (0.8)
Of those who think reduced but not to \$0, percent of subjects who think reduction amount would be:^a						
By full amount of benefit (equivalent to "reduced to \$0")	0.5	0.4	0.8	-0.2 (0.3)	-0.3 (0.4)	-0.1 (0.2)
By half, \$1 reduction for \$2 in earnings	36.5	40.3	25.5	11.0*** (1.7)	14.8*** (2.2)	3.8 (2.3)
By other amount	7.8	8.2	9.2	-1.4 (1.8)	-1.0 (1.3)	0.4 (1.7)
Don't know how much reduction	4.0	4.2	5.1	-1.0 (0.8)	-0.9 (0.9)	0.2 (0.6)

Source: BOND Stage 2 36-Month Interim Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

^a The four rows of this panel sum to the percent who think benefits would be reduced but not to \$0.

Unweighted sample sizes: Working for pay at baseline: T21 = 975, T22 = 563, C2 = 900. Looking for work at baseline: T21 = 795, T22 = 561, C2 = 806. Not working or looking for work at baseline: T21 = 1,985, T22 = 1,247, C2 = 1,933.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Impact estimates are regression-adjusted for baseline characteristics. Weekly equivalent of BYA = (7/365) × BYA.

For the C2 group, we expect better awareness of current-law rules among those who will be affected by these rules. Therefore, we expect subjects with more labor market activity to be more likely to provide the correct response that benefits would be reduced to \$0. This is, in fact, what we find. Those control subjects who are working for pay at baseline are most likely to think that benefits will be completely suspended as a result of earning over the SGA-level after the TWP. Of the C2 subjects who were working for pay at baseline, 62 percent gave correct responses that their benefits would be cut to \$0. This proportion declines to 55 percent for those who were looking for work at baseline and to 49 percent for those neither working nor looking for work at baseline. Although those working at baseline are the most knowledgeable on average among the three subgroups, almost a fifth (18 percent) of this subgroup gave a response consistent with offset rules, rather than current-law rules. This pattern of responses (proportions with correct responses in subgroups, positive correlation between baseline labor market activity and correct response, and proportion of those working at baseline who gave responses consistent with current law) by C2 subjects is very similar to the findings at one year after random assignment.

Additional Analysis

Given the relatively low awareness of offset rules among those most likely to be affected by these rules in the near term, we examined treatment subjects among three other subgroups where we expected better understanding of offset rules:

- *Those with a bachelor's degree or higher at baseline*, representing 18 percent of the sample;
- *Those who are working at the time of the 36-month survey*, representing 28 percent of the sample; and
- *Those who were working 30 hours or more per week at the time of the survey*, representing 9 percent of the sample.

Beneficiaries in these subgroups were not more likely to have a correct understanding of the rules that applied to them than beneficiaries in the opposite subgroups. Compared to beneficiaries not working at baseline, EWIC had a more positive impact than WIC on improving understanding, but the differential impact is small (an impact of 6 percentage points, compared to 4 percentage points). In the second and third subgroups, where current employment should provide ample reason to understand how SGA-level earnings affect benefits, the correct response for the T21 and T22 groups was actually less common than in the C2 group. The proportion of C2 subjects providing the correct response for their condition (current-law rules) is higher than in the full sample for the second and third subgroups (63 percent and 67 percent compared to 54 percent in the full sample). (The control group in the first subgroup of bachelor's degree or higher at baseline gave similar responses to the full-sample control group.)

5.3. How Stage 2 Subjects Think SGA-Level Earnings Would Affect Future Benefit Eligibility Three Years after Random Assignment

All Stage 2 subjects were asked as part of the Stage 2 Interim Survey about how future eligibility for disability benefits would change if they earned above SGA after the TWP. Unlike our expectations for the responses to how benefits would change, we do not expect differing responses for treatment and control subjects. The offset rules only apply for the five-year BOND participation period. The correct response for treatment subjects would be that they would remain eligible for benefits for some time, but eventually they would have to re-apply for benefits. And this is also true for the C2 subjects who are under current law, although in their case eligibility would end after three years.

The survey questions were:

- Do you think you would remain eligible for disability benefits in the future, no matter how much you earn from work? That is, you would never have to re-apply for benefits?
- Do you think you would remain eligible for disability benefits for a while, but eventually you would no longer be eligible to receive benefits? That is, do you think eventually you would have to re-apply for benefits?

From their responses to these questions, the evaluation team classified subjects as having one of the following perceptions:

- Would remain eligible for benefits indefinitely (never have to re-apply)
- Would remain eligible for a while (eventually would have to re-apply)
- Would neither remain eligible indefinitely nor for a while
- Don't know about future eligibility

Exhibit 5-3 shows the response for each treatment group for the full sample and by baseline employment status. We find that 68 percent of the treatment subjects and 71 percent of the C2 subjects give the expected answer that they would remain eligible for a while but eventually would have to re-apply.

Exhibit 5-3. Three-Year Follow-up: How Stage 2 Subjects Think Future Benefit Eligibility Would Change as a Result of Earnings Above SGA, Full Sample and By Baseline Employment Status

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
All Stage 2 Subjects (N = 9,830)						
If earnings above SGA-level beyond TWP months, percent of subjects who think:						
Would remain eligible for benefits indefinitely (never re-apply)	10.7	11.2	8.8	1.9** (0.8)	2.4** (0.9)	0.5 (1.0)
Would remain eligible for a while (eventually would have to re-apply)	68.4	67.3	71.3	-2.9 (2.0)	-3.9* (2.0)	-1.0 (1.5)
Would neither remain eligible indefinitely nor for awhile	6.9	6.9	7.2	-0.3 (0.7)	-0.4 (0.9)	-0.0 (0.8)
Don't know about future eligibility	14.0	14.6	12.6	1.3 (1.2)	1.9 (1.1)	0.6 (1.1)
Working for Pay at Baseline (N = 2,438)						
If earnings above SGA-level beyond TWP months, percent of subjects who think:						
Would remain eligible for benefits indefinitely (never re-apply)	11.9	12.5	8.9	3.0 (1.8)	3.6 (2.1)	0.6 (1.9)
Would remain eligible for a while (eventually would have to re-apply)	69.8	66.9	71.0	-1.2 (2.5)	-4.1 (3.3)	-2.9 (3.0)

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Would neither remain eligible indefinitely nor for awhile	5.9	5.9	8.1	-2.2 (1.4)	-2.2 (1.6)	-0.0 (1.3)
Don't know about future eligibility	12.3	14.7	12.0	0.4 (1.8)	2.7 (2.2)	2.4 (1.8)
Looking for Work at Baseline (N = 2,162)						
If earnings above SGA-level beyond TWP months, percent of subjects who think:						
Would remain eligible for benefits indefinitely (never re-apply)	11.5	12.4	10.4	1.1 (1.9)	2.0 (2.0)	0.9 (1.6)
Would remain eligible for a while (eventually would have to re-apply)	66.2	64.9	69.4	-3.2 (2.8)	-4.5 (3.7)	-1.3 (4.6)
Would neither remain eligible indefinitely nor for awhile	8.5	7.4	6.5	2.0 (1.6)	0.9 (1.9)	-1.2 (2.3)
Don't know about future eligibility	13.8	15.3	13.6	0.2 (2.0)	1.8 (2.9)	1.5 (2.7)
Not Working or Looking for Work at Baseline (N = 5,165)						
If earnings above SGA-level beyond TWP months, percent of subjects who think:						
Would remain eligible for benefits indefinitely (never re-apply)	9.8	10.2	8.1	1.7 (1.0)	2.1 (1.2)	0.4 (1.5)
Would remain eligible for a while (eventually would have to re-apply)	68.7	68.5	72.1	-3.4 (2.6)	-3.6 (2.6)	-0.2 (1.7)
Would neither remain eligible indefinitely nor for awhile	6.7	7.1	7.1	-0.4 (1.0)	0.0 (1.6)	0.4 (1.3)
Don't know about future eligibility	14.8	14.2	12.7	2.1 (1.7)	1.5 (1.9)	-0.6 (0.9)

Source: BOND Stage 2 36-Month Interim Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

Unweighted sample sizes: All Subjects: T21 = 3,785, T22 = 2,384, C2 = 3,661. Working for pay at baseline: T21 = 975, T22 = 563, C2 = 900. Looking for work at baseline: T21 = 795, T22 = 561, C2 = 806. Not working or looking for work at baseline: T21 = 1,985, T22 = 1,247, C2 = 1,933.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Impact estimates are regression-adjusted for baseline characteristics. Weekly equivalent of BYA = (7/365) × BYA.

Another 11 percent of treatment subjects responded that they would remain eligible for benefits indefinitely. It is possible that some treatment subjects answered the questions with the offset rules in mind without taking into account the finite nature of the demonstration. However, the percentage of control subjects answering providing the same incorrect answer is not significantly smaller (9 percent).

The subgroup results shown in the bottom three panels of Exhibit 5-3 reveal little variation by baseline employment status. We might expect that more of those working for pay at baseline would have a correct perception of future eligibility. However, those working for pay at baseline have about the same distribution of perceptions of future eligibility as those looking for work and those not working at baseline.

Overall, while we see more correct responses about future eligibility than about how benefits change with earnings above the SGA-level, there are still a nontrivial number of beneficiaries who are uncertain about future eligibility or who have incorrect perceptions of the rules. A little more than a quarter of C2 subjects and between 21 to 33 percent of treatment subjects are uncertain or have incorrect perceptions of future eligibility. Further, misperceptions about how future eligibility are not strongly related to whether or not a beneficiary was working or looking for work at baseline.

5.4. Perspectives About the Benefit Offset from Interviews with Work-Oriented Stage 2 Treatment Subjects

In this section, we report findings from interviews with 30 work-oriented Stage 2 treatment beneficiaries in 2015. In order to engage respondents in conversation, interviewers followed protocols comprised of open-ended questions. Topics of the conversations included respondents' awareness of BOND, interviewer assessments of beneficiaries' knowledge of the benefit offset and its features, self-reported understanding of the offset, suggestions for improving understanding of the offset, and overall impressions of the program. As described in Section 2.1.1, the Evaluation Team designed the 30 in-depth interviews to gather information from 10 respondents from each of three groups: (1) work-oriented (completed TWP and has identified cessation date) Stage 2 treatment subjects who had not used the offset, (2) short-term offset users (subjects who used the offset in a single year), and (3) long-term offset users (subjects who used the offset during three or more consecutive years). Subjects in each group were equally split between T21 and T22, with a total of 15 from each treatment group. Below, we describe any differences in responses by subgroup.

All 30 work-oriented Stage 2 interviewees had heard of BOND before the interview (consistent with the 98 percent of treatment subject survey respondents who had heard of BOND, Exhibit B-1). Many of these interviewees would have had interactions with demonstration staff after study enrollment—especially the 15 T22 subjects, because of the ongoing outreach efforts of EWIC counselors.

Interviewers asked respondents to explain how the BOND offset rules might affect their benefits, when, and for how long. Interviewers followed this open-ended questioning with conversational probes. Later, the interviewers assigned a knowledge rating to each interviewee, of “no understanding at all,” “basic but incomplete understanding,” or “more complete understanding.” The scores were based on specific pieces of information about the benefit offset.⁵¹

⁵¹ Interviewers gave respondents one point for each of the following items the respondent mentioned in conversation: (1) the principle of keeping some amount of disability benefits rather than losing them completely after earning over a certain amount, (2) the specific reduction of benefits by \$1 for every \$2 earned over a certain amount, (3) the approximate BYA, and (4) the five-year duration of the BPP. In addition, interviewers gave an extra point for key terms associated with benefit adjustments, including TWP, cessation date, or the offset's annual accounting period. We interpret scores of 0 points to indicate no understanding of the BOND offset and its features, scores of 1 to 2 points to indicate a basic but incomplete understanding, and scores of 3 or higher to represent a more complete understanding.

The interviewers assigned a “basic but incomplete understanding” score to 15 of the 30 interviewees, a “more complete understanding” score to 13, and a “no understanding at all” score to 2. The level of understanding of the offset varied somewhat by treatment group: all T22 respondents showed at least a basic level of understanding of the offset, and sixty percent (9 of 15) had a more complete understanding of the program. In comparison, a quarter of T21 respondents (4 of 15) had a more complete level of understanding, and two had no understanding at all. Nearly all respondents with at least some understanding of the offset (26 of 28) mentioned that participants could keep some of their benefits instead of losing them completely after earning more than a certain amount. A large majority (23 of 28) could describe several additional features, such as the specific \$1 for \$2 offset, the BYA, or the BPP.

We note that the group of interviewees are not representative of all treatment survey respondents. A cross-tabulation of the assigned knowledge ratings with their 36-Month Survey responses reveals that the sample of work-oriented subjects interviewed possess a better understanding of the offset rules than the Stage 2 treatment subjects as a whole. Of the 28 subjects who responded to the survey, 19 (68 percent) responded that benefits would be reduced but not to \$0 as a result of SGA-level earnings beyond the TWP. This rate of response consistent with offset rules is substantively higher than the average of 50 percent of all treatment subjects. The analysis also reveals the expected correlation between assigned ratings with survey responses: 10 out of 12 subjects with “more complete understanding of offset rules” gave the survey response consistent with the offset rules, compared with 9 out of 14 with “basic but incomplete understanding” and 0 out of 2 with “no understanding at all.”⁵²

Interviewee knowledge of the offset and its features was not clearly related to the extent of offset use (consistent with the results discussed in the Section 5.2). Interviewer assessments of beneficiaries’ understanding of the offset were the same among respondents who had not used the offset (5 of 10 who had not used the offset demonstrated a more complete understanding) and long-term offset users (5 of 10 long-term offset users demonstrated a more complete understanding), but lower among short-term offset users (2 of 10 demonstrated a more complete understanding). The offset rules may no longer be relevant to some short-term offset users who have stopped working: one respondent explained that she knew her benefits would go down but right now she was not working.

Respondents’ self-reported understanding of the benefit offset rules seems to have been influenced by their perceived need to understand them, their use of the offset, and related exposure to information. Overall, about three quarters of respondents (22 of 30) rated themselves as comfortable with their own understanding of BOND, 20 percent (6 of 30) were neither comfortable nor uncomfortable, and 7 percent (2 of 30) were not comfortable. One respondent who noted being fairly comfortable about his understanding of BOND said the program was well-explained and that he received in-person support when needed, but he thought reading more about the program would help him more fully understand it. Another said she would learn more about the program if she started working again. Self-described comfort of one’s understanding of the offset was about the same for all offset use groups (8 of 10 non-

⁵² Within the “more complete understanding” group, all 5 subjects with ratings of 4 or 5 gave the response consistent with offset rules. Of those with a rating of 3, 5 out of 7 subjects gave this response. Within the “basic but incomplete understanding group,” 6 out of 8 subjects with a rating of 2 gave the correct response compared to 3 out of 6 subjects with a rating of 1.

users, 7 of 10 short-term offset users, and 7 of 10 long-term offset users said they were comfortable with their understanding.)

Among all work-oriented Stage 2 interviewees, 10 provided suggestions for improving beneficiary understanding of the benefit offset. The most common suggestion (4 of 10 respondents) was to make written materials more available and easier to understand. Two subjects (one T21 and one T22) reported difficulties finding someone to answer BOND-related questions over the phone. Two others (one T21 and one T22) suggested increasing the contact between BOND staff and subjects, such as through seminars.

Nearly all work-oriented Stage 2 interviewees (27 of 30) stated that the opportunity to use the offset was positive for them in that it allowed them to keep more money from benefits than they could have otherwise and that it was a safety net that helped make it feel less risky to return to work. In addition, 5 of the 30 respondents noted the benefits of having a BOND counselor to provide them with support, counseling, and guidance; 4 of the 5 were T22 subjects.

5.5. Summary

The results presented in this chapter show that about half of the treatment subjects provided a 36-Month Survey response consistent with understanding how the benefit offset works. Also, the understanding of T22 subjects is only slightly more accurate than that of T21 subjects. In addition, the understanding of the offset does not appear to be greater for subjects who were working when they enrolled in the study, contrary to expectations. In-depth interviews with subjects with cessation dates showed that all but two interviewees had at least some understanding of the offset, and a majority understood that they could keep some of their benefits when they had earnings above the SGA level.

The 36-Month Survey responses for the control group subjects do not provide evidence of widespread understanding of program rules. Only about half of the control group subjects gave a response consistent with an accurate understanding of the current-law rules that apply to them. In fact, a little less than a quarter of control subjects gave a response consistent with the offset rules, perhaps reflecting the information they heard about the offset during the enrollment process. Although these control group subjects gave responses consistent with offset rules, it is unknown whether their behavior is influenced by a belief that the offset is available to them. (Such behavior would serve to diminish the measured impact of the offset offer.) What seems clear, however, is that almost half of control subjects do not have a firm grasp of the current-law rules on earnings that apply to them, indicating that confusion about rules is relatively common among SSDI beneficiaries.

Roughly three-quarters of both treatment and control subjects have a correct perception of how earnings would affect their future benefit eligibility if they continue to earn more than the SGA threshold.

Taken together, these results indicate that at 36 months after study enrollment about half of the treatment subjects do not demonstrate an understanding of a presumably crucial prerequisite for a behavioral response to the offset—understanding the benefit offset offer. In addition, while one of the key purposes of EWIC was to improve beneficiary understanding of the benefit offset offer, these results suggest that as of three years after enrollment, understanding was better among the T22 group by only a small amount (4 percentage points). Levels of understanding at three years after enrollment are very similar to those found at one year after enrollment, for both treatment and control subjects.

6. Employment Barriers and Facilitators

This chapter describes the barriers to employment of Stage 2 treatment and control subjects and their use of services, education, and training to facilitate employment or higher earnings. This information is based on responses to the 36-Month Survey of Stage 2 beneficiaries, as well as in-depth interviews with 30 work-oriented beneficiaries.

The premise of SSDI is to offer insurance against disabilities that prevent substantial employment. Therefore, we should expect that the majority of SSDI beneficiaries face significant employment barriers. In this regard, Stage 2 volunteers may differ from the national SSDI beneficiary population because they showed interest in an opportunity for more favorable work incentives (the possibility of being randomized to the benefit offset treatment group). Eighty-five percent of Stage 2 volunteers affirmed at baseline that their personal goals included getting a job, moving up in a job, or learning new jobs skills. By three years after random assignment, only half of those who had this personal goal at study entry had worked since baseline. Barriers to employment may explain why more Stage 2 subjects did not work during these three years. Section 6.1 presents the prevalence of various types of perceived employment barriers at 36 months, and answers the question of whether T21 and T22 subjects perceive fewer barriers to employment than C2 subjects. Section 6.2 examines their use of employment services, education, and training that can potentially help them overcome employment barriers.

6.1. Employment Barriers

Stage 2 assignment might affect beneficiary awareness or perceptions of barriers to employment. The offset rules are intended to encourage above-SGA earnings by allowing beneficiaries engaging in SGA to receive partial benefits. Therefore, we expect assignment to either treatment group, compared to current law, to reduce the share who are deterred from work because of fear of losing benefits. Assignment to T22 rather than T21 might also affect perceptions of employment barriers and facilitators because EWIC includes a barriers and needs assessment that is not included in WIC. The assessment considers transportation, child care, skill deficits, and interviewing barriers that may hinder employment. We found that 88 percent of T22s received this assessment (Exhibit 4-9).

Exhibit 6-1 shows the proportions of Stage 2 treatment and control subjects at baseline who perceive various types of barriers to employment. Since the baseline survey was administered prior to random assignment, all differences between groups are due to chance. Exhibit 6-2 shows the proportions with these same perceived barriers at the point of the 36-Month Survey. Between baseline and the 36-Month Survey, there are a few modest changes in some barriers for the control group. The largest change is in the share of all volunteers that agrees that it is difficult to work because of fear of losing benefits: a decrease from 41 percent at baseline down to 32 percent at 36 months. Other barriers, including not having reliable transportation, non-accessibility of workplaces, and lack of skills or training, are slightly more common at follow-up compared to baseline. We speculate that more Stage 2 volunteers have experienced looking for work and working for pay as SSDI beneficiaries at follow-up compared to baseline, and that these experiences have lessened the fear of losing benefits while mildly increasing the perceptions of other barriers. In other words, some Stage 2 volunteers may have pushed past the initial barrier of fear of losing benefits and then encountered some other barriers that previously had been less salient to them.

Exhibit 6-1. Barriers to Employment for Stage 2 Subjects at Baseline

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Agree or strongly agree that "I am limited in my ability to work because of a physical or mental condition" (%)	85.5	84.4	83.9	1.6 (0.9)	0.4 (1.3)	-1.2 (1.3)
Agree or strongly agree that "I am limited in my ability to work because I do not have reliable transportation to and from work" (%)	18.9	18.1	18.1	0.8 (0.9)	-0.0 (1.0)	-0.8 (1.1)
Agree or strongly agree that "I am limited in my ability to work because I am caring for children or others" (%)	8.7	10.2	10.2	-1.5* (0.8)	0.0 (0.9)	1.5 (0.9)
Agree or strongly agree that "It is difficult for me to work because I am afraid of losing my disability benefits" (%)	40.7	40.8	40.9	-0.2 (1.2)	-0.1 (1.5)	0.1 (1.5)
Agree or strongly agree that "I am limited in ability to work because I am finishing a school or training program" (%)	3.8	4.4	4.5	-0.7 (0.5)	-0.1 (0.6)	0.6 (0.6)
Agree or strongly agree that "Many workplaces are not accessible to people with my disability" (%)	44.3	43.3	44.0	0.3 (1.2)	-0.7 (1.4)	-1.0 (1.4)
Agree or strongly agree that "I don't have the skills or training needed to return to work" (%)	34.0	33.3	33.4	0.5 (1.1)	-0.2 (1.6)	-0.7 (1.5)
Agree or strongly agree that "It will be difficult to requalify for Social Security disability benefits in the future if I work" (%)	39.4	41.5	39.0	0.5 (1.2)	2.5 (1.4)	2.1 (1.4)

Source: Analysis of BOND Stage 2 36-Month Survey with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

Unweighted sample sizes: T21 = 3,750, T22 = 2,357, C2 = 3,624. Sample sizes are different in this table because these questions were asked only of beneficiaries representing themselves and thus do not include cases with proxy respondents.

Impact estimates are regression-adjusted for baseline characteristics.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Columns 4, 5, and 6 of Exhibit 6-2 show differences in perceived barriers between assignment groups at three years after random assignment. As expected, treatment subjects in both T21 and T22 groups were less likely than control subjects to agree that benefit reductions were a deterrent to work and also less likely to agree that it would be difficult to requalify for benefits if they worked. Slightly lower proportions of T21 and T22 subjects were afraid of losing SSDI benefits compared to C2 subjects (29 percent versus 32 percent). And slightly lower proportions of T21 and T22 subjects believe that it would be difficult to requalify for SSDI in the future if they work (35 and 33 percent, respectively, versus 38 percent). The

direction of these results is consistent with the offset allowing subjects to maintain partial benefits after the trial work period.

Exhibit 6-2. Estimated Impacts on Barriers to Employment of Stage 2 Subjects at Time of 36-Month Followup Survey Interview

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Agree or strongly agree that "I am limited in my ability to work because of a physical or mental condition" (%)	82.0	81.3	83.7	-1.7 (1.0)	-2.4* (1.2)	-0.7 (1.2)
Agree or strongly agree that "I am limited in my ability to work because I do not have reliable transportation to and from work" (%)	23.9	25.6	23.0	0.9 (1.1)	2.6* (1.3)	1.6 (1.3)
Agree or strongly agree that "I am limited in my ability to work because I am caring for children or others" (%)	10.5	11.5	12.4	-1.9* (0.9)	-0.9 (1.0)	1.0 (1.0)
Agree or strongly agree that "It is difficult for me to work because I am afraid of losing my disability benefits" (%)	29.2	28.7	31.6	-2.4* (1.3)	-2.9* (1.4)	-0.5 (1.4)
Agree or strongly agree that "I am limited in ability to work because I am finishing a school or training program" (%)	4.4	5.8	4.2	0.2 (0.6)	1.5* (0.7)	1.3 (0.8)
Agree or strongly agree that "Many workplaces are not accessible to people with my disability" (%)	47.8	46.4	46.4	1.4 (1.4)	0.0 (1.7)	-1.3 (1.5)
Agree or strongly agree that "I don't have the skills or training needed to return to work" (%)	34.2	36.2	35.8	-1.7 (1.3)	0.4 (1.4)	2.0 (1.8)
Agree or strongly agree that "It will be difficult to requalify for Social Security disability benefits in the future if I work" (%)	35.2	33.1	38.1	-3.0* (1.3)	-5.0** (1.6)	-2.1 (1.5)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

Unweighted sample sizes: T21 = 3,750, T22 = 2,357, C2 = 3,624. Sample sizes are different in this table because these questions were asked only of beneficiaries representing themselves and thus do not include cases with proxy respondents.

Impact estimates are regression-adjusted for baseline characteristics.

*/**/***/ Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

However, the magnitude of the effects on fear of losing disability benefits seems small considering the difference between the \$1 for \$2 offset and full benefit suspense. A cross-tabulation with knowledge of benefit-calculation rules reveals greater confusion among treatment subjects who say fear of losing benefits is a deterrent to work than among the full sample. Sixty-three percent of T1 subjects and 54 percent of T22 subjects who fear benefit loss think SGA earnings after the TWP would result in benefit suspense. This incorrect understanding of offset rules is more widespread among those who say fear of losing benefits is a deterrent to work, compared to the full sample (where the proportions are 43 percent [T21 group] and 40 percent [T22 group]). On the other hand, the control subjects who say fear of losing benefits is a deterrent to work have *better* understanding than the full sample. Seventy percent correctly anticipate benefit suspense, compared to 54 percent in the full sample.

Among perceptions of barriers that might be indirectly affected by group assignment, we find several other modest differences between one or the other of the treatment groups compared to the control group. Compared to current law, the offset plus EWIC reduced the proportion reporting that they are limited in their ability to work due to their physical or mental condition (a reduction from 83.7 percent to 81.3 percent), and increased the proportions reporting barriers due to lack of reliable transportation (an increase from 23.0 percent to 25.6 percent) and participation in school or a training program (an increase from 4.2 percent to 5.8 percent). The offset plus WIC decreased the proportion reporting that caring for children or others was a limitation on ability to work compared to current law (a reduction from 12.4 percent to 10.7 percent—a difference of 1.7 percentage points). These differences between the treatment and control groups may be explained by the modest increase in any employment since random assignment experienced by the treatment groups (see Chapter 10), where the experience of employment changes the salience of certain types of barriers for some subjects.

There is no evidence of differences between the offset-plus-EWIC group and the offset-plus-WIC group in terms of perceived barriers to employment.

About half of Stage 2 subjects in all groups indicated they needed services or supports of various sorts to improve their ability to work, but there were no significant differences across groups (Appendix B, Exhibit B-2). An estimated 48 percent stated that they needed some type of employment support but did not receive any in the three years since random assignment. The four most common unmet needs to overcome an employment barrier were training to learn a new job or skill (23 percent), help to find a job (22 percent); on-the-job training, coaching or support services (18 percent); and transportation assistance (17 percent).

The next section of this chapter reports perspectives on employment barriers as observed through in-depth interviews with Stage 2 subjects.

6.2. Perspectives about Barriers to Employment from Interviews with Work-Oriented Treatment Subjects

To gather information about respondents' barriers to employment, the Evaluation Team asked beneficiaries open-ended questions during in-depth interviews. Specifically, the questions were asked of 30 treatment beneficiaries who had an SGA-related disability cessation (Section 2.1.1).⁵³ Interviewers asked respondents to identify the main factors influencing whether and how much they worked and earned. They then asked respondents to describe the extent to which potential benefit adjustments influenced their decisions about work.

A little more than half of these interviewees reported physical or mental health as the main factors determining whether and how much they worked and earned—17 of 30. Barriers to work for an individual can change over time. A barrier to work today may not be a barrier to work tomorrow, and vice versa. Some of the 30 interviewees said that when their health was poor, it became the dominant factor influencing whether and how much they could work. Among interviewees who described their physical or mental health as the primary factor determining whether and how much they worked and earned, some said that they had previously worked more but the deterioration of their health conditions limited their current ability to work. For example, one respondent was diagnosed with a degenerative disc disease which prevented her from standing or sitting in one position for a long time, as required for her job. Conversely, other respondents noted improvements to their health, which allowed them to begin working part-time and then gradually increase their hours. One respondent worked as a nurse and reported she would have difficulty working the 12-hour shifts typically required for her position, but has been able to maintain work because her bosses are aware of her disability status and allow her flexibility in her hours. Hence, when a respondent indicated health as the reason that he or she was not working does not rule out substantial work in the future; nor does it rule out other barriers to work.

About half of interviewees (16 of 30) indicated that the prospect of a benefit reduction under the offset limited how much they were willing to earn.⁵⁴ However, those who had used the offset consistently were less likely to report that a potential benefit reduction was a limitation. Whereas 80 percent of interviewees who had not used the offset (8 of 10) indicated that the prospect of a benefit reduction was an important or somewhat important limiting factor in their decision whether or not to work, only 30 percent of long-term offset users (3 of 10) responded similarly. Long-term users were more likely to indicate that they “don’t ever think about” the prospect of a benefit reduction and are motivated to work as much as their health permits. Notwithstanding this correlation, it is unclear whether concern over benefit reduction has any causal relationship with offset use.

⁵³ We interviewed 10 work-oriented Stage 2 subjects from each of three subgroups based on whether and for how long they had used the benefit offset: (1) subjects who had not used the offset, (2) short-term offset users (subjects who used the offset in a single year), and (3) long-term offset users (subjects who used the offset during three or more consecutive years).

⁵⁴ Interviewers asked work-oriented Stage 2 subjects to explain how important the prospect of a benefit adjustment was in their decisions about how much to work. “Benefit adjustment” is the neutral term interviewers used to describe benefit reductions.

6.3. Service Utilization, Education, Training, and Employer Accommodation

We would expect group assignment to have an effect on use of services designed to help them overcome barriers to employment or higher earnings. Assignment to either treatment group is expected to increase service use. Except for those who would have high earnings anyway, the offset increases the attractiveness of working and earning more, which also increases the attractiveness of supports needed to work and earn more. Further, those assigned to T22 were expected to receive assistance from EWIC counselors in identifying and accessing such supports. We found that 77 percent of T22s worked with their EWIC counselor to develop employment support plans (Exhibit 4-8). WIC and WIPA counselors, like EWIC counselors, make referrals to local services. However, EWIC counselors also monitor beneficiaries' service receipt, following up with beneficiaries to ensure services are being provided by the appropriate organizations.

Based on survey responses, this subsection examines how some Stage 2 beneficiaries overcome their barriers to work.

For beneficiaries who are looking to increase their earnings, services, education, and training may facilitate employment. EWIC led to a small increase in receipt of employment support for all beneficiaries (employed and not employed) (Exhibit 6-3). In particular, EWIC led to small increases in receipt of a work assessment, help to find a job, and advice about modifying a job or workplace compared to C2 (Exhibit 6-4).

EWIC also had a small positive effect on schooling or training compared to C2 (Exhibit 6-3): 20 percent of T22 subjects received any schooling or training, compared to 18 percent of C2 subjects. Across all three years since random assignment, EWIC also had a small positive impact on attendance in an educational or training program, compared to C2 (Exhibit 6-5).

We find few differences in the receipt of employment supports between the offset-plus-EWIC and offset-plus-WIC groups. Compared to WIC, EWIC led to higher receipt of work assessments, advice about modifying a job or workplace, and receipt of transportation assistance (Exhibit 6-4). EWIC also led to higher attendance at two-year college degree programs (Exhibit 6-5). These findings are consistent with the direction of findings based on BTS data in Chapter 4 that T22s receive more counseling beyond information and referral than T21s. However, the magnitude of the share with self-reported receipt of work assessments is much lower than the BTS data would suggest. For example, Exhibit 4-8 shows that nearly 77 percent of T22 subjects received a skills assessment soon after demonstration entry. This compares to less than 10 percent of the T22 group who report receiving a work or job assessment on the survey.

Exhibit 6-3. Estimated Impacts on Employment Supports, Education, and Training Received by Stage 2 Subjects

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Received any type of employment support (%)	46.8	48.7	45.1	1.7 (1.4)	3.6** (1.5)	1.9 (1.5)
Received any schooling or training (%)	19.4	20.3	17.7	1.7 (1.0)	2.6* (1.4)	0.9 (1.2)
Currently enrolled in school or taking classes (%)	5.4	5.6	5.1	0.3 (0.6)	0.5 (0.7)	0.2 (0.7)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

Unweighted sample sizes: T21 = 3,785, T22 = 2,384, C2 = 3,661

Impact estimates are regression-adjusted for baseline characteristics.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit 6-4. Estimated Impacts on Self-Reported Use of Employment Supports by Stage 2 Volunteers: All Policy Comparisons

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Work or job assessment (%)	7.6	9.7	6.3	1.2 (0.7)	3.4*** (0.9)	2.1** (0.9)
Help to find job (%)	13.2	15.9	10.9	2.3** (0.9)	5.1*** (1.2)	2.8* (1.2)
Training to learn new job or skill (%)	11.3	11.9	11.3	0.0 (0.9)	0.6 (1.3)	0.6 (1.0)
Enrolled in school or classes (%)	5.4	5.6	5.1	0.3 (0.6)	0.5 (0.7)	0.2 (0.7)
Advice about modifying job or workplace (%)	5.5	7.5	5.2	0.3 (0.6)	2.3** (0.8)	2.0** (0.8)
On-the-job training, coaching or support services (%)	14.1	14.3	13.3	0.8 (1.2)	1.1 (1.5)	0.3 (1.1)
Personal care assistance (%)	10.1	9.3	10.0	0.0 (0.8)	-0.8 (1.1)	-0.8 (0.9)
Transportation assistance (%)	14.3	14.8	14.4	-0.1 (1.2)	0.4 (1.1)	0.5 (1.1)
Transportation cost assistance (bus tokens, subway passes (%))	4.3	6.8	5.4	-1.1 (0.7)	1.4 (0.8)	2.5*** (0.7)

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Transportation assistance included aid for specific purpose, e.g. modifying existing vehicle	12.8	9.9	9.6	3.2 (3.5)	0.3 (2.6)	-2.9 (2.5)
Help in keeping a job (%)	3.8	3.1	2.6	1.1** (0.5)	0.4 (0.5)	-0.7 (0.7)
Any kind of assistive device (%)	16.1	16.4	15.7	0.3 (1.1)	0.7 (1.1)	0.3 (1.1)
Other (%)	12.3	13.2	13.1	-0.8 (0.9)	0.1 (1.2)	0.9 (1.1)

Source: BOND Stage 2 36-Month Survey with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

Unweighted sample sizes: T21 = 3,785, T22 = 2,384, C2 = 3,661

Impact estimates are regression-adjusted for baseline characteristics.

*/**/***/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit 6-5. Estimated Impacts on Education and Training since Random Assignment

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Number of education or training programs attended since random assignment	0.2	0.3	0.2	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Number of hours spent in education or training programs since random assignment	22.4	22.2	20.1	2.3 (1.4)	2.1 (1.5)	-0.2 (1.6)
Attended educational or training program since random assignment (%)	16.8	18.3	15.2	1.6 (1.0)	3.1* (1.6)	1.4 (1.6)
Attended high school since random assignment (%)	-0.0	0.1	0.0	-0.0 (0.0)	0.1 (0.1)	0.1 (0.1)
Attended GED preparation program since random assignment (%)	0.4	0.1	0.3	0.1 (0.2)	-0.2 (0.1)	-0.2 (0.2)
Attended 2-year college directed towards degree since random assignment (%)	1.9	3.1	2.2	-0.3 (0.5)	0.9 (0.6)	1.2* (0.6)
Attended 4-year college directed towards degree since random assignment (%)	1.4	1.4	1.5	-0.1 (0.4)	-0.1 (0.4)	0.0 (0.4)
Attended graduate courses since random assignment (%)	0.7	1.0	0.5	0.2 (0.2)	0.5 (0.3)	0.3 (0.3)

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Attended college courses not directed towards a degree since random assignment (%)	0.8	0.8	0.8	0.1 (0.3)	-0.0 (0.4)	-0.1 (0.4)
Attended vocational education outside a college since random assignment (%)	7.6	8.3	6.9	0.6 (0.7)	1.4 (1.3)	0.7 (1.2)
Attended non-vocational adult education not directed towards a degree since random assignment (%)	1.1	1.2	1.1	0.1 (0.3)	0.1 (0.4)	0.0 (0.4)
Attended job search assistance program since random assignment (%)	2.9	2.6	2.0	0.9 (0.5)	0.6 (0.5)	-0.3 (0.6)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

Unweighted sample sizes: T21 = 3,785, T22 = 2,384, C2 = 3,661

Impact estimates are regression-adjusted for baseline characteristics.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Employers can provide accommodations by adjusting the physical work environment, schedule, and tasks for workers. Of the 28 percent of Stage 2 survey respondents working at the time of their 36-Month Survey, the majority received accommodations from their employer. In the survey, more than three hundred respondents provided open-ended responses to the question of how their employer provides workplace accommodation for their disability. Though not representative, these responses help to describe the wide range of accommodations that help them in the workplace.

"They accommodate my breaks and when I'm out sick I never feel that my job is at risk."

"A chair"

"In team meetings they provide a sign language interpreter."

"When there is an issue they take it to the job coach."

"Private area for [me] to do work."

"[My employer put] tile on the floor instead of carpet leading to [my] workstation, [they] modified doors and [the] bathroom, lowered microwave in the kitchen."

"Eliminated [my] closing shift due to mopping tasks [which I cannot do]."

"They have a dress code for shoes but I am unable to wear them so I am allowed to wear tennis shoes instead of leather shoes."

"When I'm in bad pain they let me switch my days."

Exhibit 6-6 shows the proportions of the three assignment groups with employer accommodations. Compared to C2 subjects, a larger percentage of subjects in both Stage 2 treatment groups worked and received employer accommodations. The result is partly accounted for by higher rates of employment for the two groups, but also by higher rates of accommodation among those employed (of those employed, 64, 68, and 60 percent of T21s, T22, and C2s received accommodations). In particular, T21 and T22s are more likely to have an employer who kept a job available during disability-related absences. It is unclear why subjects with offset rules report more employer accommodations. While this difference is certainly due in part to higher employment rates among T21s and T22s, WIC and EWIC could be more supportive of subjects advocating for accommodations than WIPA; or, T21 and T22 subjects may be more forthcoming on the survey because of a warmer feeling toward BOND. Alternatively, this result may be due to random chance.

Exhibit 6-6. Estimated Impacts on Employer Accommodations Received by Stage 2 Subjects at the Time of 36-Month Followup Survey Interview

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Received any accommodation from employer (%)	18.8	19.8	16.7	2.1* (1.0)	3.1** (1.3)	1.0 (1.4)
Specific Employer Accommodations^a						
Employer provided special equipment or assistive technology (%)	2.5	2.4	2.2	0.2 (0.5)	0.1 (0.5)	-0.1 (0.5)
Employer kept job available during disability-related absences (%)	14.3	14.9	12.2	2.1** (0.9)	2.7** (1.0)	0.6 (1.1)
Employer arranged for coworkers to help subject, when needed (%)	13.4	15.3	12.4	1.0 (0.9)	2.9 (1.6)	1.9 (1.5)
Employer provided modified computer hardware (%)	1.0	1.1	0.9	0.1 (0.3)	0.2 (0.3)	0.1 (0.3)
Employer provided modified computer software (%)	1.1	0.9	0.9	0.2 (0.3)	-0.0 (0.3)	-0.2 (0.3)
Employer provided flexible shift/schedule or time off (%)	1.6	1.0	1.3	0.3 (0.3)	-0.3 (0.3)	-0.6 (0.3)
Employer made other accommodations not listed above (%)	1.8	2.4	1.9	-0.1 (0.4)	0.5 (0.5)	0.6 (0.4)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

Unweighted sample sizes: T21 = 3,724, T22 = 2,350, C2 = 3,610

Impact estimates are regression-adjusted for baseline characteristics.

^a The sum of percentages in this section may exceed the percentage reported in the same column in the first row of the exhibit because subjects may have received multiple types of employer accommodations.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Slightly more than a quarter of employed Stage 2 volunteers reported using special equipment for their disability while on the job, and 10 percent receive personal assistance that helps them work. There is no evidence that T21 or T22 subjects use more special equipment on the job, or receive more personal assistance that helps them work, compared to C2 subjects (Appendix B, Exhibits B-3 and B-4). Out of 75 hypothesis tests examining payments sources for special equipment or personal assistance, only one difference (which is less than one percentage point) is significant at the $p < 0.10$ level, thus we treat the finding as spurious (Exhibits B-3 and B-4). Accommodations for commuting needs may help facilitate access to a job, but there are no patterns of different transportation access, licensing, and usage across the treatment groups (Exhibit B-5).

Additionally, there is no evidence of an effect of treatment (T21 or T22) compared to current law on the following sets of outcomes:

- Location, referral source, or types of personal assistance (Exhibit B-6)
- Local and referral sources for training to learn a new job or skill (Exhibit B-7)
- Educational attainment (Exhibit B-8)
- Current education and training activities at time of the 36-Month Survey (Exhibit B-9)

6.4. Perspectives about Employment Support Services from Interviews with Work-Oriented Treatment Subjects

We gained more in-depth information about treatment subject experiences with employment support services via the 30 in-depth interviews of work-oriented subjects and focus groups conducted with WIC and EWIC staff.

The in-depth interviews revealed that few had received outside employment support services (8 of 30, evenly split between T21 and T22 subjects) and that the services were perceived as unhelpful (by 7 of 8 who received services). Seven of the 22 respondents who did not receive services said that they did not need them. For example, five respondents noted that they were returning to the same exact job or same type of job they had prior to their disability and thus did not need assistance. Two other respondents expressed an interest in services but were unable to access them: one reported being put on a waiting list for vocational rehabilitation, and the other was unaware of what services were available.

During the 2016 focus groups, benefits counselors and their supervisors described mixed experiences with the availability of services and the usefulness of services to beneficiary employment outcomes. Counselors in four of the eight focus group discussions reported that employment support services have not been consistently available to beneficiaries in their sites because of long waiting periods for services. A few of these counselors reported that they do not typically refer beneficiaries to employment support services because their recent experience suggests that there will be a long wait time and that beneficiaries will lose interest while waiting. Their limited enthusiasm for service use is reflected in their responses to an online poll that asked them how often referrals to employment support services helped BOND beneficiaries in their own caseloads begin, maintain, or increase work. About 14 percent (5 out of 35

respondents) responded “usually”, 57 percent (20 out of 35) responded “some of the time,” and 26 percent (9 out of 35) responded “rarely”.⁵⁵ A few counselors in two focus groups reported that employment support services were less helpful for beneficiaries with relatively high levels of education or work experience because services were not appropriately tailored to their needs.

In the same focus group discussions, counselors and supervisors expanded further on factors that may influence beneficiaries’ experiences with employment support services, including the counselors’ role in the referral process and beneficiaries’ characteristics. Counselors in two focus groups emphasized the complexity of engaging with SVRA services. They indicated that beneficiaries were more likely to follow through with referrals if WIC or EWIC provided the beneficiary with detailed information about what to expect from SVRA services, including the timeline for receiving services, how often the beneficiary would interact with the service provider, and what types of services the beneficiary would receive.

Both treatment and control subjects access the same infrastructure of employment support services outside of BOND. It is possible that limited availability of employment services has made it difficult for some treatment beneficiaries to use the offset, but limited availability would presumably affect their earnings under current law as well. We have no way of knowing the extent to which limited availability of desired services also limited subjects’ earnings or use of the offset.

6.5. Summary

Slightly lower proportions of treatment subjects (both groups combined) reported that fear of losing SSDI benefits made it difficult to work compared to control subjects (29 percent versus 32 percent). A reduction in fear of losing SSDI benefits is consistent with the offset rules, which create an additional work incentive. However, we find no differences in fear of losing SSDI benefits between the offset-plus-EWIC and offset-plus-WIC groups.

Interviewees reported that physical and mental conditions (the most important factor limiting ability to work) can improve or deteriorate over time. Nearly half of survey respondents reported at least some unmet need for an employment support. The most common unmet needs to overcome an employment barrier were training to learn a new job or skill, help to find a job, on-the-job training, coaching or support services, and transportation assistance. Interviewees and staff reported low satisfaction with existing outside employment support services.

Compared to the current law, the offset plus EWIC led to small increases in the receipt of a work assessment, help to find a job, advice about modifying a job or workplace, and attendance in an educational or training program. Compared to WIC, EWIC led to higher receipt of work assessments, advice about modifying a job or workplace, receipt of transportation assistance, and attendance at two-year college degree programs. All of these findings about EWIC are consistent with the direction of findings based on BTS data in Chapter 4: that T22 subjects receive more counseling beyond I&R than T21 subjects. However, the magnitudes of the impact of EWIC relative to WIC on all of these measures is

⁵⁵ In addition, one counselor participating in the online poll responded “Don’t Know” when asked how often employment support services helped beneficiaries in his caseload begin, maintain, or increase work.

much smaller than the impact of EWIC on counseling service delivery as measured using demonstration operations data.

Nearly two-thirds of Stage 2 volunteers working at the 36-Month Survey received some kind of workplace accommodation and the treatment groups reported 2 to 3 percentage points higher levels of accommodation than the control group.

The next chapter of this report examines the process from earnings above SGA to receipt of benefits adjusted for the offset.

7. Offset Use and the Pathway to Benefit Offset Adjustment

7.1. Introduction

Timely and accurate benefit adjustment according to the benefit offset rules relies on multiple complex processes. This chapter analyzes how the benefit adjustment processes have functioned in BOND. It also reports the number of Stage 2 treatment subjects who have had their SSDI benefits adjusted according to offset rules at some point up to and including December 2016.

The chapter begins with a summary of SSDI benefit rules under current law. It then describes the benefit offset rules for BOND treatment subjects and reports rates of offset use among Stage 2 treatment subjects. Chapter 2 of the *Final Design Report* provides a more detailed review of current law SSA rules and work incentives. The *Stage 2 Early Assessment Report* (Sections 6.1 and 6.2) and the *Process Study Report* (Section 5.2) describe in detail how the benefit offset works and how it differs from work incentives in current law.

The following current law SSDI rules and procedures govern both BOND treatment and control subjects as they work:

- During the ***Trial Work Period (TWP)***, beneficiaries are entitled to work without affecting benefits. In 2016, a TWP month was any month in which an SSDI beneficiary had earnings of at least \$810 or worked at least 80 self-employed hours. The TWP consists of nine such months in a rolling 60-month window.
- Given evidence of earnings, SSA conducts a ***Work Continuing Disability Review (Work CDR)*** to confirm beneficiaries' continued eligibility for benefit receipt. In SSA's terminology, disability "ceases" for beneficiaries who engage in SGA after completing the TWP.
- During the ***Grace Period (GP)***, which starts with the disability cessation month and continues for two additional months of SGA, SSA pays benefits at their full amount regardless of earnings.
- At all stages of work, all SSDI beneficiaries are required to report earnings to SSA. SSA also obtains evidence of earnings from the IRS and other sources.

At this point, the rules for the BOND offset and current law diverge. Under current law, after the beneficiary completes the TWP and the GP, SSA suspends SSDI benefits in any month in which a beneficiary engages in SGA, through the 36th month after the TWP ends. This is known as the re-entitlement period of the Extended Period of Eligibility (EPE). After the end of the re-entitlement period, SSA terminates entitlement to SSDI if the beneficiary engages in SGA in any month; otherwise the EPE continues. BOND treatment subjects who complete the TWP enter the BOND Participation Period (BPP), which continues for 60 months. During the BPP the \$1 for \$2 benefit offset applies to annual earnings above the BOND Yearly Amount (BYA) after the beneficiary has used his GP. We describe the benefit adjustment process for the BOND offset below.

7.1.1. Benefit Adjustment Processes Developed for BOND

Processes used in BOND to adjust SSDI benefits according to the benefit offset depend on whether or not the beneficiary reports earnings to the demonstration, per the BOND design. If the beneficiary reports

substantial earnings to the demonstration, the beneficiary enters the offset through the “front-door” process. If the beneficiary has substantial earnings but does not report them to the demonstration the beneficiary will eventually enter the offset through the “back door.”⁵⁶ We describe the front- and back-door processes below.

Front-door entry into the offset occurs when treatment group beneficiaries report earnings to the demonstration and complete the steps necessary to have their benefits adjusted under offset rules (for example, provide an Annual Earnings Estimate [AEE]). The front-door administrative path to the first benefit adjustment under offset rules includes four milestones:

1. *Sustained earnings sufficient for offset use:* To receive a benefit adjustment through the offset, Stage 2 treatment subjects must have sufficient sustained earnings to complete the TWP and GP followed by calendar-year earnings that exceed BYA. We refer to any demonstration year in which earnings exceed BYA after TWP and GP completion as a year with “offset use,” even though the actual adjustment of the monthly benefit may not occur until late in the year or retroactively after the year has ended.⁵⁷
2. *Work CDR completion:* SSA must complete a work CDR to verify that the treatment subject completed the TWP and GP and to establish when this occurred.
3. *AEE submission:* Treatment subjects must provide an AEE, an estimate of anticipated earnings during the calendar year. The BOND Implementation Team submits the AEE to SSA.
4. *First benefit adjustment:* SSA’s BOND Stand Alone System (BSAS) uses the AEE information to adjust SSDI benefits according to the benefit offset rules. SSA usually makes the first benefit adjustment later than, and retroactive to, the start of the year (or partial year) of offset use. When SSA makes benefit adjustments retroactively, it typically means there has been an overpayment of benefits during the prior period of offset use.⁵⁸

Back-door entry into the offset occurs when treatment beneficiaries earn more than BYA but do not report their earnings. Instead, SSA discovers unreported earnings from a different source, most often IRS earnings data (that is, W-2 reports of earnings). The main difference between the administrative processes for entry into the offset through the back door versus the front door is that instead of the third milestone,

⁵⁶ Some treatment subjects who enter the offset through the “back door” may not report earnings to demonstration staff because they do not realize they are in BOND or do not understand demonstration reporting requirements, despite the Implementation Team’s efforts to notify and educate treatment subjects as described in Derr et al. 2015.

⁵⁷ Throughout this report, we define “offset use” as *having earnings that should lead to a benefit reduction under offset rules, regardless of whether SSA has adjusted benefits according to offset rules*. Beneficiaries are considered to have used the offset in a demonstration month if they have completed the TWP (and thus entered the BPP) and GP in a previous month *and* have earnings for the calendar year (or for the remainder of the year after completing the GP) that exceed the BYA (prorated if for the remainder of the year only).

⁵⁸ Delays in adjustment may cause underpayments for treatment subjects who were in the EPE and had their benefits suspended before BOND random assignment.

AEE submission, SSA uses IRS earnings records to retroactively adjust benefits through an automated BSAS process or a manual process.

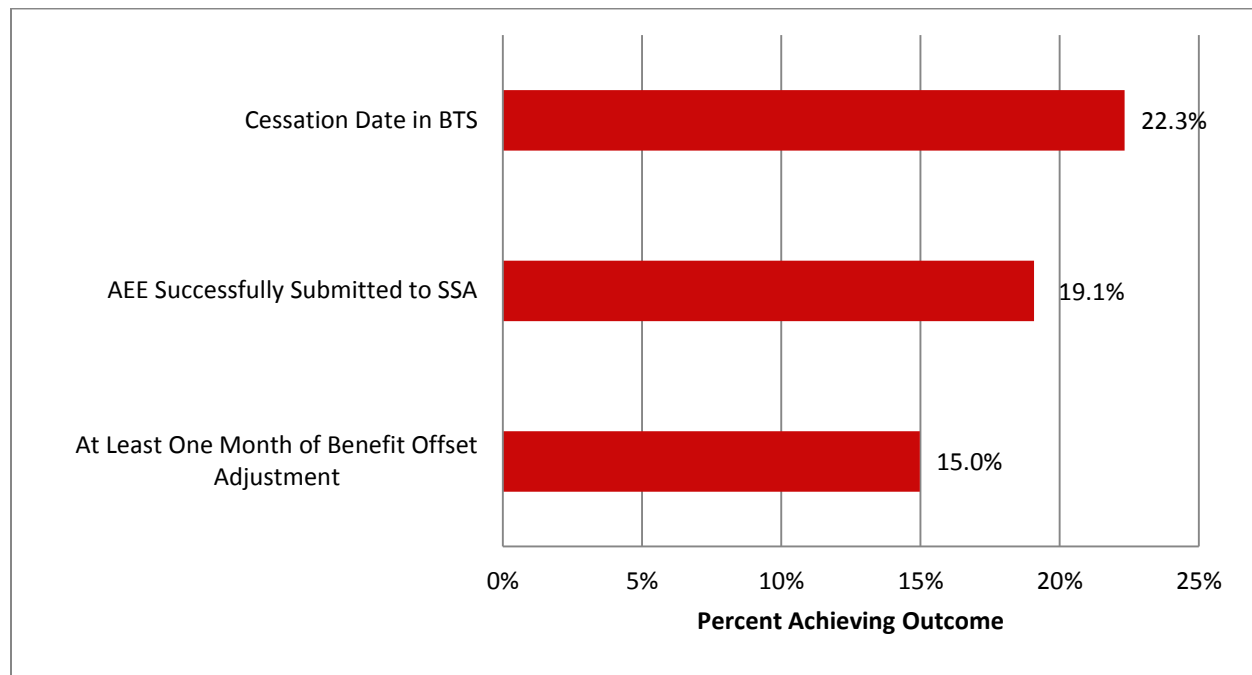
To summarize, for SSA to adjust benefits under offset rules (treatment group subjects) or suspend benefits according to current-law rules (control group subjects), SSA must complete a work CDR based on documented earnings. Such documentation can occur either when the beneficiary reports earnings to SSA, or when SSA reviews IRS records. Treatment group subjects who report earnings as intended by BOND's design follow a "front-door" path to the first adjustment under offset rules, and those who do not report eventually enter the offset via a "back-door" path. Under both the offset rules and current law, SSA often applies the first benefit adjustment retroactively to the first month in which the offset use or suspension should apply. SSA may implement these retroactive adjustments many months or even years after the earnings that triggered the adjustment occurred.

7.1.2. Evidence of Progress Toward Benefit Adjustment Under Offset Rules

The previous section describes the processes for entry into the offset. In this section, we use BTS records to describe the progress of Stage 2 subjects through the milestones during the first six calendar years of the demonstration. Exhibit 7-1 shows the percentages of Stage 2 treatment subjects who had reached the milestones by December 2016. All Stage 2 subjects volunteered after receiving information about the demonstration and after completing an informed consent process. However, only a minority worked after enrollment in BOND through the 36-Month Survey and a smaller share worked enough in that period to potentially use the offset. For instance, we found that 29 percent of Stage 2 treatment subjects reported working at the time of the 36-Month Survey (Exhibit 10-1). Low levels of employment and earnings for beneficiaries are not surprising, in general, because SSA had determined that beneficiaries had a severe medical impairment and were unable to engage in SGA for at least 12 months when they first entered SSDI; that is, they met SSDI's medical and vocational eligibility criteria. We also know that, historically, only a minority of beneficiaries have worked at all after entering SSDI, and only a small share of these have left SSDI because they were able to again engage in SGA.⁵⁹ However, one would expect the BOND benefit offset to appeal to SSDI beneficiaries who have the capacity to return to engagement in SGA, despite their continuing medical condition. Hence, our expectation is that beneficiaries who volunteered for the demonstration (after receiving detailed explanation of the offset) would be considerably more likely to engage in SGA than non-volunteers.

⁵⁹ Many workers with impairments that initially prevent them from engaging in SGA for at least 12 months can eventually adapt to those impairments in ways that permit them to engage in SGA.

Exhibit 7-1. Percentage of Stage 2 Treatment Subjects with Documented Steps towards Benefit Adjustment (through December 31, 2016)



Source: Analysis of BTS records from January 2017.

Sample size: 8,025.

Note: In an analysis of BTS records, we found 75 cases with completed AEE and/or a benefit adjustment for whom the cessation date was not recorded in BTS. Because a cessation date is a necessary step for successful AEE submission and benefit adjustment, we reclassified these beneficiaries as having a cessation date. These individuals constituted less than one percentage point of the overall 22.3 percent reported.

As of December 2016:

- 22.3 percent of Stage 2 treatment subjects had completed the TWP, and SSA had determined that they had at least one post-TWP month in which they had SGA-level earnings. This means that they were poised to use the offset if their annual earnings exceeded BYA. They had completed the second milestone (work CDR completion) and may or may not have completed the first milestone (sustained earnings sufficient for offset use). Whether they enter via the front door or the back door, subjects are known to have reached this point only after SSA has completed a work CDR and established a cessation month—a post-TWP month during which the beneficiary had engaged in SGA.
- 19.1 percent of all Stage 2 treatment subjects had completed the third milestone; that is, they had successfully submitted an AEE to SSA.⁶⁰ Everyone in this group is included in the 22.3 percent with an SGA cessation date).

⁶⁰ AEEs are considered successfully submitted once they are acceptable for use by BSAS. In rare cases, BSAS does not accept AEEs (for example if an AEE is submitted for a BOND subject who does not yet have a work CDR indicating the beneficiary's disability ceased due to work).

- 15.0 percent of Stage 2 treatment subjects—1,202 beneficiaries—had had their benefits adjusted by SSA according to the offset rules. Everyone in this group had completed the first two milestones (that is, they are included in the 22.3 percent with an SGA cessation date).⁶¹

These proportions for the 2011 to 2016 time period will increase somewhat as SSA completes documentation of treatment subject work activity for this period.

It appears that EWIC services accelerated entry into offset use relative to WIC services, but did not substantially affect the proportion of users. A previous analysis for an earlier period (from the start of the demonstration through December 2014) found that the percentage of T22 beneficiaries having reached each milestone was significantly larger than the corresponding T21 percentage (point estimates ranged from 2.2 to 2.8 percentage points, Exhibit 5-3 in Gubits et al. 2017). As of December 2016, there were no significant differences in the percentages of T21s and T22s completing the three milestones of benefit adjustment (between 0.8 and 1.2 percentage points, Exhibit 7-2).⁶²

These results may indicate that EWIC services accelerated the processing of benefit adjustment for those engaged in SGA, rather than increasing the likelihood of sustained engagement in SGA. Chapter 9 presents estimates of the impacts of EWIC services, relative to WIC services, on earnings above BYA and other earnings outcomes in 2015.

As documented in Section 7.6, many offset users experience long delays from the first month in which the offset should be applied to their benefits to the month in which SSA first adjusts benefits based on offset rules. For all offset users with first adjustments in 2013 through 2016, the median time from first month of offset use to first benefit adjustment was 15 months. Delays are typically shorter for those who enter the offset via the front door than for those who do not, but still substantial (median of 12 months). These delays are important for two reasons: (1) they mean that the evaluation does not immediately have the full picture of offset use that has occurred during any given time window of the demonstration, and (2) they may negatively affect beneficiaries' understanding of how the offset works because it may be nearly two years before they see how it affects their monthly benefits.

⁶¹ Of the 19.1 percent of treatment subjects who had submitted an AEE to SSA, 75 percent have had their benefits adjusted under offset rules. Almost all (95 percent) of those with a benefit adjustment had submitted an AEE to SSA for their first offset year or for subsequent years. Recent back-door entrants into the offset may not yet have had a chance to submit an AEE.

⁶² The estimated means and impacts in Exhibit 7-2 use analysis weights to ensure that the estimates are unbiased for the population represented by the Stage 2 treatment groups. Other statistics in this chapter, which focuses on process outcomes, are not weighted.

Exhibit 7-2. EWIC versus WIC Impact Estimates on Steps towards Benefit Adjustment (through December 31, 2016)

Steps Toward Benefit Adjustment	Average Outcome with Offset and EWIC (T22)	Average Outcome with Offset and WIC (T21)	Estimated Impact of EWIC Instead of WIC Given Offset (T22 vs. T21)
Cessation Date in BTS	24.6	23.5	1.1 (1.0)
AEE Successfully Submitted to SSA	20.6	19.4	1.2 (1.0)
At Least One Month of Benefit Offset Adjustment	15.5	14.7	0.7 (1.0)

Source: Analysis of BTS records from January 2017, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T22 = 3,089; T21 = 4,936.

*/**/*** Impact estimate is significantly different from zero at the 10, 5, and 1 percent levels, respectively, using a two-tailed t-test with 9 degrees of freedom. For each milestone, the average difference in attainment between WIC and EWIC assignment was not statistically significant.

7.1.3. Organization of the Rest of the Chapter

The rest of this chapter provides information on the implementation of the demonstration at each of the four milestones along the front-door pathway to adjustment of benefits under offset rules: (1) engagement in sustained earnings, (2) work CDR completion, (3) AEE submission, and (4) first benefit adjustment under offset rules. The next four sections consider operational factors that may have influenced the progress of beneficiaries through these milestones. The fifth section presents evidence of variation in the pattern of progress across beneficiary characteristics. The sixth section addresses the timing and duration of offset use once underway, followed by a concluding section that summarizes the results.

This chapter draws on both quantitative and qualitative data. The quantitative data are primarily from BTS and provide information on the timing of offset use and benefit adjustments. When available, we supplement BTS data with SSA administrative data. The qualitative data were generated in two phases. Most recently, in 2016 the Evaluation Team interviewed WIC and EWIC supervisors and counselors, a technical assistance provider, the BOND lead for post-entitlement support, the liaison between the BOND sites and the BOND Implementation Team, the Implementation Team director and deputy director, and staff in SSA's ORDES BOND work unit. This followed data collection efforts described in the *2016 Stage 1 Interim Report* (Hoffman et al. 2017): WIC and EWIC focus groups in 2014, and in-depth telephone interviews of 30 work-oriented Stage 2 treatment subjects in late 2015.

7.2. Activities Related to Achieving and Sustaining Sufficient Earnings to Use the Offset

The first milestone toward using the offset is sustained earnings. BOND treatment subjects must engage in SGA for a sustained period to use the benefit offset. Specifically, beneficiaries must complete their

TWP and GP and then earn more than BYA during a calendar year to qualify for an adjustment of their SSDI benefits for that year according to the offset rules. Attainment of this milestone is captured in BTS data by the presence of a cessation date. In the remainder of this section, we consider the reasons why approximately three quarters of Stage 2 subjects did not have a cessation date by the end of 2016, even though they volunteered for BOND.

The most obvious reason that the percentage with a cessation date is not larger concerns pending work CDRs. The number of treatment subjects with cessation dates before December 2016 will increase somewhat as pending work CDRs are completed, but at this point we do not expect the increase to be substantial (see Section 7.3).

For many treatment subjects, the lack of a cessation date is likely due to their personal circumstances. For Stage 2, many who volunteered with the intent of engaging in SGA for a sustained period may have discovered that their medical conditions prevented them from doing so. According to the 36-Month Survey of Stage 2 beneficiaries, more than 80 percent of Stage 2 treatment subjects cited physical or mental health conditions as barriers to work (82.0 percent for T21, 81.3 percent for T22). During the in-depth interviews of work-oriented subjects, 5 of the 10 interviewees without a benefit adjustment identified issues with their physical or mental health as the main factor determining whether and how much they worked. In addition, according to EWICs who participated in three separate 2016 focus group discussions, an indeterminate but potentially substantial number of subjects volunteered to participate in Stage 2 to collect an incentive payment during the enrollment process and did not intend to engage in SGA.⁶³

Some treatment subjects may not have engaged in sustained SGA because they were unable to obtain employment services. The qualitative evidence indicates that some treatment subjects have not been able to obtain desired employment services (Section 3.4). There is no way to quantify how many treatment subjects did not engage in sustained SGA for that specific reason, however. Control subjects presumably encounter similar limits to the availability of such services. Because employment services themselves are not part of the offset treatment, the impact estimates presented in Chapter 9 should be interpreted as impacts given the availability of employment services.

A final, potentially important reason that some treatment subjects have not engaged in sustained SGA may be that they do not understand how the offset works. As discussed in more detail in Chapter 4, at the time of the 36-Month Survey, about half of Stage 2 treatment subjects did not understand that the offset allowed them to engage in SGA and still keep part of their benefits. Counselors who participated in the 2016 WIC and EWIC focus groups indicated that the complexity of the rules made it challenging for beneficiaries to comprehend what they could gain by using the offset.

⁶³ As stated in outreach materials, volunteers received \$40 at the completion of the enrollment interview. The EWIC reports are consistent with similar comments from previous in-depth interviews of counselors, other BOND staff, and small samples of beneficiaries. We cannot quantify the extent to which such volunteers account for treatment subjects who have not used the offset.

7.3. Activities Related to Work CDR Completion

The second step toward adjustment of benefits is when SSA conducts a work CDR to evaluate a beneficiary's work history and earnings. SSA uses this information to determine whether or not the beneficiary has completed the TWP and subsequently engaged in SGA. When conducting the work CDR for a BOND treatment subject, SSA identifies the first month in which SSDI benefits should be adjusted under offset rules. Benefit adjustment may be delayed, however, because of impediments to identifying beneficiaries who engaged in SGA and completing documentation required to establish offset use via the work CDR process. This subsection describes the work CDR process and considers factors that may have contributed to delays in work CDR completion.

There are three steps in the work CDR process which we discuss in operational terms below: (1) SSA or BOND staff identify those in need of a work CDR based on beneficiary-reported earnings or information from other sources, typically an SSA-initiated review of IRS records; (2) beneficiaries, often with the help of SSA or BOND staff, compile information on their work histories; and (3) SSA verifies the information and completes the work CDRs. Several processes in this flow differ across treatment and control group subjects in ways that might lead to systematic differences in the timeliness of work CDR completion for the two groups.

As reported previously (Gubits et al. 2013; Derr et al. 2015; Gubits et al. 2017; Hoffman et al. 2017), several challenges to completing these steps have contributed to long delays in the first adjustment of benefits under offset rules. Notable issues include: beneficiary failure to comply with the SSA requirement to report earnings to BOND or SSA staff; SSA delays in completing work CDRs; and early problems with the functionality of the BSAS. Control subjects also experience delays in benefit adjustments due to earnings for the first two of these reasons, but it appears that the second reason—delays in the processing of work CDRs—were especially problematic for treatment subjects, primarily due to the limited capacity of the SSA staff assigned to complete this specialized work.

As a result, the ORDES work unit accumulated a backlog of pending work CDRs. Even as staff completed work CDRs, additional cases were identified as needing processing. The queue of pending work CDRs quadrupled from 300 cases in March 2014 to 1,200 in September 2014. A year later, following efforts to share the workload with SSA processing centers and field offices, the backlog fell to 750 cases in September 2015. However, 2015 staffing reductions within the ORDES work unit led to an increase to 980 backlog cases as of March 2016. Most recently, in April 2016 SSA dedicated additional ORDES staff to processing work CDRs for BOND treatment subjects. After these staff started, the number of cases pending in the backlog declined substantially, to 325 in December 2016. We describe the evolution of the work CDR process for BOND treatment subjects in detail in Appendix C.

Delays in work CDR completion have implications for benefit adjustment. If a beneficiary reaches a cessation month and continues to engage in SGA over additional months, there are three GP months before his benefits are subject to the offset (the GP starts with the cessation month and ends after two additional months of SGA). If SSA completes adjustments during this three-month period, overpayments are not likely. However, if SSA completes adjustments after this three-month period and the beneficiary continues to engage in SGA, overpayments are likely (see Chapter 8). For subjects with exceptionally long delays, another possible consequence is late notification of the end of the BOND Participation Period (BPP) (see Section 7.4).

7.4. Activities Related to AEE Submission

The third milestone on the front-door pathway to benefit adjustment under offset rules is completion of an AEE. This step is unique to treatment group subjects; under current law, SSA suspends the benefits of those it determines are engaging in SGA after they use their GP months.

Accurate and timely AEE completion is a necessary step for proper prospective benefit adjustment and helps beneficiaries minimize over- and underpayments. When SSA completes a work CDR and identifies a treatment subject earning above BYA after the GP, SSA suspends benefits until the beneficiary submits an initial AEE or until SSA obtains earnings information via IRS records and completes end-of-year reconciliation.⁶⁴ Beneficiaries who submit an AEE for the first time do so with the help of a WIC, EWIC, or BOND Implementation Team member, in person or over the phone. After the initial AEE, BOND staff contact beneficiaries annually to collect subsequent AEEs before the start of a new calendar year. The team attempts to collect the AEEs by mail; those who do not return the AEE by mail are called by the team in January of the following year. If a beneficiary does not submit a new AEE, SSA will adjust benefits for the coming year in accordance with the most recent AEE submitted.

The Implementation Team successfully addressed early problems in the timely and accurate completion of AEEs, and the process has run smoothly since 2013. At that time, the Implementation team began reviewing BTS data to identify beneficiaries in need of an initial AEE (Derr et al. 2015). The demonstration also established a Centralized Post-Entitlement (CPE) Team, composed of BOND counselors and Implementation Team staff, to process AEEs. The CPE took over responsibility for processing AEEs in all sites except the few that were performed well on their own (Derr et al., 2015). As reported in Gubits (2017) and Hoffman et al. (2017), BOND staff perceive that beneficiaries received high quality support and generally submit accurate AEEs.

7.5. Activities Related to Benefit Adjustment Under Offset Rules

Initial benefit adjustment is the final milestone of the benefit offset adjustment process. SSA developed a computer program called BSAS to adjust SSDI benefits for treatment subjects after the beneficiary submits an AEE. After the end of each calendar year, SSA also uses BSAS for an automated reconciliation process that compares expected earnings to earnings reported in IRS records and, in the event of substantial differences, makes additional retroactive benefit adjustments for the prior year. BSAS functions as intended for the cases with an AEE, but does not function as well for automated reconciliation. As a result, SSA staff must conduct manual reviews and adjustments.

SSA staff have resolved early challenges with BSAS performance. Early on, BSAS caused minor delays to adjustments based on AEE submissions, but a correction in December 2012 successfully addressed the underlying issue (Gubits et al. 2013). Other challenges with BSAS functionality led SSA staff to delay automated reconciliation of earnings and benefits for 2011, 2012 and 2013 (Derr et al. 2015). The direct result of such delays was an extended wait for benefit reconciliation, which affects both beneficiaries with

⁶⁴ Because AEEs are used for prospective adjustments and back-door offset entrants seldom learn that their benefits will be adjusted until after their first calendar year of offset use, few submit AEEs for that year. Once notified, however, they are required to submit an AEE for the current calendar year, and are subject to benefit suspension until they submit an AEE.

a benefit offset adjustment in the previous year and first-time offset users. During this wait, beneficiaries may have unknowingly accumulated over- and underpayments. For first time offset users, the delay may have limited their understanding of how their earnings affect their benefits under the offset. SSA ran automated reconciliation for 2014 and 2015, in August and September of the following years.

BSAS functioning remains problematic in two situations, however. First, ORDES staff must still manually process AEEs for former offset users whose earnings have dropped below BYA. The Implementation Team has observed delays with this manual process that led to delays in beneficiaries' return to full benefits. Second, SSA's delay of automated reconciliation in 2011, 2012 and 2013 meant that staff had to complete additional manual processing in those years and later. To illustrate the magnitude of the problem, during the automated reconciliation run in August 2016 (for 2015 earnings), manual review was required in about 78 percent of the approximately 3,700 cases.⁶⁵ The same was true for the majority of cases processed during the 2015 automated reconciliation. ORDES staff expect this issue to be resolved in the August 2017 run (for 2016 earnings). The effect of the manual review is to slightly delay sending overpayment notices to beneficiaries and increase the burden on ORDES staff. Limited availability of both ORDES staff and staff of the information technology contractor that developed BSAS also slowed the diagnosis and correction of problems in BSAS.

7.6. Duration from First Offset Use to First Benefit Adjustment

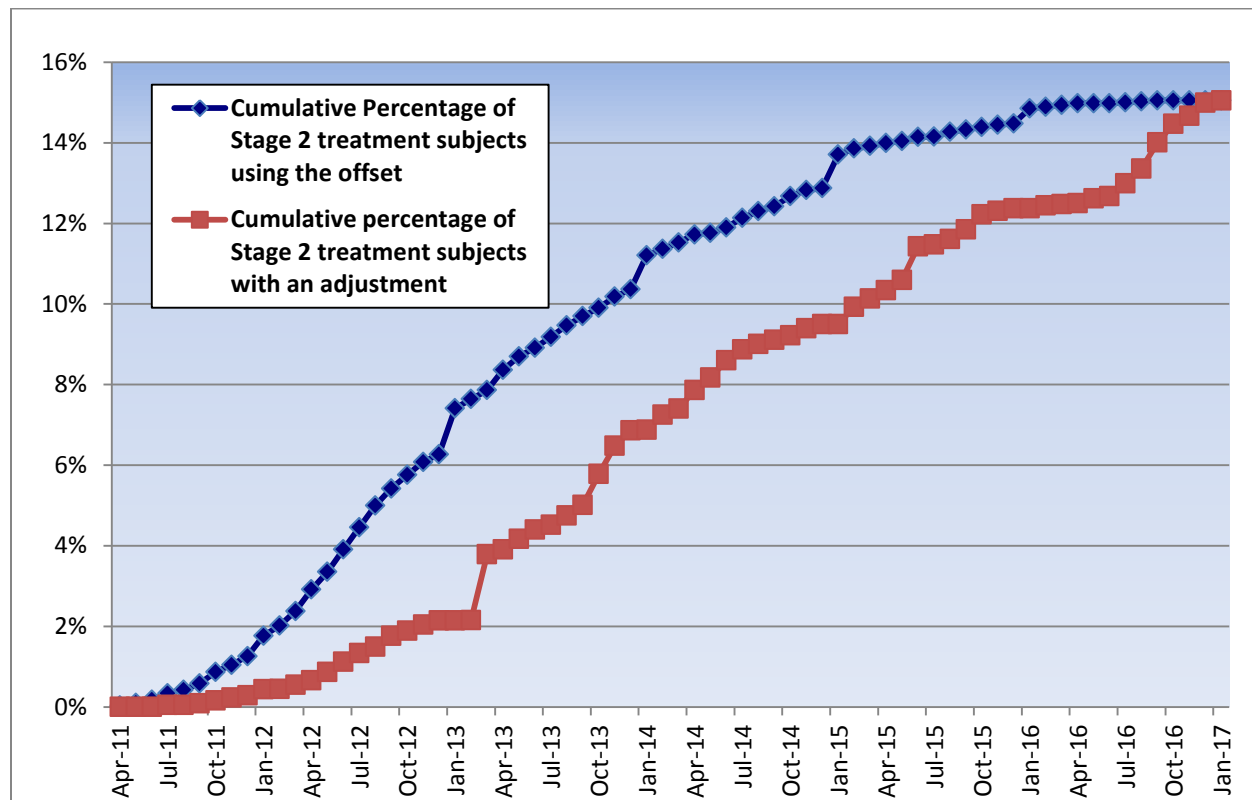
Previous sections examined the factors influencing attainment of offset milestones. Here we look at when first benefit adjustments actually occurred and examine the duration from first month of offset use to the month in which SSA makes the first adjustment. These statistics reflect the aggregate effects of factors affecting the speed of the adjustment process.

Exhibit 7-3 compares cumulative statistics on Stage 2 treatment subjects with a first month of offset use to cumulative statistics on Stage 2 treatment subjects for whom SSA had adjusted benefits, based on SSA administrative data and BTS records.⁶⁶ The upper line in the exhibit shows the cumulative percentage of Stage 2 treatment subjects known to have first begun a year (or, for some first-time users, a partial year) of offset use (that is, those who earned above BYA in a calendar year during the BPP after using up all GP months) as of the indicated month, based on adjustments completed through December 2016. This line will change as SSA makes more retroactive adjustments in the future.

⁶⁵ ORDES staff explained that a high rate of manual exceptions will persist until a year when both BSAS automated reconciliation and benefit cost-of-living adjustments (COLA) are processed on time. ORDES staff have run automated reconciliation on time in recent years, but there was no COLA in 2015. ORDES staff expect that the problem would be resolved by August 2017, when they run automated reconciliation following the 2016 COLA applied in December 2016.

⁶⁶ The data on cumulative offset use are from a monthly extract from SSA's MBR and SSA staff. The data on cumulative percentage of participants with adjustments in 2011 and 2012 are from manual updates made by SSA staff to BTS.. The data on cumulative adjustments executed in 2013, 2014, 2015, and 2016 are from a combination of BTS, BSAS, and MBR data.

Exhibit 7-3. Cumulative Stage 2 Offset Users and Cumulative Stage 2 Treatment Subjects with an Offset Adjustment, Based on December 2016 Data



Source: Information on cumulative offset use is from monthly extracts from SSA's MBR as of January 2017. Information on cumulative adjustments is from BTS, BSAS and MBR data.

Note: The upper line, cumulative percentage of offset users, shows the cumulative percentage of treatment subjects who completed the TWP and GP and then earned above BYA in at least one month, based on administrative records through December 2016. The cumulative percentage of offset users at any point in time presented in this series will continue to increase as SSA completes retroactive adjustments for this period.

The lower line in the exhibit, cumulative percentage with an adjustment, provides information on the months in which initial benefit adjustments under offset rules were made—usually later than the first month of offset use. It represents the percentage of beneficiaries whose benefits actually have been adjusted under offset rules as of the month indicated. Declines that sometimes occur in the cumulative percentage with an adjustment from one month to the next are due to retroactive reversals of initial adjustments. Such cases are not included in the cumulative percentage of offset users because the action determined that they had not actually used the offset.

The lower line in the exhibit shows the cumulative percentage of Stage 2 treatment subjects for whom SSA had actually made an initial adjustment as of the indicated month. This series will not change as SSA makes retroactive adjustments. Although the series is cumulative, in a few months this series declines because SSA reversed some adjustments after the initial adjustment was made.⁶⁷ The main reason the two series differ is that SSA's initial adjustment of benefits for a beneficiary generally occurs many months

⁶⁷ Such changes affect the cumulative offset use series (the upper line) in a less obvious way—the whole series is reduced starting with what was incorrectly considered to be the first month of offset use.

after the first month of offset use. Median duration between these two points is 15 months; we present additional duration statistics below.⁶⁸

The number of Stage 2 treatment subjects with a benefit adjustment grew throughout the demonstration period, but with a different trajectory compared to the number of offset users. A comparison of the lower line in Exhibit 7-3 to the corresponding upper line shows that the duration from first use to first adjustment was substantial for many Stage 2 offset users. For example, as of February 2013, 613 beneficiaries (7.6 percent) had used the offset but SSA had only adjusted the benefits of 173 beneficiaries (2.2 percent). As of the next month, March 2013, the cumulative number of users grew marginally to 631 beneficiaries (7.9 percent) while the cumulative number of beneficiaries with an adjustment jumped to 304 (3.8 percent). The number of first adjustments has been rising sharply since June 2016, for two reasons: ORDES' progress in reducing the work CDR backlog, and the December 2016 adjustments resulting from automated reconciliation for 2015 (which was conducted in August 2016).

Ideally, SSA would first adjust benefits in the first month of offset use, or shortly thereafter. The first month of offset use is often the third month after the disability cessation month, coinciding with GP completion, so in many cases SSA has a two-month window in which to make the adjustment after the cessation month. Such rapid adjustments would help beneficiaries understand how their earnings affect their benefits and total income, and minimize variation in the beneficiaries' monthly income due to delays in administrative processes. That rarely happens, however. Instead, durations are often much longer, for combinations of all of the reasons described earlier: beneficiaries' failure to report earnings timely, if at all; SSA delays in processing work CDRs; and problems with automated reconciliations. For instance, as reported earlier, 97 percent of the 2,496 cessation months that SSA recorded from March 2014 through December 2016 were recorded more than three months after the cessation month.

For first adjustments made between February 25, 2013, and December 31, 2016, Exhibit 7-4 provides statistics on the duration between the first month of offset use and SSA's first adjustment of benefits.⁶⁹ We are able to produce these statistics over this time frame because, starting in early 2013, the Implementation Team adjusted BTS to capture historical information on the timing of first benefit adjustment for treatment group subjects. Because control group subjects do not typically interface with

⁶⁸ An example is helpful in distinguishing between the two cumulative series. If a beneficiary had a cessation date and sufficient earnings to first use the offset in May 2012, but SSA adjusted his or her benefits in September 2013 (retroactively), the beneficiary would be included in the upper line starting in May 2012 and in the lower line starting in September 2013. In contrast, if the same beneficiary had entered through the front door and SSA had first adjusted his or her benefits under offset rules contemporaneously with the first month of offset use (May 2012), the beneficiary would be included in both lines starting in that month.

The values for both series are the same in December 2016 because they are from data in which all those known to have used the offset by December 2016 had their benefits adjusted by December 2016. SSA continues to retroactively identify additional offset users in 2016 or earlier, so the cumulative percentage of Stage 2 treatment subjects who used the offset during the period (including in December 2016) will increase, but the percentage of initial adjustments during the period will not change, by construction.

⁶⁹ We did not include data for the 15 percent of adjustments (N=175) that occurred before February 25, 2013. Most of those adjustments were for beneficiaries who were retroactively discovered to have completed the TWP and subsequently engaged in SGA, and should have been in suspense when they were enrolled into BOND.

the Implementation Team or BTS, we do not have comparable statistics for C2 subjects with benefit suspension (duration from first month of SGA-level earnings after the GP during the EPE until benefits are actually suspended). However, the unobserved durations for C2 subjects are unlikely to be as long as those shown for Stage 2 treatment subjects. While two of the administrative issues that are the source of major delays for treatment subjects—reporting delays and work CDR backlogs—also apply to current-law beneficiaries, snapshots from SSA’s eWork system suggest that backlogs are greater for treatment subjects (Appendix C).

We use evidence of AEE submission before the time of the first benefit adjustment as the best available indication of front-door entry into the offset. However, in some scenarios this definition can lead to misclassification of front- and back-door entrants. Beneficiaries who report their earnings and encounter delays in work CDR processing may lose the opportunity to submit an AEE before SSA adjusts benefits. As a result, they are included in the statistics for the SSA-initiated reconciliation group. Conversely, in a small share of cases, SSA identifies Stage 2 treatment subjects with unreported earnings before initiating reconciliation to adjust benefits—in which case the beneficiaries may submit an AEE within the same calendar year as the first month of offset use. These back-door entrants are included in the statistics for those whose first offset adjustment is based on an AEE.

Exhibit 7-4. Duration from First Offset Use to First Benefit Adjustment (through 2016)

Time to First Adjustment	All Stage 2 Offset Users Through 2016		Stage 2 Offset Users by Initial Adjustment Type			
			Initial Adjustment Through an AEE		Initial Adjustment Through SSA Reconciliation	
	Number	Percentage	Number	Percentage	Number	Percentage
Less than 6 months	235	22.9	229	28.1	6	2.8
6 to 12 months	178	17.3	172	21.1	6	2.8
12 to 18 months	193	18.8	134	16.5	59	27.7
18 to 24 months	223	21.7	145	17.8	78	36.6
24 to 30 months	122	11.9	83	10.2	39	18.3
30 to 36 months	42	4.1	33	4.1	9	4.2
More than 36 months	34	3.3	18	2.2	16	7.5
Total	1,027	100.00	814	100.00	213	100.00
Median months	15	--	12	--	20	--

Source: BTS.

Note: We do not have necessary information to calculate the duration from first offset use to first benefit adjustment for the 15 percent of adjustments (N=175) for Stage 2 treatment subjects that occurred before February 25, 2013.

As seen in the exhibit, 60 percent of first adjustments occurred more than 12 months after first use. For all offset users with first adjustments in 2013 through 2016, the median time from first offset use to first benefit adjustment was 15 months.

To better understand the reason for this delay, we also present processing times in Exhibit 7-4 separately by whether offset entry occurred after submission of an AEE, the bulk of which are “front-door” entries,

or via the reconciliation process, the bulk of which are “back-door” entries.⁷⁰ As discussed previously, the first pathway is expected to take less time than the second because front-door entrants report earnings themselves, begin the work CDR process sooner, and are often proactively engaged in the pathway to benefit adjustment. Further, some back-door entries took longer in early years of the demonstration because SSA ran automated reconciliation behind schedule. Most first adjustments (814 of 1,027, or 79 percent) were made following submission of an AEE.

As expected, median time from first offset use to adjustment was not as long for beneficiaries whose initial adjustment occurred after submission of an AEE (12 months) as it was for those for whom benefits were adjusted by reconciliation (20 months). SSA adjusted the benefits of 28 percent of those who entered via an AEE within six months of the first month of offset use, whereas the comparable figure for initial adjustments via reconciliation is only 4 percent. At the opposite end of the distribution, the time between the first month of offset use and the first adjustment was more than 36 months for 2 percent of entrants via an AEE and 7 percent of entrants via reconciliation.⁷¹

The long durations between offset use and benefit adjustment experienced by offset users are particularly problematic for the demonstration because the period of offset eligibility—the BPP—is time limited. The BPP lasts for 60 months after TWP completion, or the 60 months after the start of BOND for those who had completed their TWPs before random assignment. Hence, many beneficiaries did not fully experience the income consequences of his or her earnings until almost a third of the way through the BPP.

Delays in delivering the incentive via the adjustment process are also noteworthy because they may weaken beneficiaries’ understanding of how the offset works. The BOND logic model posits that beneficiaries need to understand the benefit offset in order to change their behavior in response to the incentive. We do not know the extent to which behavior might have differed had this duration been shorter. The long durations between offset use and benefit adjustment are particularly problematic for back-door entrants because it is possible that these subjects had little or no awareness of how the offset would affect their benefits until the adjustment was made. For those with some awareness, the exact nature of the connection between earnings and benefit adjustments may have been obscured, rather than reinforced, by the long delay and by the effects of overpayment recovery on their subsequent benefit checks.

In addition, delays in receiving a benefit adjustment led to accumulation of overpayments, and the overpayments themselves may have influenced subsequent earnings in ways that are difficult to predict, especially if the overpayments were unexpected. Evidence on the prevalence and size of overpayments for both treatment and control group subjects appears in Chapter 8.

⁷⁰ Manual reconciliation is conducted after the end of the calendar year and may occur either before or after the automated reconciliation. Beneficiaries may request that a manual reconciliation take place before the scheduled automated reconciliation. SSA also conducts manual reconciliations for calendar years in which SSA already completed automated reconciliation. See Section 5.2.2 of the *Process Study Report* for more details.

⁷¹ A chi-square test rejects the equality of the two distributions at the level $p < .001$.

7.7. Variation in Steps to Offset Adjustment by Beneficiary Characteristics

Thus far in this chapter, we have provided information on beneficiaries' attainment of milestones on the way to offset use for all Stage 2 subjects. By taking steps toward offset adjustment, the treatment subjects in effect sort themselves into categories defined by the milestones achieved. In this section, we first compare the characteristics of treatment subjects in three categories, defined by the milestones achieved, to gain insight about characteristics that may lead them to achieve the first major milestone, a cessation date, but not proceed to offset use. We then turn to a more focused analysis about how various observable characteristics associate with the likelihood that the beneficiary becomes a user, holding other characteristics constant.

7.7.1. Profile of Beneficiaries at each Milestone

This section compares baseline characteristics of Stage 2 treatment subjects for those who have attained none of the milestones toward using the benefit offset (6,233) to those who have a cessation date but have nonetheless not yet used the offset (590) and to those who have a cessation date and have used the offset (1,202). The substantial number with a cessation date who are not users are interesting because their cessation date status seemingly makes them well-positioned to use the offset. The fact that they volunteered to participate in the demonstration also suggests they are well-positioned to use the offset. It would be useful to know why they have not done so. Has something prevented or discouraged them from using the offset, or is it simply a matter of time until they become users? Differences between their characteristics and those of the other two groups cannot answer these questions definitively, but do provide insights. Differences between characteristics of users and others are also of interest because they provide initial information about characteristics that predict the likelihood of offset use—a topic we will focus on in Subsection 7.7.2.

There are many significant differences in the characteristics across the three groups (Exhibit 7-5).⁷² Two characteristics of the non-users with a cessation date that clearly distinguish them from the other two groups is duration on the SSDI rolls and the prevalence of mental conditions. A disproportionately large share of this group—60 percent—is from the long-duration stratum—those on the rolls for 36 months or more at the time of selection, compared to approximately 35 percent for each of the other two groups, and they had already received SSDI benefits for a mean of 81 months at enrollment, compared to about 51 months in each of the other two groups. Past research tells us that the bulk of beneficiaries who give up their benefits by returning to work under current law do so in their first five years (60 months) on the rolls (Liu and Stapleton 2011). Such long-duration beneficiaries may have attained cessation dates well in advance of enrollment in BOND, and for various reasons may have found it more difficult or less attractive to return to engagement in SGA than those who had entered SSDI more recently. Hence, this finding diminishes our expectations about the extent to which non-users with a cessation date will eventually become offset users.

⁷² These findings are largely consistent with a similar comparison of beneficiaries who were in each group as of December 2014 (Gubits et al. 2017), with some changes in the size and significance level of differences in characteristics across groups. These changes occurred because cessation dates were identified and benefit adjustments were made for more subjects in 2015 and 2016, moving them from the first group into the second or third groups, or from the second group into the third group.

Exhibit 7-5. Stage 2 Treatment Beneficiary Characteristics by Steps towards Benefit Adjustment (through December 31, 2016)

	Non-offset User, No Cessation Date	Cessation Date, No Offset Use	Offset User	
Baseline Characteristic	(1)	(2)	(3)	P-value
Number of Beneficiaries	6,233	590	1,202	
Gender				
Male	49.4%	45.9%	48.7%	0.279
Female	50.6%	54.1%	51.3%	
Age				
20–29 years	5.0%	7.6%	9.7%	0.000***
30–39 years	12.9%	19.3%	20.4%	
40–44 years	10.5%	14.9%	14.6%	
45–49 years	16.1%	15.1%	16.3%	
50–54 years	25.0%	22.0%	18.7%	
Over age 55	30.5%	21.0%	20.4%	
Mean age (years)	48.3	45.7	44.7	0.000***
Primary Impairment				
Neoplasms	3.8%	3.4%	6.4%	0.000***
Mental Disorders	29.8%	41.7%	32.9%	
Back or Other Musculoskeletal	26.9%	19.7%	22.5%	
Nervous System Disorders	6.6%	5.3%	7.2%	
Circulatory System Disorders	7.1%	3.7%	4.2%	
Genitourinary System Disorders	2.8%	3.1%	2.7%	
Injuries	4.1%	3.9%	6.4%	
Respiratory	2.5%	1.7%	1.5%	
Severe Visual Impairments	2.9%	2.2%	2.2%	
Digestive System	2.0%	1.5%	2.7%	
Other Impairments	11.4%	13.9%	11.3%	
Length of SSDI Receipt				
Long duration (more than 36 months)	34.3%	60.0%	36.0%	0.000***
Number of months received SSDI	51.7	80.8	50.8	0.000***
Benefit Amount and Status				
Monthly SSDI Benefits (\$)	\$1,081	\$1,076	\$1,143	0.004***
AIME (May 2011) (\$)	\$1,865	\$1,767	\$2,093	0.002***
Disabled adult child (DAC)	3.4%	3.9%	2.4%	0.049**
Disabled widow beneficiary (DWB)	1.3%	0.7%	0.6%	0.009***
Dually-entitled disabled adult child	1.0%	2.4%	1.1%	0.102
Dually-entitled disabled widow beneficiary	0.6%	0.7%	0.4%	0.353
Payee is other than self	7.9%	8.8%	6.5%	0.097*

	Non-offset User, No Cessation Date	Cessation Date, No Offset Use	Offset User	
Baseline Characteristic	(1)	(2)	(3)	P-value
Local Characteristics				
County unemployment rate (April 2011)	8.7%	8.5%	8.3%	0.003***
County employment rate for people with a disability (2010)	34.2%	35.4%	35.3%	0.023**
Employment Status at Baseline				
Working for pay	16.4%	39.9%	58.9%	0.000***
Looking for work	22.3%	26.9%	20.8%	0.067*
Education				
Less than a 2-year postsecondary degree	70.4%	63.9	58.9	0.000***
2- or 3-year postsecondary degree	14.6%	16.6%	16.9%	
Bachelor's degree or higher	15.0%	19.5%	24.2%	
Health Status at Baseline				
Health is fair or poor	66.9%	58.4%	54.1%	0.000***
Health is good or very good	33.1%	41.6%	45.9%	

Source: Analysis of BTS records from January 2017 and BOND Stage 2 Baseline Survey for all Stage 2 treatment subjects. Data on county unemployment rates in 2011 are from the American Community Survey, American FactFinder (<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>). Data on county employment rates in 2010 for people with disabilities are from the Bureau of Labor Statistics (<http://www.bls.gov/lau/tables.htm>).

Note: p-values shown are from statistical tests of differences in percentages across the three groups. Groups of mutually-exclusive characteristics were tested for differences with chi-squared tests. Single characteristics not part of a mutually-exclusive group were tested for differences by F-tests. The Chi-squared statistic from omnibus statistical test of difference between groups across all characteristics is 1,547, with a p-value of 0.000.

Sample size: 8,025.

*/**/** Indicate statistical significance at the 10, 5, and 1 percent levels, respectively.

The relatively high prevalence of mental disorders among non-users with a cessation date —42 percent, versus 30 to 33 percent for the other two groups—may also diminish expectations about eventual use of the offset, although this is less clear. Mental disorders include both psychiatric and intellectual disorders. We know from other research that both of these groups of beneficiaries are more likely to work than those with many other disorders, but appear to be less likely to engage in sustained SGA because of relatively high barriers to obtaining well-paying, full-time, permanent jobs, even though their cessation date implies that they engaged in SGA in at least one post-TWP month (Livermore and Bardos, 2017 and Livermore et al. 2017). Counselors who participated in the 2016 WIC and EWIC focus groups indicated that subjects with mental disorders found the reporting requirements associated with offset use to be complicated and stressful. One counselor also noted that beneficiaries with anxiety are particularly afraid to lose their benefits. The high prevalence of mental disorders among non-users with a cessation date may also explain why this group has the largest percentage with a representative payee, the lowest mean average indexed monthly earnings (AIME),⁷³ and the largest share percentage of disabled adult children (including those who are dually-entitled).

⁷³ The AIME averages monthly earnings over a maximum of 35 years of work history.

The group of non-users with a cessation date has several other characteristics that lie between those for the other two groups, suggesting that they consist of a mixture of beneficiaries who will become offset users and others who will not. Compared to those without a cessation date, they were more likely to be working for pay at baseline, are more likely to have a postsecondary degree, and more likely to be in good or very good health, but each of the corresponding percentages for users is higher.

A substantial number of characteristics of users differentiate them from both non-user groups and therefore are somewhat predictive of offset use. Compared to both non-user groups, at baseline they were disproportionately in the younger age groups, they had higher mean AIME and monthly SSDI benefits, they were less likely to be entitled as a disabled adult child or widow(er) and less likely to have a representative payee, they lived in counties with relatively low unemployment rates, they were much more likely to be working for pay, they were more likely to have a post-secondary degree, and they were more likely to be in good or very good health. In the next subsection, we consider the extent to which each of these characteristics, as well as others in the table, predict offset use, holding the other characteristics constant via regression analysis.

7.7.2. Beneficiary Characteristics Predictive of Offset Use

In a multivariate regression analysis of Stage 2 treatment subjects, many of these beneficiary characteristics are predictive of being an offset user. We estimated a linear probability model for having a benefit adjustment in at least one month from the beginning of the demonstration through December 2016, with explanatory variables for gender, age category, primary impairment, length of SSDI receipt, benefit amount and status, local economic conditions, employment status, educational attainment, and health status, all at BOND entry (Exhibit 7-6). Readers should interpret these results with caution because in a regression with this number of predictors we would expect a few coefficients to be statistically significant by chance—that is, significant even though the corresponding actual coefficient for the underlying population is zero.⁷⁴

Age is a statistically significant predictor of benefit adjustment under offset rules. For example, beneficiaries ages 20-29 were 14.3 percentage points more likely to use the offset relative to beneficiaries ages 55 and older, holding other characteristics constant. Similarly, primary impairments of neoplasms, back or other musculoskeletal disorders, and injuries were all associated with a statistically significant increase in the likelihood of offset use relative to beneficiaries with other impairments, while beneficiaries with severe visual impairments were significantly less likely to have used the offset. Turning to self-reported health status, beneficiaries who reported fair or poor health were 3.4 percentage points less likely to have a benefit adjustment than those in good or very good health. Beneficiary attainment of a bachelor's degree or higher was associated with a 3.5 percentage point increase in offset use relative to beneficiaries with education less than a postsecondary degree. Disabled adult child beneficiaries and

⁷⁴ These findings are largely consistent with a similar regression analysis based on offset use as of December 2014 (Gubits et al. 2017), with changes in the magnitude and significance level of coefficients for some beneficiary characteristics. These changes occurred because benefit adjustments were made for more subjects in 2015 and 2016, changing the model's outcome variable for them.

beneficiaries with representative payees were also less likely to have a benefit adjustment than beneficiaries without those characteristics.

Employment and past earnings were also predictive of benefit adjustment under offset rules, other things constant. Baseline employment was associated with a 28.4 percentage point increased likelihood of benefit adjustment relative to those not looking for work and not working. Holding other characteristics constant, those looking for work were 6.8 percentage points more likely to have a benefit adjustment relative to those not looking for work and not working. Previous earnings was also a strong indicator of future benefit adjustment. An increase in AIME by \$1,000 was associated with a 1.7 percentage point increase in the likelihood of benefit adjustment. In addition, increases in the county employment rate for people with disabilities (as measured by the American Community Survey) were associated with a small but statistically significant increase in benefit adjustment.

Exhibit 7-6. Predictors of Benefit Adjustment for Stage 2 Treatment Subjects (through December 31, 2016)

Predictor of Benefit Offset Adjustment	Coefficient (1)	Standard Error (2)	P-value
Gender			
Male	-0.04	0.61	0.949
Female	00.00	--	--
Age			
20–29 years	14.30	3.78	0.004***
30–39 years	10.17	1.83	0.000***
40–44 years	8.14	1.95	0.002***
45–49 years	4.81	1.72	0.021**
50–54 years	1.04	0.74	0.192
Over age 55	0.00	--	--
Primary Impairment			
Neoplasms	4.99	2.39	0.066*
Mental Disorders	-0.26	1.74	0.886
Back or Other Musculoskeletal	1.76	0.87	0.073*
Nervous System Disorders	-0.35	1.86	0.855
Circulatory System Disorders	-1.33	1.84	0.487
Genitourinary System Disorders	-2.51	2.62	0.363
Injuries	6.49	1.65	0.003***
Respiratory	0.15	1.86	0.939
Severe Visual Impairments	-4.94	2.25	0.056*
Digestive System	6.14	3.45	0.109
Other Impairments	0.00	--	--
Length of SSDI Receipt			
Short duration (36 months or less)	0.78	0.95	0.430
Number of months received SSDI	0.00	0.01	0.887

Predictor of Benefit Offset Adjustment	Coefficient (1)	Standard Error (2)	P-value
Benefit Amount and Status			
Monthly SSDI benefits (\$1,000)	0.66	1.50	0.672
AIME (May 2011) (\$1,000)	1.69	0.29	0.000***
Disabled adult child (DAC)	-9.91	1.88	0.001***
Disabled widow beneficiary (DWB)	1.09	1.37	0.447
Payee is other than self	-6.17	0.80	0.000***
Local characteristics			
County unemployment rate (April 2011)	0.04	0.14	0.800
County employment rate for people with a disability (2010)	0.05	0.02	0.028**
Employment status at baseline			
Working for pay	28.38	1.67	0.000***
Looking for work	6.83	0.87	0.000***
Not working for pay or looking for work	0.00	--	--
Education			
2- or 3-year postsecondary degree	1.16	1.08	0.310
Bachelor's degree or higher	3.50	1.34	0.028**
Less than a 2-year postsecondary degree	0.00	--	--
Health status at baseline			
Health is fair or poor	-3.42	0.77	0.002***
Health is good or very good	0.00	--	--

Source: Analysis of BTS records from January 2017, baseline administrative SSA records, and Stage 2 Baseline Survey data for all Stage 2 treatment subjects.

Notes: The model was estimated using a clustered linear regression model without weights. The outcome variable is an indicator of whether the recipient has at least one month of offset use through December 2016. Adjusted R-Squared: 0.14. Model F-statistic is 39.36, p-value < .0001.

Sample size: 8,025.

*/**/** Indicate statistical significance at the 10, 5, and 1 percent levels, respectively.

7.8. Duration of Offset Use

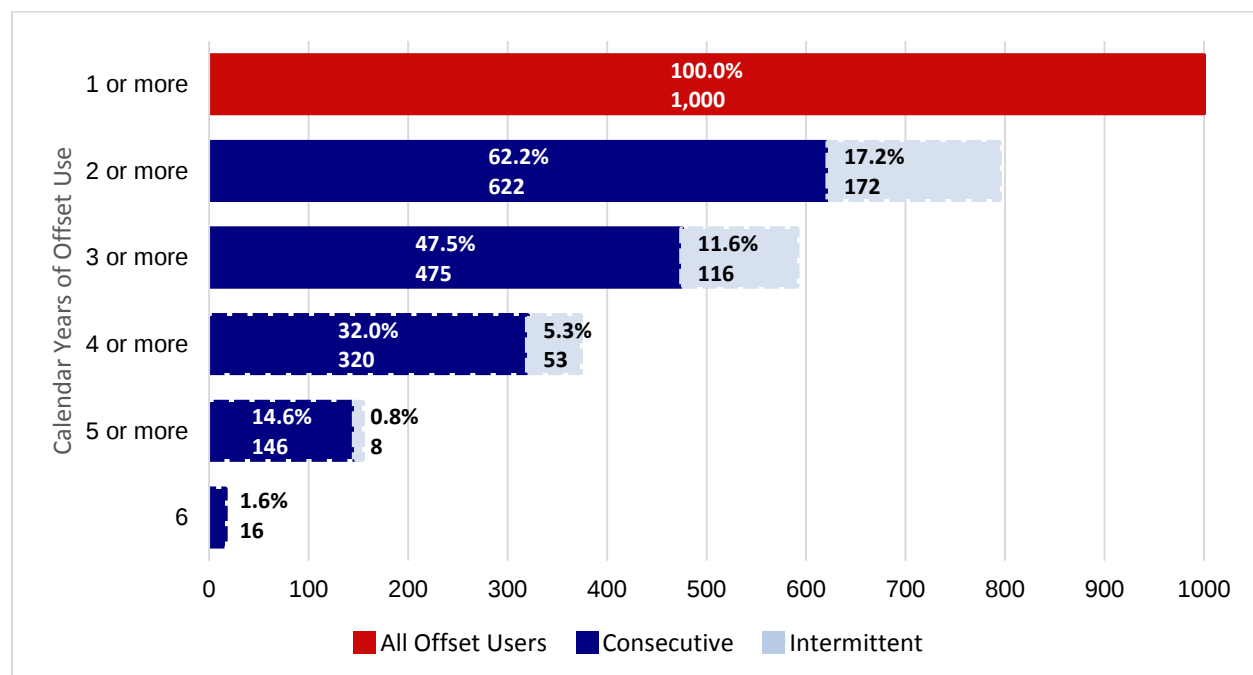
After first using the benefit offset, beneficiaries may continue to earn above BYA and continue to use the offset. Alternatively, if their calendar-year earnings fall below BYA, they return to full benefits in future years. Beneficiaries may reduce work to the point that they no longer use the offset because of a worsening medical condition or other change in their circumstances prevents them from continuing to earn more than BYA. Or they may simply decide, for any reason, that they prefer to earn less than BYA and receive full benefits. Users who stop using the offset may return to using it later. This section presents statistics on duration of offset use among Stage 2 offset users who are known to have started using the offset in 2014 or earlier, based on all adjustments made through December 2016.⁷⁵ We observe use by all of the users in this sample from three to six years, depending on when their first use occurred.

⁷⁵ We identified 1,003 beneficiaries with first offset use between 2011 and 2014. However, we excluded 3 cases, for whom information on offset use throughout this period is incomplete.

A substantial majority (62.2 percent) of the 1,000 offset users continued to use the offset for at least two consecutive years, and nearly half (47.5 percent) used it for at least three consecutive years (Exhibit 7-7). Information on longer use of the offset by these users is incomplete, because we only have data for three years for those who first used the offset in 2014. The bars in Exhibit 7-7 with dashed borders show the usage observed so far; the size of all of the bars would presumably be larger if we could observe all of the users for six calendar years, starting with the first year of offset use. So far, 32.0 percent of the users have used the offset for four consecutive calendar years, 14.6 percent for five years, and 1.6 percent for six years (the maximum). In addition, some of the users who stopped using the offset for at least one calendar year resumed using it in a later calendar year (intermittent users), including 17.2 percent who have used it for at least two calendar years, 11.6 percent for at least three years, 5.3 percent for at least four years and 0.8 percent for five years, the maximum for intermittent users.

At face value, multiple years of offset use are indicative of both willingness and ability to use the offset for a long period. However, there are several reasons to believe that not all offset users initially make this choice deliberately. This possibility stems from the fact that half of the treatment group lacked an accurate understanding of the offset rules (Chapter 5), 21 percent of offset users did not submit AEEs prior to their initial benefit adjustment (Section 7.6), and a substantial number of the users in this sample had already been using the offset for at least two calendar years before seeing any change in their benefit checks and thus it may not have been clear to them that they were using the offset (Section 7.6).

Exhibit 7-7. Calendar Years of Offset Use for Stage 2 Treatment Subjects with First Use Observed in 2014 or Earlier, as of December 2016



Source: Analysis of BTS records.

Note: The 1,000 users consist of those whose first calendar year of offset use was 2011 through 2014, based on adjustments reported in administrative records through December 2016, and excludes 3 users whose data were incomplete. Thus far, we have observed their offset use for three to six years, depending on the first calendar year of use: we observed 10 percent of the sample for the full six-year period. For this reason we used dashed outlines to identify bars that would be larger if we had already observed these cases for six years starting with the first year of offset use, by unknown amounts. The number of users with first use during the 2011-2014 period may also increase as SSA makes retroactive adjustments. All percentages are based on the full sample. Starting with the "2 or more" bar, all users in each bar are a subset of users in the bar above it.

7.9. End of the BOND Participation Period

BOND is a time-limited demonstration in which treatment subjects who complete their TWP enter a 60-month BOND Participation Period (BPP). During the BPP, subjects have the opportunity to use the benefit offset if their earnings exceed the BYA, but after the BPP ends, subjects transition back to current-law SSDI rules. At that point, SSA reviews the work and earnings of beneficiaries and use current-law rules to determine whether the beneficiary is performing SGA. If earnings in a month after the BPP exceed the SGA threshold, SSA terminates the beneficiary's entitlement to SSDI benefits; otherwise entitlement continues.⁷⁶

A subject's BPP starts the month after TWP completion or the month after random assignment to a BOND treatment group—whichever is later. Stage 2 treatment subjects volunteered, enrolled, and were randomly assigned throughout the demonstration's outreach period of March 2011 to September 2012. Therefore, the T21 and T22 subjects who started the BPP *earliest* were those who enrolled in March 2011 and had already completed the TWP; this cohort reached their BPP end dates in March 2016. As of March 2017, the total number of Stage 2 treatment subjects known to have completed the TWP—and thus known to have entered the BPP—was approximately 2,600, or about one-third of all T21 and T22 subjects. The total number of beneficiaries who will eventually enter the BPP is not yet known.⁷⁷

As of January 2017, 7.4 percent (591) of Stage 2 treatment subjects were known to have BPP end dates in 2016. The number of subjects who had reached the end of their BPP increased steadily throughout the year, with the smallest monthly number (19) occurring in March and the largest monthly number (94) occurring in December. Of the 1,202 T21 and T22 subjects who were known to have ever used the offset by the end of 2016, 231 (19 percent) had BPP end dates in 2016, including 100 subjects who used the offset in 2016. While additional Stage 2 offset users may be identified over time, the cohort with BPP end dates in 2016 will not be eligible to use the offset past 2016.

7.10. Summary

There are four milestones along the preferred front-door pathway to offset use. First, the beneficiary must work enough to complete the TWP and GP. Second, SSA must document the beneficiary's work history by completing a work CDR and assigning a cessation date. Third, treatment subjects are required to complete and submit an AEE describing expected earnings, which must exceed BYA. Fourth, SSA must administer the initial benefit adjustment under offset rules.

Most Stage 2 offset users have reported their earnings proactively. To date, approximately 79 percent of offset users have entered through the front door, after reporting earnings and completing and submitting an AEE. The other users have entered through the back door, because they did not report earnings in a timely manner.

⁷⁶ More information on the end of the BPP, and the administrative processes supporting beneficiaries' transitions from the BPP, appears in Chapter 8 and Appendix C of the *2017 Stage 1 Interim Process, Participation, and Impact Report* (Croake et al. 2017).

⁷⁷ Treatment subjects must complete the TWP by September 2017 to enter the BPP, so the *latest* possible BPP will begin in October 2017 and end in September 2022.

An additional 7.3 percent of Stage 2 treatment subjects reached an earlier major milestone on the pathway to the benefit adjustment: establishment of an SGA cessation date via a completed work CDR. In some of these cases, the beneficiary had successfully submitted an AEE to SSA.

As of December 2016, SSA had adjusted the benefits of 1,202 (15.0) percent of Stage 2 treatment subjects. The percentage of identified Stage 2 treatment subjects known to have used the offset by the end of 2016 will increase as SSA completes processing the work CDR backlog.

Several factors might explain why use of the offset is not more common—even among those who volunteered for BOND:

1. Many beneficiaries may be unable, uninterested, or unprepared to engage in sustained SGA-level work. SSA determined that beneficiaries were unable to engage in SGA for at least 12 months when they first entered SSDI, and that may still be true for a large majority of them in this study as of December 2016. Some treatment subjects may have intended to use the offset when they volunteered for BOND, but later found that they were unable or unwilling to do so. Others may have volunteered for BOND without intending to engage in SGA, instead interested by the opportunity to receive compensation for interviews.
2. Beneficiaries may not understand how the offset works well enough to be influenced by the work incentive.
3. After volunteering for the offset opportunity, beneficiaries who intend to engage in sustained SGA-level work may require time to obtain counseling or employment-related services, or to address a variety of issues and find an SGA-level job. Beneficiaries who have not previously done so must also complete their nine TWP months and three GP months before the offset is applied to their benefits.
4. Once beneficiaries have worked enough to warrant a benefit adjustment under the offset rules, there is often a lengthy delay before SSA actually makes the adjustment.

As SSA processes the remaining work CDR backlog that existed at the end of 2016, we expect to see the number of users in 2016 and—to a lesser extent—earlier years to increase. We also know that the duration of the delay is typically quite long. This is evident from analysis of the delays from the first month of offset use to SSA's first adjustment of benefits. We know that for the 216 Stage 2 treatment subjects whose first adjustments occurred in 2016, in 173 cases (80 percent) SSA identified years of offset use that preceded 2016.

For all offset users with first adjustments in 2013 through 2016, the median duration from the first month of offset use to the first adjustment was 15 months, or slightly more than one year. We have identified three main sources of the delays from the start of offset use to the first benefit adjustment: many beneficiaries did not report earnings, SSA did not process work CDRs in a timely fashion, primarily due to insufficient resources at the BOND work unit; and BSAS deficiencies that have caused substantial delays in automated reconciliation. Delays in beneficiary reporting and automated reconciliation are more important for users who enter through the back door than for those who enter through the front door. This is reflected in the comparison of the median duration of first adjustments that were made without the

completion of an AEE (20 months) to the median for the half of adjustments that occurred after completion of an AEE (12 months).

Long durations between offset use and first offset adjustments present challenges for both the implementation and evaluation of BOND. The BOND logic model posits that beneficiaries need to understand the benefit offset to change their behavior in response to the incentive. Delays in delivery of the incentive via the adjustment process may negatively affect beneficiaries' understanding of how the offset works and thus result in behavior that differs from what would be observed if adjustments occurred more quickly. Further, long durations often lead to large overpayments, which may influence beneficiaries' behavior and contribute to confusion about the relationship between benefits and earnings. We return to the topic of overpayments in the next chapter. Long processing times before initial benefit adjustment also mean that we do not yet have the full picture of the offset use that has occurred in the 2011–2016 period, particularly in the most recent years.

An important implication of the findings is that the impact estimates, which compare outcomes for the treatment and control subjects, may be substantially different if benefit adjustments were completed more rapidly for both treatment and control subjects. A second implication is that the estimated impacts on benefits paid *in* 2015 (see Chapter 9) and in earlier years may differ substantially from impacts on benefits that will eventually be paid to beneficiaries *for* 2015 and earlier years, after all retroactive adjustments are made.

8. Overpayments

Several challenges have hindered timely and accurate benefit offset adjustment for BOND treatment subjects (Chapter 7). This chapter documents a related outcome: overpayments. Specifically, this chapter defines overpayments, presents estimates of their prevalence, compares overpayments associated with initial offset use to those that occur after the first benefit offset adjustment, presents estimates of BOND's impact on overpayments among Stage 2 subjects during the demonstration's first four years, and presents information on beneficiaries' perceptions and reactions to overpayments. Although we focus on overpayments, we also briefly discuss underpayments. However, we do not have precise statistics on the prevalence and size of underpayments.

8.1. Definition of Overpayments

Overpayments occur when SSA pays beneficiaries more in SSDI benefits than the amount to which they are entitled. In this report, we focus on the only type of overpayment directly affected by BOND: work-related overpayments.⁷⁸ In addition, they are one of the most prevalent types of DI overpayments (SSA Office of the Inspector General 2015).

Work-related overpayments may occur for several reasons, all of which relate to the timeliness and accuracy of benefit adjustment as earnings change. After beneficiaries have used their three GP months, treatment and control subjects may accrue work-related overpayments while in the BPP or EPE, respectively. When engaging in SGA after the GP, beneficiaries may incur overpayments if they do not report earnings, if SSA is delayed in processing work CDRs, or if BSAS errors occur (see Section 7.5). In addition, while using the offset, treatment subjects may encounter overpayments due to revised AEEs or inaccurate AEEs.⁷⁹ BSAS and AEEs are unique to treatment subjects and hence do not contribute to overpayments for control subjects.

Overpayments for treatment subjects fall into two categories. The first category, which we refer to as a *previous-period overpayment*, is identified after the current annual accounting period ends. That is, treatment subjects may encounter previous-period overpayments when SSA discovers overpayments that occurred in the previous calendar year. When SSA identifies a previous-period overpayment, it requires beneficiaries to repay the owed amount either by check or through withheld future benefits. Beneficiaries have the right to appeal the previous-period overpayment, and SSA may agree to set up a repayment plan to mitigate financial hardship.

⁷⁸ Other reasons for overpayments include death, medical improvement, imprisonment or fugitive status, and a change in living arrangements. Table 2 in an audit report by the SSA Office of the Inspector General (2015) includes a complete list of reasons for overpayments and their prevalence among their sampled beneficiaries.

⁷⁹ To have an accurate AEE, beneficiaries must provide SSA with an accurate estimate of earnings and non-countable earnings. SSA subtracts non-countable earnings from total earnings when determining whether a beneficiary engaged in SGA. Examples of non-countable earnings include impairment-related work expenses and paid time off.

The second category of overpayment that may occur for treatment subjects (but not control subjects) is *incorrect payment*, which are errors identified during the current annual accounting period. In these cases, SSA withholds benefit checks immediately until the payment is recovered or until the end of the calendar year, whichever comes first.⁸⁰ Beneficiaries with incorrect payments do not have the right to appeal the overpayment (Derr et al. 2015).

Incorrect payments can occur at offset entry or following the submission of a revised AEE. As described in Section 1.1, each treatment beneficiary's monthly benefit amount is based on expected earnings for the entire calendar year, as estimated by the beneficiary. Estimating earnings for the calendar year is difficult for some beneficiaries, especially those with fluctuating hours and unpredictable earnings. As a result, some beneficiaries start to earn more than they initially predicted and submit a revised AEE for a larger amount before the end of the calendar year. Such submissions can result in incorrect payments because changes in the earnings estimate submitted after January (or after the first offset month, if later) retroactively affect benefits paid in previous months within the same calendar year.

Control subjects may accrue work-related previous period overpayments but not incorrect payments. This is because control beneficiaries are subject to current law, under which SSA uses a monthly accounting period to adjust benefits and identifies previous-period overpayments after the end of a given month. There is no opportunity to identify incorrect payments within the monthly accounting period followed under current law.

Overpayments have implications for SSDI Trust Fund expenditures. Of all the overpayment debt identified during an audit of a representative sample of SSDI beneficiaries in 2004, 53 percent was recovered, 26 percent was still outstanding, and 21 percent was waived or cancelled a decade later (SSA Office of the Inspector General 2015). We do not have information on the recovery rate for work-related previous-period overpayments or incorrect payments. Because SSA is not able to recover some overpayments, the net cost to the government is a portion of the overpayment amount plus administrative costs from overpayment recovery.

Unless otherwise noted, the remainder of this chapter uses the term overpayments to refer to both categories of work-related overpayments: previous-period overpayments and incorrect payments.

8.2. Prevalence of Overpayments

This section uses SSA administrative data to describe the prevalence and size of overpayments made to Stage 2 treatment beneficiaries. The section supplements these administrative-data based findings with qualitative data from focus groups with BOND staff and in-depth interviews with beneficiaries.

⁸⁰ At the end of each calendar year, incorrect payments are eligible to be reclassified as overpayments. According to ORDES staff, SSA withholds benefits until a beneficiary with an incorrect payment submits a new AEE after the start of a new calendar year or until SSA runs an automated reconciliation for the previous year, whichever comes first. In addition, a beneficiary can ask ORDES to process the overpayment earlier by asking for a beneficiary-initiated reconciliation.

This is the first evaluation report to present statistics on the prevalence and size of overpayments for T21 and T22 subjects. It also provides estimates of the impact of assignment to each of these groups, rather than C2, on the prevalence and size of overpayments, and tests for differences in impacts between the groups.

This section includes overpayments that occurred after BOND random assignment through December 2014. Stage 2 random assignment began in early 2011 and continued through September 2014 (Gubits et al. 2013).⁸¹ Accordingly, we expect overpayment rates for Stage 2 treatment and C2 beneficiaries to be lowest in 2011 when enrollment was lowest. The analysis period ends in 2014 because many overpayments for more recent years were presumably not yet captured in administrative data when the data were extracted for this report, in December 2016. This is apparent from the statistics for the duration from first month of offset use to the SSA first adjustment of benefits (during which time beneficiaries may accumulate overpayments; see Chapter 7). If the same duration distribution applies to first offset users in 2013 and 2014, the December 2016 overpayment data miss up to about 3 percent of overpayments for 2013 and 19 percent for 2014. Hence, the estimates of prevalence and mean size in 2014 are likely biased downward, and there may be diminishingly smaller bias in 2013 and earlier.⁸²

The estimates of overpayments are for the subsample of BOND disabled-worker beneficiaries with the necessary data needed for analysis. Specifically, the included cases had to meet two requirements: (i) entitled to SSDI solely based on their own earnings histories and (ii) have DBAD data for each month of the calendar year. It was not possible to produce accurate overpayment estimates for the excluded cases.⁸³ The resulting subsample includes about 92 percent of the beneficiaries included in the impact on earnings and benefits. For this reason, the impact estimates for overpayments are based on a large subset of the samples for which we report impacts on earnings and benefits in Chapter 9. More information on the

⁸¹ Stage 2 enrollment began in February 2011 and the first enrolled beneficiaries were eligible to use the offset in March 2011, the month after random assignment. No Stage 2 beneficiaries used the offset in March 2011 and only three used it in April 2011. We begin our analysis in May 2011, as Stage 2 offset use began to grow. May 2011 also corresponds with the first month of Stage 1 offset use.

⁸² We used administrative data to estimate overpayments to Stage 1 beneficiaries through 2013 in the *2016 Stage 1 Interim Process, Participation, and Impact Report* (Hoffman et al. 2017) and updated and extended that analysis through 2014 using more recent data in the *2017 Stage 1 Interim Process, Participation, and Impact Report* (Croake et al. 2017). A comparison of the updated 2011, 2012, and 2013 results with the previous analysis illustrates this bias in the Stage 1 sample and provides an indication of the size of the bias in the Stage 2 estimates presented in this report. We discuss the results of the Stage 1 comparisons in Section 8.3 of this report.

⁸³ The unweighted samples for the overpayment analysis include about 92 percent of subjects in each of the T21 (N=4,854), T22 (N=3,041), and C2 (N=4,849) samples for the impact on earnings and benefits. The difference between the sample used to estimate earnings and benefit impacts and the sample used to estimate overpayment impacts reflects differences in how they were selected. The sample used to estimate the impact of BOND on overpayments excluded disabled beneficiaries with auxiliary entitlement and this exclusion accounts for over 88 percent of the cases dropped in 2012, 2013, and 2014. For 2011, a lower proportion—about two-thirds of the exclusions—were dropped due to auxiliary entitlement. The remainder of exclusions are due to missing DBAD data. See Appendix D of this report for more information on the missing DBAD data and the sample sizes for the overpayment analysis.

construction of the overpayment measure and sample selection is available in Appendix C of the *2016 Stage 1 Interim Process, Participation, and Impact Report*.

Using qualitative data, this chapter also includes summaries of staff and beneficiary reports of the frequency of overpayments. We present information from focus groups with WIC and EWIC counselors and supervisors conducted in 2014 and 2016, and from interviews with a sample of work-oriented T21 and T22 beneficiaries conducted in 2015.⁸⁴

The statistics for overpayments in 2011 through 2014 cover a slightly different time period than the qualitative information collected on overpayments. We conducted WIC and EWIC staff focus groups in fall 2013, fall 2014, and fall 2016 and conducted in-depth interviews with work-oriented beneficiaries in fall 2015.

8.2.1. Overpayments During the First Four Years of BOND

Starting early in the demonstration and continuing until our most recent focus groups, counselors have reported that BOND treatment beneficiaries who use the offset are very likely to experience overpayments, particularly when they first enter the offset. Offset users we have interviewed have made similar comments (Derr et al. 2015; Hoffman et al. 2017). Consistent with these qualitative reports, an analysis of SSA administrative data finds that overpayments were common among offset users in the first four years of the demonstration. The statistics in Exhibit 8-1 are representative of the national population of SSDI beneficiaries who are eligible for Stage 2 and would volunteer for the demonstration; we used weight and regression-adjustments for beneficiary characteristics to adjust sample statistics for that purpose.⁸⁵ According to data extracted in December 2016, a large majority of Stage 2 treatment subjects who used the offset at any time between May 2011 and December 2014 had overpayments that accrued during that period (90.8 percent). This figure represents about 11.4 percent of all Stage 2 treatment subjects in our sample.⁸⁶

The prevalence of overpayments varied across the demonstration's first four years. Overpayments occurred for 76 percent of Stage 2 offset users in 2011, increased to 80 percent in 2012, then gradually

⁸⁴ We include responses from WIC and EWIC staff that apply to both Stage 1 (T1) and Stage 2 (T21 and T22) subjects. Of the 45 counselors and supervisors who participated in focus groups, 12 participants (27 percent) worked at sites where post-entitlement services were conducted by counselors rather than by centralized staff (see Section 4.1). Compared to the centralized focus group participants, the counselors and supervisors from non-centralized sites may know more about factors contributing to overpayments because they were more involved in helping beneficiaries complete and submit paperwork for benefit adjustments.

⁸⁵ The regression results are from a comparison of T21 and T22 subjects to C2 subjects. The regression-adjusted average outcomes are calculated as the average predicted outcomes in the T21 and T22 group using the coefficients estimated in the regression model.

⁸⁶ Approximately 12.9 percent of our sample used the offset between May 2011 and December 2014, based on statistics that are weighted and not regression adjusted. These statistics indicate that 11.7 percent of T21 and T22 subjects in the sample were overpaid, which differs slightly from the regression-adjusted statistic in the text, 11.4 percent. During the same period, the same proportion (12.9 percent) of all Stage 2 treatment subjects are known to have used the offset.

declined to 78 percent in 2013 and 66 percent in 2014. The prevalence rates were lower among all Stage 2 treatment subjects (offset users and non-users combined): 1.1 percent in 2011, 4.9 percent in 2012, 6.5 percent in 2013, and 6.3 percent in 2014. This is because there are no work-related overpayments for non-users, by definition. Both sets of rates will rise as SSA retroactively identifies more overpaid beneficiaries, especially for the most recent years.

The prevalence of overpayments is lowest in the first year in large part because many Stage 2 subjects had not yet enrolled in BOND. Less than 2 percent of all Stage 2 treatment subjects had used the offset and hence were at risk of an overpayment as of December 2011. The prevalence of overpayments among all Stage 2 treatment subjects increased across the first four years of the demonstration as the number of offset users increased.

For those with an overpayment, the mean amount of the overpayment ranged from approximately \$1,500 in 2011 to over \$2,700 in 2013. The mean total overpayment over the entire 44-month period for all offset users with an overpayment in any month was \$4,309 (column 4 of Exhibit 8-1). The variation is partially attributed to the partial-year period analyzed in 2011; on a per-month basis, average overpayments ranged from \$192 in 2011 to \$206 in 2012, \$230 in 2013, and \$224 in 2014. This pattern may change as the result of later retroactive identification of new users and overpayments. The pattern across years in the mean overpayment among all Stage 2 treatment subjects is determined by the combination of the pattern in prevalence and the pattern in the mean overpayment amount to those with overpayments.

Exhibit 8-1. Prevalence of Overpayments in 2011, 2012, 2013, or 2014

Period	Stage 2 Treatment Subjects with Overpayment (%)	Mean Overpayment in Period for Stage 2 Treatment Subjects	Stage 2 Offset Users with Overpayment (%)	Mean Overpayment in Period for Stage 2 Subjects with Overpayment in Period
May–December 2011	1.1	\$16	75.8	\$1,533
January–December 2012	5.0	\$123	79.9	\$2,468
January–December 2013	6.6	\$183	78.2	\$2,761
January–December 2014	6.4	\$171	66.2	\$2,689
May 2011–December 2014	11.4	\$493	90.8	\$4,309

Source: Monthly DBAD extracts from May 2011 to December 2014 and December 2016, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Note: Values in the first two columns are regression-adjusted for baseline characteristics (see Section 2.3.4). The percentages in the third column are for offset users only. We calculated results in the fourth column as the second column divided by the first column. For all dollar values, the exhibit shows results in 2011 dollars, adjusted using the Consumer Price Index for Urban Wage Earners and Clerical Workers to adjust 2012, 2013, and 2014 dollars for inflation.

Unweighted sample sizes for all Stage 2 treatment subjects in 2014: 7,258. Sample sizes were marginally smaller in earlier years, see Chapter 2. The sample size for the combined May 2011–2014 statistics is the union of the annual samples: 7,258.

Unweighted sample sizes for Stage 2 treatment offset users: 2011 = 87; 2012 = 435; 2013 = 641; 2014 = 723.

8.2.2. Overpayments for First-Time Offset Users versus Overpayments for Beneficiaries with Previous Benefit Adjustments under BOND

While Section 8.2.1 describes the prevalence of overpayments among all Stage 2 treatment subjects during the first four years of BOND, this section compares the prevalence and size of overpayments for

the period leading up to SSA's first adjustment of subjects' benefits under the offset to overpayments for the period after the first adjustment.

To examine the potential causes of overpayments, it is useful to differentiate between (i) overpayments in the period leading up to SSA's first adjustment of offset users' benefits; and (ii) overpayments to the same beneficiaries after the first adjustment. Work CDRs are a major cause of delays in the first adjustment (see Chapter 7), but are not required thereafter. In all focus groups with WIC and EWIC staff in 2016, participants attributed the bulk of overpayments before the first adjustment to delays in SSA's processing of work CDRs. Counselors and post-entitlement team members explained that later overpayments may result from untimely earnings reporting, difficulty estimating income, and inaccurate AEEs. They added that these issues also affect first-time benefit adjustments but are less important than lags in processing work CDRs.

The SSA administrative data provide evidence that the prevalence and size of overpayments decreased after the first offset adjustment. Exhibit 8-2 shows that, among the 405 Stage 2 treatment subjects known to have used the offset both before and after SSA first adjusted their benefits, the percentage of these users with an overpayment in any month decreased from 89 percent in the period before the first offset adjustment to 60 percent in the period after the first offset adjustment, and the percentage of offset months with an overpayment decreased from 73 percent in the period before to 47 percent in the period after. For those who experienced an overpayment, the overpayment amount per month was smaller in the period after the first offset adjustment than in the period before.

Exhibit 8-2. Overpayments to Stage 2 Offset Users in May 2011 to December 2014, Before and After Month of First Offset Adjustment

Period	Stage 2 Offset Users with Overpayment in Any Month (%)	Mean Number of Months in Offset	Mean Percentage of Months in Offset with Overpayment (%)	Mean Monthly Overpayment for Stage 2 Offset Users in Overpayment Months
Period before month of first offset adjustment ¹	88.6	10.9	72.9	\$415
Period after month of first offset adjustment	60.3	11.8	46.5	\$246

Source: BTS records through December 31, 2016, and monthly DBAD extracts from May 2011 to December 2014 and December 2016.

Note: The period before the first offset adjustment is defined as the time between first month of offset use and the first offset adjustment, and the period after the first offset adjustment is defined as the time between the first offset adjustment and the end of the observed period (December 2014). For all dollar values, we used the Consumer Price Index to adjust 2012, 2013, and 2014 dollars for inflation to be equivalent to 2011 dollars.

¹ Includes the first month of offset adjustment.

Unweighted sample size: Stage 2 offset users = 405, including 371 with an overpayment in at least one month. Sample is limited to T21 and T22 subjects in the overpayment analysis sample with documented offset use before and after their initial benefit adjustment.

There are several explanations for the persistence of overpayments in the period after the first offset adjustment, but at a reduced size and prevalence. First, overpayments can occur after benefits are adjusted when the offset adjustment is not large enough (because actual earnings were higher than the actual amount estimated in the AEE). The benefit reduction makes these overpayments smaller than they would have been before the initial adjustment. Second, due to the annual accounting period, beneficiaries are

considered offset users for a full calendar year once earnings accumulated since the start of the calendar year exceed the BYA threshold, even if the beneficiary reduces his earnings or stops working entirely in the remainder of the year. Offset users who reduce their earnings after the first adjustment are unlikely to have an overpayment after that point, thereby reducing the proportion of offset users overpaid in any month after first adjustment. We do not know how often beneficiaries reduced their earnings in this way.

Findings from interviews with WIC and EWIC staff are consistent with the findings from the administrative data. Most counselors (79 percent; 15 of 19 poll respondents) who participated in the 2016 online poll reported that the majority of offset users in their caseloads experienced an overpayment when they first entered the offset.⁸⁷ In contrast, only 19 percent of counselors (4 of 21 poll respondents) reported that the majority of offset users in their caseloads experienced an overpayment in later years of offset use.

For beneficiaries with previous benefit adjustments, WIC and EWIC staff and post-entitlement team members suggested that three main factors contribute to overpayments. First, BOND staff reported that not all beneficiaries reported changes in earnings, or were late in doing so. In all of the focus groups and interviews, counselors and post-entitlement team members said that some beneficiaries remained confused about the requirements for reporting earnings, even after having their benefits adjusted previously, and did not know when or how to report changes in earnings. In addition, several counselors reported that some beneficiaries were reluctant to report changes in wages to SSA. For example, one counselor said that beneficiaries in her caseload had told her that they expected that they would end up owing money if they report changes in income to SSA.⁸⁸ Such reports need to be interpreted with care; the beneficiaries who sought guidance on earnings reporting may not be representative of all treatment beneficiaries.

Second, WIC and EWIC counselors and post-entitlement team members mentioned that it can be difficult for beneficiaries and BOND staff to estimate annual earnings. BOND staff noted challenges estimating annual earnings for beneficiaries with hourly wage jobs and fluctuating hours (such as seasonal jobs, contract work, and retail positions). A few counselors also noted difficulties estimating income for beneficiaries who receive incentives such as profit-sharing bonuses that cannot be easily predicted.

Third, several counselors reported that some beneficiaries intentionally underestimate their income so they can receive a larger benefit check in the meantime, even though they understand that they will need to pay it back later.⁸⁹ Two counselors said that they had worked with overpaid beneficiaries who had

⁸⁷ BOND staff reported a similar incidence of overpayments during discussions in 2014; 77 percent of poll respondents reported that offset users always or often experience overpayments.

⁸⁸ A beneficiary could owe money after reporting an increase in earnings for the same calendar year. This would be an incorrect payment, as described in Section 8.1. However, SSA would treat adjustments due to higher-than-estimated earnings that it discovers in the following calendar year as previous-period overpayments.

⁸⁹ Chapter 2.1.5 of *The Evaluation and Analysis Plan* (Bell et al. 2011) describes the possibility that some beneficiaries may view overpayments as interest-free loans and intentionally overestimate earnings. This is in contrast to the guidance that centralized post-entitlement staff offer to beneficiaries: to minimize overpayments by slightly overestimating beneficiaries' income and slightly underreporting deductions.

intentionally underestimated their earnings so they could avoid decreases to their benefit check. It was not clear whether these beneficiaries understood they would accrue an overpayment. Similarly, another WIC counselor reported that beneficiaries expressed a preference for underestimating earnings because they did not trust SSA to repay an underpayment in a timely manner.

Qualitative data from the focus groups and interviews with the Implementation Team provide anecdotal evidence about the factors contributing to overpayments for beneficiaries with previous benefit adjustments under BOND; however, we are not able to quantify the prevalence of each of these factors among all overpaid treatment subjects.

8.3. Comparison of Stage 2 Treatment and Control Subjects' Experiences: Estimated Impacts of the Benefit Offset on Overpayments

BOND's experimental design supports a rigorous (but exploratory) analysis of the impact of the benefit offset, as administered during the demonstration, on the rate and size of overpayments among Stage 2 treatment subjects relative to the experience of C2 subjects under current-law rules and procedures. The design also supports an analysis of the incremental impact of enhanced counseling when available in addition to the offset.

A comparison of T21 and T22 subjects to C2 subjects during the first four years of the demonstration reveals that the prevalence of overpayments for all Stage 2 treatment subjects was 4.1 percentage points higher than for all C2 subjects, a difference which is 55 percent of the control group percentage (Exhibit 8-3). The yearly estimates provide evidence that the benefit offset caused a positive and statistically significant increase in overpayments in 2012, 2013 and 2014. Relative to the control group mean, the percentage impact is largest in 2014, 75 percent. There is no detectable evidence of an incremental impact of enhanced counseling on the prevalence of overpayments.

Exhibit 8-3. Estimated Impacts on Overpayments in 2011, 2012, 2013, and 2014

Outcome	T21 Mean	T22 Mean	T21+T22 Mean	C2 Mean	Estimated Impact of Offset vs. Current Law (T21+T22 vs. C2)	Estimated Impact of EWIC vs. WIC (T22 vs. T21)
Percentage of Beneficiaries with Overpayment^a						
Overpaid in any month in 2011 (%)	1.0	1.6	1.1	0.9	0.2 (0.23)	0.5 (0.37)
Overpaid in any month in 2012 (%)	5.2	5.1	5.0	3.6	1.4** (0.46)	-0.2 (0.58)
Overpaid in any month in 2013 (%)	6.9	6.8	6.6	3.9	2.7*** (0.61)	-0.1 (0.65)
Overpaid in any month in 2014 (%)	6.7	6.2	6.4	3.6	2.7*** (0.50)	-0.5 (0.63)
Overpaid in any month in 2011, 2012, 2013, or 2014 (%)	11.9	11.8	11.4	7.4	4.1*** (0.65)	-0.2 (0.89)

Outcome	T21 Mean	T22 Mean	T21+T2 2 Mean	C2 Mean	Estimated Impact of Offset vs. Current Law (T21+T22 vs. C2)	Estimated Impact of EWIC vs. WIC (T22 vs. T21)
Mean Total Overpayment Amount for All Beneficiaries^a						
2011 total overpayment	\$15	\$23	\$16	\$31	-\$15 (9)	\$8 (9)
2012 total overpayment	\$141	\$100	\$123	\$196	-\$73** (30)	-\$41 (24)
2013 total overpayment	\$203	\$151	\$183	\$289	-\$106** (34)	-\$52* (25)
2014 total overpayment	\$186	\$169	\$171	\$229	-\$58* (30)	-\$17 (24)
Combined 2011, 2012, 2013, and 2014 overpayment	\$545	\$442	\$493	\$744	-\$251** (82)	-\$102* (55)

Source: Monthly DBAD extracts from May 2011 to December 2014 and December 2016, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Note: We estimate overpayments starting in May 2011. For all dollar values, we used the Consumer Price Index for Urban Wage Earners and Clerical Workers to adjust 2012, 2013, and 2014 dollars for inflation to be equivalent to 2011 dollars. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

^a All comparisons are inclusive of the relevant group of Stage 2 subjects, including those without overpayments.

Unweighted sample sizes for 2014: T21 = 4,470, T22 = 2,788, C2 = 4,453. Sample sizes were marginally smaller in earlier years, see Chapter 2. The sample size for the combined May 2011-2014 statistics is the union of the annual samples: T21 = 4,470, T22 = 2,788, C2 = 4,453.

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

The estimated impacts of BOND on overpayments in this analysis are likely biased downward because some overpayments that occurred during the analysis period may not yet have been identified in the most recent data available. A comparison of the estimates for 2011 through 2013 in the *2016 Stage 1 Interim Process, Participation, and Impact Report* based on October 2015 data to the corresponding estimates in the *2017 Stage 1 Interim Process, Participation, and Impact Report* based on October 2016 data reveal that using the additional year of data increases the estimated impact of BOND on the proportion overpaid in 2012 and 2013 as well as made the negative impact on the mean overpayment amount in 2013 larger in absolute value.⁹⁰ Thus, while the updates increased the measured prevalence of overpayments for treatment subjects more than for control subjects, the larger size of the newly reported overpayments to control subjects cause mean overpayments for control subjects to increase by more than for treatment subject. If similar trends to those observed among the Stage 1 sample apply to Stage 2, future estimates of the impacts on prevalence for 2014 will likely increase modestly (by about 6 percent) relative to those

⁹⁰ To illustrate this point, compare the estimate of the impact on overpayment prevalence in 2013—the most recent year included in both Stage 1 Interim Reports. The earlier report, based on data extracted in October 2015, presents a 0.35 percentage point estimated impact on the likelihood of an overpayment. The more recent report, based on data extracted 12 months later, presents a 0.37 percentage point impact estimate, a change of about 6 percent. The additional year of data also affected the overpayment amount. The estimated negative impact on mean overpayments changed from \$15 to \$18, a 20 percent increase in the absolute value.

presented here. We would also expect to observe negative impacts that are larger in absolute value (an increase of about 20 percent).

Several factors may explain the higher prevalence of overpayments under the offset relative to current law. The first factor is that BOND had a positive two percentage point impact on the proportion of beneficiaries with earnings above BYA in 2014 (Gubits et al. 2017). The higher likelihood of earnings above this threshold roughly translates to a higher proportion of beneficiaries at risk of an overpayment.

The second factor is the delays in processing benefit adjustments for treatment subjects under the offset relative to control subjects. As described in more detail in Chapter 7 and Appendix C, treatment subjects encountered longer work CDR processing times than did beneficiaries subject to current law. During delays in work CDR processing, treatment and control beneficiaries working above the BYA and SGA levels, respectively, may accrue overpayments.

The third factor is that the offset adjustment is based on an earnings estimate, and in some cases actual earnings are substantially different. Discrepancies between predicted earnings (on AEEs) and actual earnings may yield overpayments for treatment subjects. Under current law, the adjustment depends only on whether monthly earnings are above or below the level of SGA.

Finally, the use of an annual rather than monthly accounting period under the offset may lead to overpayments. For example, Stage 2 treatment subjects who began work in months after the start of their BPP (in the first year of the BPP) or the start of the calendar year (for subsequent years) may be subject to incorrect payments. This factor does not apply to C2 beneficiaries, who are subject to a monthly accounting period.

Although Stage 2 treatment subjects were more likely than C2 subjects to have an overpayment, we find evidence that mean overpayment amounts for all Stage 2 treatment subjects were lower than for C2 subjects in the first four years of the demonstration (Exhibit 8-3). The differences in mean overpayment amounts were statistically significant in 2012, 2013, 2014, and all four years combined. The \$251 reduction in mean overpayments for all Stage 2 treatment subjects relative to all C2 subjects (where both groups include those without an overpayment) over the entire period represents 34 percent of the C2 mean.

The direction and size of the impact of the benefit offset on overpayment amounts can be expressed as a production of: (i) the relative prevalence of overpayments and (ii) the relative size of overpayments among those overpaid. Results in the top panel of Exhibit 8-3 show that Stage 2 treatment subjects were more likely to have overpayments than C2 subjects. Accordingly, it is clear that the reason the benefit offset had a negative impact on mean overpayment amounts among all Stage 2 treatment subjects is that the overpayment amounts of the Stage 2 treatment subjects with overpayments were substantially smaller than mean overpayments for C2 subjects with overpayments. Indeed, the mean monthly overpayment amount among T21 and T22 subjects overpaid in at least one month from May 2011 to December 2014 was \$356 and the mean amount among overpaid C2s was \$1,199 (not shown in an exhibit).

The higher mean monthly overpayment amount among control subjects to be expected. This is because, holding earnings and the size of the full benefit amount constant, an overpayment to a treatment subject can be no larger (and is typically much smaller) than the monthly overpayment amount under current law.

Further, overpayments for Stage 2 treatment subjects due to revised or inaccurate AEEs may be quite small, whereas such small errors cannot occur for C2 subjects. As a result, a control subject's overpayment is likely to be their full benefit amount, but a treatment subject's overpayment may be smaller.

Exhibit 8-4. Overpayment Amounts Relative to Percentage of Subjects with Overpayments

	T21 + T22 Mean Total Overpayment Amount / Proportion of T21 + T22 Subjects Overpaid	C2 Mean Total Overpayment Amount / Proportion of C2 Subjects Overpaid	T21 + T22 vs. C2 Impact on Mean Total Overpayment Amount / Proportion of T21 + T22 Subjects Overpaid	T21 vs. T22 Impact on Mean Total Overpayment Amount / Proportion of T21 Subjects Overpaid
2011 (\$)	\$1,533	\$3,528	-\$1,390	\$769
2012 (\$)	\$2,468	\$5,496	-\$1,467	-\$789
2013 (\$)	\$2,762	\$7,333	-\$1,601	-\$755
2014 (\$)	\$2,689	\$6,308	-\$916	-\$260
2011 - 2014 (\$)	\$4,309	\$10,107	-\$2,196	-\$858

Note: Each figure is either the mean overpayment amount or the mean impact on overpayments for the indicated group (from Exhibit 8-3) divided by the corresponding estimate of the proportion with overpayments. These are proxies for the mean overpayment amount among those overpaid and the mean impact on overpayment amount among those overpaid. For all dollar values, we used the Consumer Price Index for Urban Wage Earners and Clerical Workers to adjust 2012, 2013, and 2014 dollars for inflation to be equivalent to 2011 dollars.

The effect of the BOND treatment on the mean size of overpayments is presumably much larger for Stage 2 treatment subjects with an overpayment than for all Stage 2 treatment subjects. This is because most Stage 2 treatment subjects (88.6 percent in the sample for the overpayment analysis) did not have an overpayment during the analysis period (the demonstration's first four years). We cannot directly estimate the impact of the benefit offset on mean overpayment amounts for the subgroup of treatment subjects with overpayments because we do not know what the counterfactual overpayments for this same subgroup would have been had they been assigned to C2. A reasonable approximation can be obtained by assuming that all C2 subjects in the overpayment sample with an overpayment would also have had an overpayment if they had been assigned to the treatment group.⁹¹ Under that assumption, the annual mean impact for Stage 2 treatment subjects with an overpayment equals the annual mean impact for all Stage 2 treatment subjects divided by the percentage of Stage 2 treatment subjects with an overpayment in the same year.⁹² This calculation yields impacts on mean overpayments among those with an overpayment of \$2,196

⁹¹ This assumption may not be exactly correct—perhaps some C2 subjects would have avoided overpayments altogether if they had been assigned to T21 or T22—but the assumption seems unlikely to be so substantially violated as to make the order of magnitude of the estimates misleading.

⁹² Specifically, the estimated effect of the offset on the mean overpayment amount among Stage 2 treatment subjects with overpayments across all four years is calculated as -\$251 (the mean impact for all Stage 2 treatment subjects over the four years) divided by 0.114 (the prevalence of overpayments among all Stage 2 treatment subjects), to yield about \$2,202.

across all four years included in the analysis (Exhibit 8-4). This is an average across positive impacts for treatment subjects who would not have had an overpayment under current law. These impacts are presumably negative for the majority of those who would have had an overpayment under current law and accrue a comparatively smaller underpayment under BOND.

It is also interesting to compare the mean size of overpayments to C2 subjects with overpayments to the mean size for Stage 2 treatment subjects with overpayments. This comparison does not constitute an impact estimate, because it assumes treatment subjects would have been overpaid if they had been assigned to the control group and control subjects would have been overpaid if they were assigned to the treatment group. Nonetheless it provides perspective on the overpayment actually experienced by a typical beneficiary with an overpayment under each of the two systems. Conditional on having an overpayment, the estimated mean overpayment amount from 2011 through 2014 for Stage 2 treatment groups was \$4,309 (\$492.77/.11436; Exhibit 8-4). The corresponding value for the control group is \$10,107 (\$743.89/.07360; Exhibit 8-4). This difference amounts to \$5,798. Thus, overpaid C2 subjects experience overpayments that are typically more than twice as large as overpayments experienced by Stage 2 treatment subjects.

We also find that T22 subjects had combined 2011 through 2014 overpayment amounts that were \$102 smaller than for T21 subjects, a difference that is statistically significant. Mean monthly overpayment amounts were marginally larger for T21 subjects: the mean monthly overpayment amount was \$373 among overpaid T21 subjects and \$327 among overpaid T22 subjects. We also observe a difference in the duration of overpayment months. Although T22 subjects used the offset for more months than T21 subjects, the median overpayment duration among overpaid T21 subjects was 13 months and was 12 months among overpaid T22 subjects (not shown in an exhibit). The difference in total overpayment amount between T21 and T22 subjects suggests that guidance from EWIC staff may have helped beneficiaries submit more accurate AEEs and otherwise helped T22 subjects to accrue overpayments for a shorter duration, resulting in a lower total overpayment amount.

8.4. Beneficiaries' Experiences with Overpayments

WIC and EWIC counselors described beneficiaries' reactions to overpayments as generally negative. In 2014 and 2016 focus groups, counselors reported that beneficiaries reacted to overpayments with stress and confusion. Some beneficiaries whose checks were withheld following an incorrect payment said they wanted to drop out of BOND because they were so upset. As reported in the *2016 Stage 1 Interim Process, Participation, and Impact Report*, some beneficiaries may have reduced their earnings as a result of an overpayment. A member of the BOND Implementation Team explained that some beneficiaries who received overpayments were especially confused because they believed they could not accrue overpayments while participating in BOND. This misunderstanding may reflect broader gaps in beneficiaries' understanding of the benefit offset (see the discussion in Section 5.2).

Beneficiaries reported a wider range of reactions to overpayments during in-depth interviews in 2015.⁹³ Several beneficiaries described neutral responses to overpayments, noting that overpayments did not

⁹³ For additional detail about beneficiaries' reactions to overpayments, refer to the *2016 Stage 1 Interim Process, Participation, and Impact Report*.

change their perception of BOND, while others described negative reactions and adverse financial outcomes following overpayments. It is possible that beneficiaries with negative experiences with overpayments were more likely to express their reactions to WIC and EWIC counselors compared to beneficiaries with neutral reactions.

Overpayments are not unique to BOND treatment subjects, and reactions to overpayments under current law may be stronger than those under the offset because the overpayments under current law tend to be larger. As discussed in Section 8.3, over the course of the first four years of the demonstration, 7.4 percent of C2 beneficiaries subject to current law were overpaid and overpayments among overpaid C2 beneficiaries averaged \$10,053. In addition, in 2015 interviews with 30 Stage 2 treatment subjects, two reported overpayments that predated BOND.

Beneficiaries' experiences with and reactions to overpayments may be influenced by their interactions with benefits counselors. During the 2016 focus group discussions, several WIC and EWIC counselors described warning beneficiaries against spending accrued overpayments and encouraging overpaid beneficiaries to stay optimistic about BOND. For example, one WIC counselor noted that, when confronted by beneficiaries who wanted to quit their jobs following overpayments, he has encouraged them to "stick it out." Another WIC counselor said some beneficiaries in his caseload were comforted when he explained that overpayments can also happen outside of BOND. Several staff said they explained to overpaid beneficiaries that an overpayment would be larger if they were not in BOND, but beneficiaries were not always comforted by this message.

WIC and EWIC staff also reported that first-time offset users tended to react more negatively to overpayments than beneficiaries with previous benefit adjustments under the offset. During focus group discussions in 2016, several counselors said that beneficiaries became more accustomed to payment issues later in the BOND participation period and did not get as upset, although they continued to require support from their WIC counselors to resolve payment issues. In contrast, several counselors noted that beneficiaries were equally frustrated by overpayments in later years of using the offset. One WIC counselor mentioned beneficiaries in later years who thought they were reporting earnings accurately and were "flabbergasted" that they continued to experience payment problems.

WIC, EWIC, and centralized post-entitlement staff may also help beneficiaries reduce the likelihood and total amount of overpayments. Consistent with training and guidance from the Implementation Team, WIC and EWIC staff, and post-entitlement team members reported in focus groups and interviews that they generally encourage beneficiaries to submit AEEs that are slightly higher than earnings expectations for the coming year so that the beneficiaries will be less likely to receive overpayments after automated reconciliation. Results in Exhibit 8-3 support the notion that BOND counselors may have lowered the mean total overpayment amount. EWIC efforts may have been particularly fruitful, as evidence by the lower total overpayment amounts among T22 subjects relative to T21 subjects.

8.5. Underpayments

Underpayments occur when beneficiaries receive less in benefits than the amount to which they were entitled. When SSA recognizes an underpayment, it issues beneficiaries a lump-sum check to rectify the shortfall. Additional discussion of underpayments can be found in the *Process Study Report* (Derr et al. 2015).

The exact rate of work-related underpayments among BOND subjects is unknown. This is due to the difficulty in distinguishing in administrative data between work-related underpayments and underpayments for other reasons. The perception among ORDES staff in early 2015 was that, after the first benefit adjustment under the offset, underpayments are at least as likely to occur as overpayments. However, the perception from WIC and EWIC counselors is that underpayments are less common than overpayments after the first benefit offset adjustment; nearly all WIC and EWIC counselors (18 of 21 counselors) who participated in an online poll in 2016 estimated that underpayments were rare. Similarly, only 4 of the 20 Stage 2 offset users interviewed in 2015 reported having an underpayment. Findings of the in-depth interviews should be interpreted with caution because they were not intended to produce findings that are representative of all Stage 2 subjects.

Several factors may contribute to the discrepancy between the perceived prevalence of overpayments and underpayments as reported by ORDES staff, WIC and EWIC counselors, and Stage 2 treatment beneficiaries. First, centralized post-entitlement staff noted that, although beneficiaries are notified of underpayments, the underpayments are often used to recoup unresolved overpayments. Thus, the large majority of offset users who initially experience overpayments may not be aware of any partially counterbalancing underpayment.

Second, it is possible that underpayments are not as salient to beneficiaries as are overpayments because they are less likely to contribute to financial hardship, and therefore go underreported in interviews and in beneficiaries' interactions with WIC and EWIC counselors or centralized post-entitlement staff.⁹⁴ Thus, it is possible that the actual rates of underpayments are higher than counselors and beneficiaries reported during focus groups and interviews.

8.6. Summary

Overpayments may affect beneficiaries' financial situations and have direct consequences for employment and other behaviors. Overpayments also affect the SSDI Trust Fund; past experience indicates that it will take at least 10 years to recover 53 percent of overpayment dollars (which include overpayments owed for all reasons, not just the work-related overpayments which are the focus of this chapter), and at least 21 percent will be waived or cancelled (SSA Office of the Inspector General, 2015).

Overpayments are pervasive among T21 and T22 offset users, particularly when SSA first adjusts benefits under the offset. According to December 2016 SSA administrative data, a large majority of Stage 2 treatment subject offset users (91 percent) had an overpayment during the first four years of the demonstration. The mean amount of overpayments accrued as of that point in the demonstration for those with any overpayment totaled \$4,309. In contrast, 7.4 percent of C2 subjects experienced an overpayment

⁹⁴ Underpayments occur when beneficiaries have decreases in earnings that should result in the reinstatement of benefit payments or a higher benefit amount, but receive a lower (or no) benefit check for that month. Beneficiaries may be more likely to report earnings decreases and more quickly contact SSA if they are underpaid because of the real-time effect on their current financial situation, making underpayments less likely to accumulate than overpayments. In addition, beneficiaries may base their monthly expenditures on their current benefit amount, making underpayments a less challenging situation relative to overpayments due to inaccurate AEEs.

during this period, with a mean of \$10,107 in total overpayments. Thus, those who experienced overpayments under the benefit offset typically experienced overpayments that were less than half as large as those typically experienced by C2 subjects with overpayments.

The prevalence and size of overpayments tended to decrease after the initial offset adjustment. Of Stage 2 treatment subjects who used the offset both before and after their first offset adjustment, 89 percent had an overpayment during the period before the first offset adjustment and the average monthly overpayment amount in overpaid months was \$415. In comparison, 60 percent of those same Stage 2 treatment subject offset users had an overpayment in the period after the initial adjustment and the average monthly amount was \$246. In 2016, two years after the end of the analysis period in this chapter, WIC and EWIC staff observed that beneficiaries were still highly likely to have an overpayment during their first year of benefit adjustment but that overpayments were less likely and smaller in subsequent years of offset use.

The BOND benefit offset was expected to reduce the mean overpayment amount, because under the offset overpayment amounts in any given month must be equal to or less than overpayment amounts under current law. We find strong evidence that the percentage of treatment subjects with overpayments increased over the first four years of the demonstration but their overpayment amounts were smaller as compared to their counterparts in the control group. The likelihood of an overpayment was 55 percent higher for Stage 2 treatment subjects than for C2 subjects (11.4 percent compared to 7.4 percent), but the mean overpayment accrued was \$251 (34 percent) less than for C2 subjects. Thus, despite substantially higher prevalence of overpayments among treatment subjects, there was a large reduction in mean overpayments over all treatment subjects. In addition, we find evidence that EWIC services decreased the mean total overpayment amount relative to Stage 2 treatment subjects who had access to WIC services.

We also find evidence that suggests that overpayment amounts are smaller for offset users than they would have been under current law. Specifically, treatment subjects with an overpayment had total overpayments that were an estimated \$2,202 less than they would have had under current law, but this average is a mix of increases for those who would have had no overpayments under current law and decreases for others. The actual impact on the prevalence of overpayments is likely to become higher than the estimate reported here as SSA completes a backlog of long-pending work CDRs for treatment subjects, because it appears that the percentage of subjects with long-pending work CDRs is greater for treatment than control subjects (Appendix D). For the same reason, the reduction in the mean size of overpayments is likely to become smaller.

During in-depth interviews, beneficiaries with overpayments exhibited a range of reactions. Some treatment beneficiaries had neutral reactions to overpayments while others formed negative associations between overpayments and the benefit offset. We received reports from WIC and EWIC counselors of a few beneficiaries who said they planned to reduce their earnings because of an overpayment, but such reports were rare, and we do not know that the beneficiaries actually did reduce their earnings.

BOND staff attempted to mitigate the effects of overpayments by providing guidance and encouragement to beneficiaries who accrue overpayments. They helped beneficiaries more accurately report their earnings on their AEEs. This help from BOND staff may contribute to lower rates of overpayments in later years of offset use. In addition, counselors supported beneficiaries who accrued overpayments and helped them stay motivated to continue working despite frustrations with overpayments. Although we have anecdotal evidence that BOND staff play a critical role in encouraging and counseling beneficiaries

who have accrued overpayments, it is not possible to determine the extent to which these factors affect beneficiaries' use of the benefit offset.

9. Impacts on Annual Earnings and SSDI Benefits Measured in Administrative Data

For the Stage 2 sample of volunteers, this chapter presents estimates of the impact of the benefit offset rules (plus WIC or EWIC) on earnings and benefits outcomes in 2015, as measured from administrative data. As of the end of 2015, most Stage 2 volunteers in the treatment groups had been under the benefit offset rule for four years.⁹⁵ 2015 is the last full calendar year in which all Stage 2 treatment subjects are still subject to the BOND benefit offset rules (see Chapters 4 and 7) because some Stage 2 treatment subjects finish their BOND Participation Periods during 2016.

For 2015 earnings and benefits, this chapter reports three policy comparisons:

- The impact of the benefit offset with standard work incentives counseling (WIC) compared to current law (T21 vs. C2).
- The impact of the benefit offset and enhanced work incentives counseling (EWIC) compared to current law (T22 vs. C2).
- The incremental impact of enhancing work incentives counseling (moving from WIC to EWIC) given the benefit offset (T22 vs. T21).

Chapter 2 of this report provides definitions of outcome variables, theories about possible impacts, administrative features of the offset that may influence impacts, and the impact estimation methodology used to generate the results presented in the current chapter.

To provide context for interpreting the impacts of the offset (with WIC or EWIC), Section 9.1 offers a discussion of employment, earnings, benefits, and health trends in the current law control group (C2). Then Section 9.2 discusses the 2015 confirmatory results (i.e., impacts on annual SSDI benefits and annual earnings) for the full Stage 2 sample. Exploratory evidence regarding other employment- and benefit-related outcomes appears in Section 9.3. Section 9.4 explores variation in impact for beneficiaries with differing background characteristics and Section 9.5 summarizes the chapter's findings.

As explained in Chapter 2, the significance levels for full-sample estimates of impacts on the confirmatory outcomes (total earnings and total SSDI benefits) are adjusted to address the multiple comparisons problem. The statistical significance of the *confirmatory* impact estimates at the 10-, 5-, and 1-percent significance levels are indicated with “#” symbols in the last three columns of the exhibit. For the other outcomes, and for all subgroup analyses, the impact estimates are considered *exploratory* and their significance levels are not adjusted for multiple comparisons. The significance levels of the exploratory estimates are indicated by asterisks. For the confirmatory outcomes, we describe estimates that are statistically significant at the 10-percent level as “some confirmatory evidence” of demonstration

⁹⁵ Those randomly assigned to one of the treatment groups became subject to the offset work incentives as they enrolled in the demonstration between March 2011 and September 2012. Forty percent of the Stage 2 subjects enrolled in 2011 and 60 percent enrolled in 2012. Hence, the duration of subjects' participation in Stage 2 ranges from 27 to 46 months at the start of 2015 and from 39 to 58 months at the end of the year.

impact, while those significant at the 5-percent level are described as “confirmatory evidence” of impact and those significant at the 1-percent level are characterized as “strong confirmatory evidence.” We term as “no detectable evidence” any impact estimate not significant at even the 10-percent level. Findings concerning exploratory outcomes are dubbed “suggestive” when found statistically significant at any of the three significance levels, since they are not adjusted to contain the heightened risk of false positive findings when multiple tests of significance are run. All subgroup analyses are exploratory and examine whether impacts are different *across* subgroups; we do not examine impacts *within* subgroups.

Under this high standard set for confirmatory evidence, there is confirmatory evidence of a positive impact of the offset on SSDI benefits paid in 2015. In contrast, there is no detectable confirmatory evidence of an impact on 2015 earnings. Both of these findings are consistent with the confirmatory analyses of 2014 SSDI benefits paid and earnings (Geyer et al. 2017). Also consistent with previous findings, some of the exploratory impact estimates are statistically significant. We find positive exploratory impacts of the offset on employment, proportion with earnings above BYA, and number of months of SSDI receipt. There are some significant differences in impacts for subgroups defined by employment at baseline and subgroups defined by whether or not their primary impairment is back disorder.

Consistent with previous findings for Stage 2, there is no detectable evidence of differential effects of EWIC compared to WIC in the full sample confirmatory or exploratory analyses (Geyer et al. 2017, Gubits et al. 2017).

9.1. Employment, Earnings, Benefits, and Health Trends in the Control Group

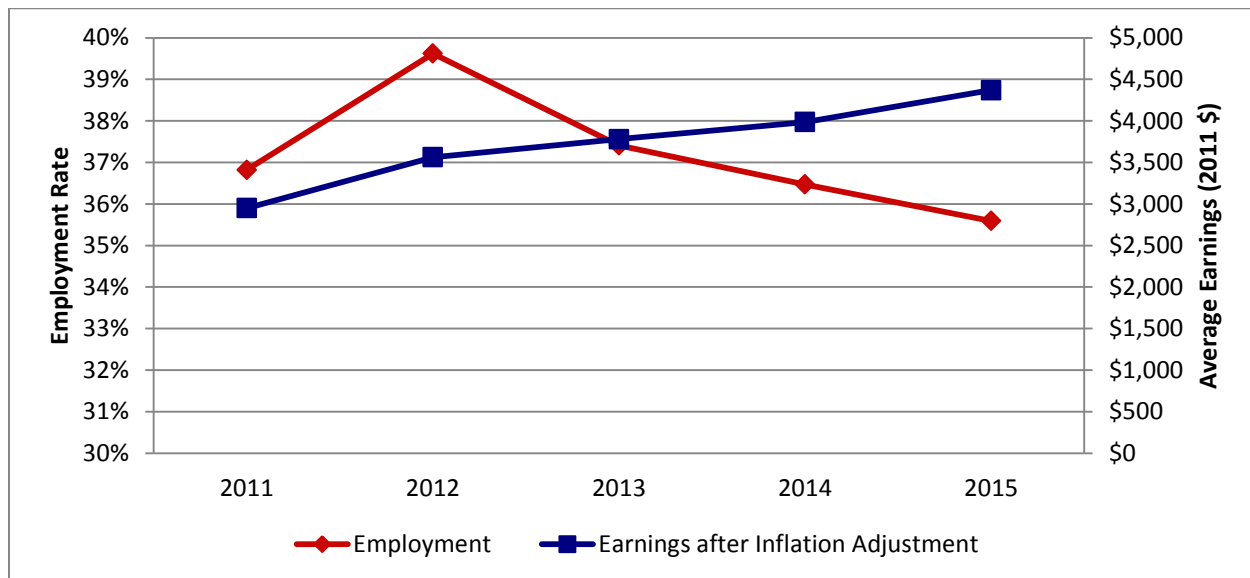
To provide a broader context for the findings, this section briefly reports trends in employment, earnings, health, and SSDI benefits received in the control group, spanning from 2011 through 2015. As depicted in Exhibit 9-1, 37 percent of subjects in the current law control group were employed at some point in 2011, rising to almost 40 percent in 2012 and slowly but steadily declining over the next three years to 35.5 percent in 2015.⁹⁶ Average earnings rose steadily over time from \$2,951 in 2011 to \$4,369 in 2015. It is plausible that those who volunteered for Stage 2 did so because they expected to have higher earnings in the future, and thus be able to gain from the benefit offset rules if their earnings began to exceed BYA for an extended period. This hypothesis is consistent with a rise in earnings for 2011 to 2012, even in the control group. The rise is also consistent with the concurrent strengthening of the U.S. labor market. As shown in Exhibit 9-2, earnings for employed subjects in the control group rose steadily between 2011 and 2015 from \$8,014 in 2011 to \$12,276 in 2015.

On average, we expect health to decline as individuals age and thus we expect some decline in health in the control group since enrollment. Exhibit 9-3 reports trends in self-reported health for this sample. The proportion of beneficiaries reporting poor health status increased between baseline and the 12-Month Survey ($p < .01$), but was stable between the 12- and 36-Month Surveys.

⁹⁶ National employment rates were improving over this period, but we would not expect a cohort analysis to reveal the same trends as national averages, owing to death and declines in health over time.

Average SSDI benefits paid in a given year declined over the 2011 to 2015 period (Exhibit 9-4). This decline is likely driven by death (roughly 8 percent of the Stage 2 volunteers died between the start of the demonstration and the end of 2015). The decline may also be driven by beneficiaries completing their TWP or leaving the rolls through medical improvement or incarceration.

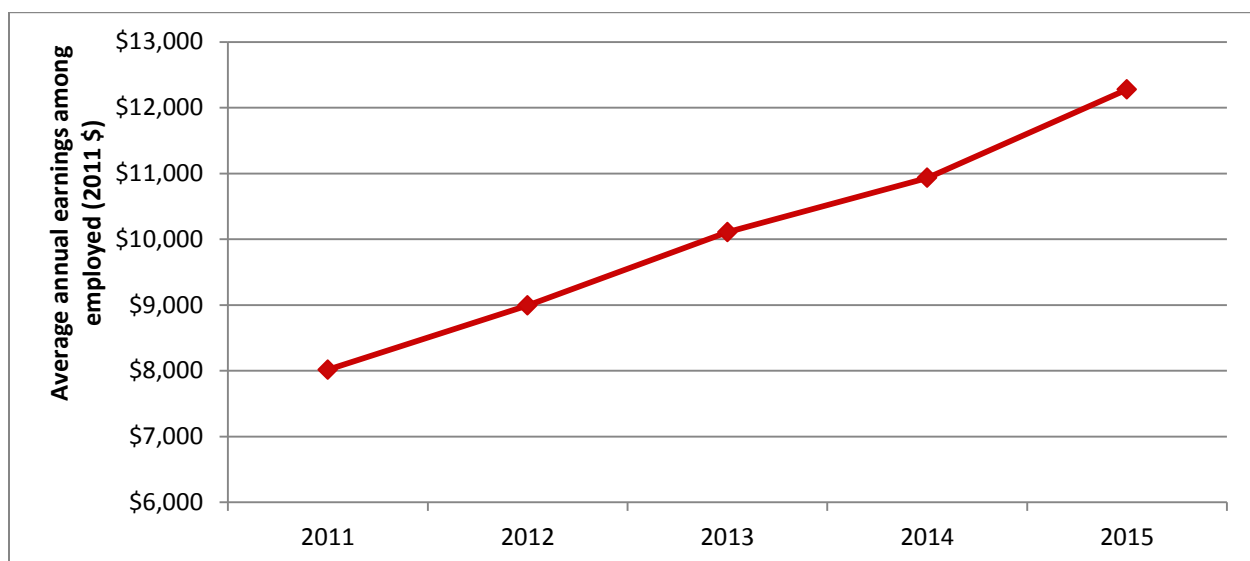
Exhibit 9-1. Trends in Employment and Earnings, Current Law Control Group (C2)



Source: Exhibits 9-5 and 9-6 of this report; Gubits et al. 2017, Geyer et al 2017

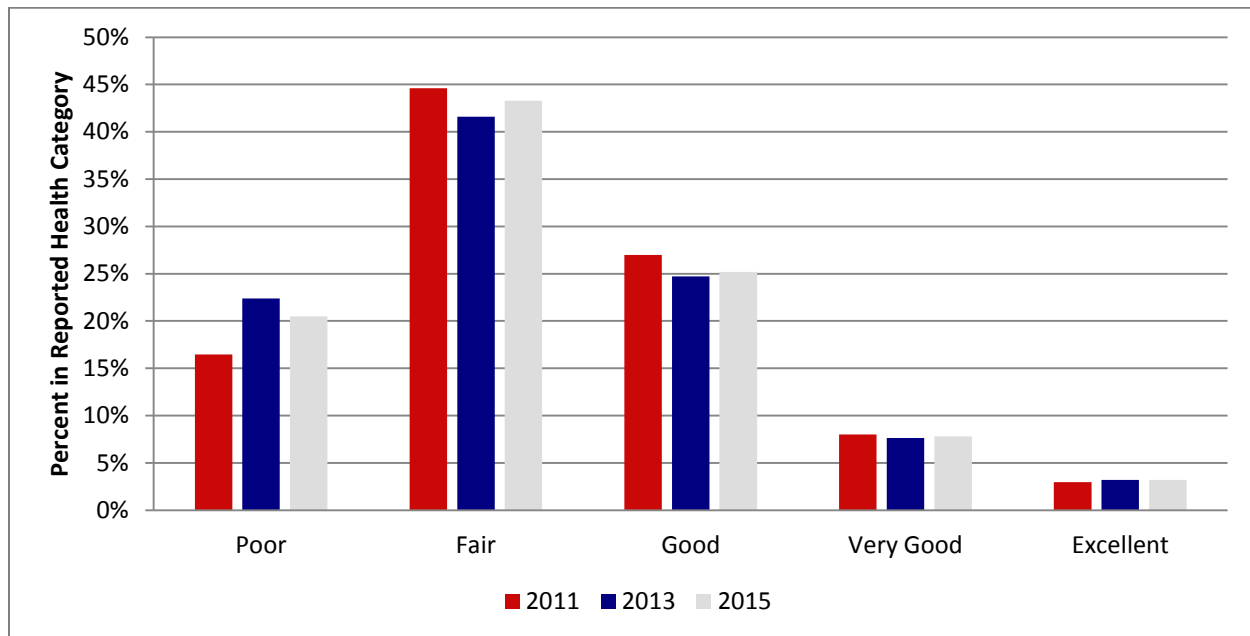
Note: Weights reflecting sample selection are used to ensure that estimates are representative of SSDI-only beneficiaries who would volunteer for study enrollment. For all dollar values, we used the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) to adjust 2012, 2013, 2014, and 2015 dollars for inflation to be equivalent to 2011 dollars.

Exhibit 9-2. Earnings Trend for Employed Subjects, Current Law Control Group (C2)



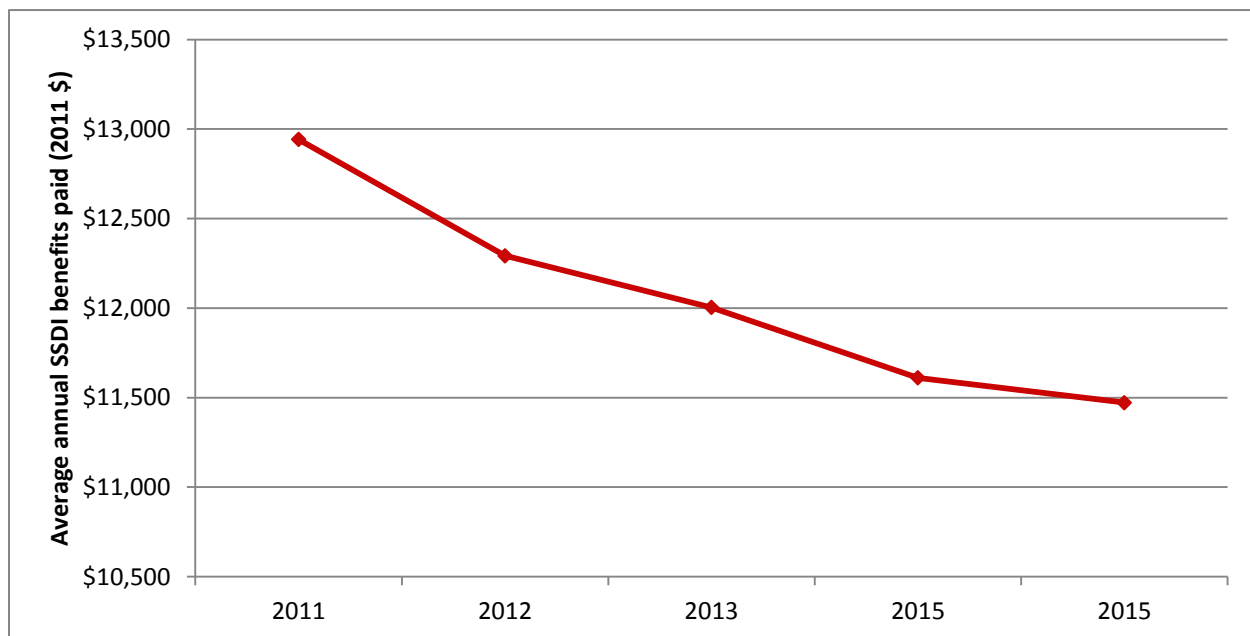
Source: Exhibits 9-5 and 9-6 of this report; Gubits et al. 2017, Geyer et al 2017

Notes: Average C2 earnings are divided by the share of C2 subjects employed to obtain the average annual earnings among those who are employed. Weights reflecting sample selection are used to ensure that estimates are representative of SSDI-only beneficiaries who would volunteer for study enrollment. For all dollar values, we used the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) to adjust 2012, 2013, 2014, and 2015 dollars for inflation to be equivalent to 2011 dollars.

Exhibit 9-3. Self-Reported Health in 2011, 2013, and 2015, Current Law Control Group (C2)

Source: Exhibit F-8 of this report; Gubits et al. 2017

Note: The unweighted baseline sample size is 4849. The unweighted interim follow-up sample size in 2013 is 3961; in 2015, 3610. Weights reflecting sample selection and survey nonresponse are used to make the BOND subjects who met analysis criteria more representative of volunteers for offset participation in the nation.

Exhibit 9-4. Trends in Annual SSDI Benefits Paid, Current Law Control Group (C2)

Source: Exhibit 9-5 of this report; Gubits et al. 2017, Geyer et al 2017

Note: Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of volunteers for offset participation in the nation. For all dollar values, we used the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) to adjust 2012, 2013, 2014, and 2015 dollars for inflation to be equivalent to 2011 dollars.

Collectively, these trends provide context for interpreting estimated impacts of the demonstration. Employment rates and benefits were on a slight downward trend, likely driven by death (the Final Evaluation Report will examine death rates). However, among those employed, average earnings increased. We have not examined the extent to which the growth in mean earnings is due to changes in the composition of those who are working versus growth in earnings of those who are working.

9.2. Confirmatory Impacts

Among the many outcomes analyzed in the BOND evaluation, two outcomes are of paramount interest. These we examine for confirmatory evidence that one or both of the Stage 2 BOND interventions are having an impact on beneficiaries':⁹⁷

1. Total earnings in the most recent available year (2015 in this report); and/or
2. Total SSDI benefits paid in the most recent available year (2015 in this report)

For total earnings received from January through December 2015, there is no detectable confirmatory evidence of a statistically significant effect on either treatment group relative to current law (Exhibit 9-5). Point estimates of impacts on mean earnings (first row of the exhibit, columns 4 and 5) are \$306 for the offset-plus-WIC compared to current law, and \$398 for the offset-plus-EWIC compared to current law. The adjusted p-values for these two impact estimates both equal 0.359 and so do not meet the study's established standard for statistical significance ($p < 0.10$). These findings are consistent with the lack of evidence of an effect on 2012, 2013, or 2014 earnings for the offset combined with either WIC or EWIC (Gubits et al. 2017; Geyer et al 2017). The size of the impact estimates for 2015 is roughly the size of the impact estimates on earnings in previous years: estimates for both years and both policy comparisons range between 7 and 9 percent of average earnings under current law (with rounding).

Consistent with previous findings, there is no detectable evidence of an incremental effect on earnings of EWIC compared to WIC (column 6). The point estimate of impact is \$92 and is not statistically significant.

In contrast to the lack of confirmatory evidence of an impact on earnings, there is confirmatory evidence of positive effects on total SSDI benefits paid between January and December 2015, for both treatment groups, relative to current law (second row of Exhibit 9-5, columns 4 and 5). Estimated impacts on benefits are \$515 annually for the comparison of the offset plus WIC to current law and \$543 for the comparison of the offset plus EWIC to current law. These figures represent about 4 percent of average benefits under current law (\$12,002, column 3). The adjusted p-value of both of these estimates is 0.022.

⁹⁷ These two outcomes were identified in the *BOND Evaluation Analysis Plan* (Bell, et al 2011) for confirmatory analysis, prior to the research team having access to outcome data for study subjects. Pre-specifying outcomes for confirmatory analysis prior to having access to outcome data is standard evaluation practice. It makes transparent that researchers have selected the study's confirmatory outcomes based on hypotheses developed prior to looking at the data, rather than based on the estimates of impact for many different outcomes. See the discussion of confirmatory outcomes in Chapter 2, Section 2.1, of this report.

Exhibit 9-5. Estimated Impacts on 2015 Annual Earnings and Annual SSDI Benefits Paid for Stage 2 Volunteers: All Policy Comparisons

Outcome	Average Outcome with Offset and WIC (T21) (1)	Average Outcome with Offset and EWIC (T22) (2)	Average Outcome under Current Law (C2) (3)	Estimated Impact of Offset + WIC vs Current Law (T21 vs. C2) (4)	Estimated Impact of Offset + EWIC vs Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Total earnings (January–December 2015)	\$4,877	\$4,969	\$4,571	\$306 ^a (\$240)	\$398 ^a (\$284)	\$92 (\$251)
Total SSDI benefits paid (January–December 2015)	\$12,517	\$12,545	\$12,002	\$515 ^{##b} (\$136)	\$543 ^{##b} (\$152)	\$28 (\$191)

Source: Analysis of SSA administrative records (from the MEF, BODS, MBR, and SSR), with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 4,854, T22 = 3,041, C2 = 4,849

###,### Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a confirmatory standard of evidence (p-value adjusted by the multiple comparisons procedure) and a two-tailed t-test with 9 degrees of freedom.

^a The impact estimates for total earnings for T21 vs. C2 and for T22 vs. C2 both had p-values after multiple comparison adjustments of 0.359. Hence, the data do not provide confirmatory evidence of an impact in either case

^b The impact estimate for total SSDI benefits paid for T21 vs. C2 and for T22 vs. C2 both had p-values after multiple comparison adjustments of 0.022. Hence, the data provide confirmatory evidence of an impact.

These 2015 findings are consistent with 2014 results that provided some confirmatory evidence that the offset, when combined with WIC or combined with EWIC, had an effect on 2014 benefits, relative to current law (Geyer et al. 2017).

Similar to the findings of previous years, there is no detectable evidence of an incremental effect of EWIC compared to WIC. The point estimate of impact on SSDI benefits for this comparison is small (\$28, column 6) and not statistically significant.

9.3. Exploratory Impacts for the Full Sample

The previous section reported results for confirmatory outcomes, finding no detectable evidence of impact on average earnings but evidence of an impact on SSDI benefits paid. This section considers impacts on other earnings- and benefit-related outcomes—outcomes tested for effects on an exploratory rather than confirmatory basis. It is possible for impacts on the exploratory outcomes to occur in the full sample even when the effects on the confirmatory outcomes are zero.

Specifically, the analysis estimates impacts on seven other outcomes related to earnings and benefit amounts that are measured in administrative data: any employment during the year and in various dollar ranges relative to BYA, number of months of SSDI receipt over a year, and total dollars and number of months of payments from the Supplemental Security Income (SSI) program. This section reports impacts on these measures for 2015. Consistent with the *BOND Evaluation Analysis Plan* (Bell et al. 2011), we consider these analyses to be exploratory and therefore do not make any correction for multiple comparisons. As a result, any statistically significant findings are suggestive of where effects may have

taken place. Even if the interventions had no impacts on any of the measures examined here, we would expect some of the impact estimates to be statistically significant by chance alone due to the fact that we conducted many hypothesis tests.

9.3.1. Exploratory Impacts on Earnings-Related Outcomes

As discussed in Chapter 2, the offset is predicted to have two countervailing effects on earnings: a *positive* effect on average earnings for those who would not engage in SGA under current law (i.e. without the offset) and a *negative* effect on average earnings for those who would earn above the SGA level under current law. The net result of these two changes can be an earnings impact in either direction or no earnings effect at all. Only for the first group can an employment gain coincide with the earnings gain, moving employment upward for those who do not work at all under current law but who work under offset rules. Both earnings and employment increase for these beneficiaries. In contrast, theory predicts that those who would earn above the SGA amount under current law will earn less than under current law, but will nonetheless remain employed and earn above the SGA amount. These beneficiaries are predicted to work fewer hours while continuing to work.

Movements in and out of other earnings categories—above twice BYA and above three times BYA—are also possible without net changes in earnings. Hence, for all of the exploratory outcomes of interest here impacts could occur even absent impacts on earnings as a confirmatory outcome.

Exhibit 9-6 provides some exploratory evidence that the offset plus EWIC increased the proportion of sample members employed (i.e., those with any earnings during 2015). There is also strong exploratory evidence that the offset plus WIC and the offset plus EWIC increased the proportion earning above BYA. These statistically significant findings generally conform to an unambiguous prediction that by removing the benefit cliff at earnings above BYA, the offset will increase employment and the proportion of beneficiaries with earnings above BYA. In the current law control group, 36 percent of beneficiaries had some employment in 2015 and 10 percent had earnings above the BYA. The offset plus EWIC increased the proportion employed by 2 percentage points (a 7 percent increase) and the proportion with earnings above the BYA by 3 percentage points (a 30 percent increase) (Exhibit 9-6, column 5). The offset plus WIC did not yield a statistically significant increase in the total employment rate, compared to the current law control group, but it did increase the proportion with earnings above BYA by 2.6 percentage points (a 26 percent increase) (Exhibit 9-6, column 4).

Similar to findings in all previous years, there is no evidence that the offset plus WIC or the offset plus EWIC had an impact on the proportion of beneficiaries with earnings greater than two or three times BYA. The reductions may not be taking place, or they might be difficult to detect with our sample size because the proportion of beneficiaries with earnings at these levels is very low. Note, however, that the estimates are sufficiently precise that we can rule out large increases.

Exhibit 9-6. Estimated Impacts on 2015 Employment and Benefit Receipt for Stage 2 Volunteers: All Policy Comparisons

Outcome	Average Outcome with Offset and WIC (T21) (1)	Average Outcome with Offset and EWIC (T22) (2)	Average Outcome under Current Law (C2) (3)	Estimated Impact of Offset + WIC vs Current Law (T21 vs. C2) (4)	Estimated Impact of Offset + EWIC vs Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset(T22 vs. T21) (6)
Employment (January–December 2015)						
Employment during year (%)	36.77	37.95	35.59	1.18 (1.06)	2.36* (1.14)	1.18 (1.15)
Earnings above BYA (%)	12.46	12.82	9.85	2.61*** (0.76)	2.97*** (0.78)	0.36 (0.81)
Earnings above 2x BYA (%)	5.07	4.74	4.60	0.48 (0.52)	0.14 (0.52)	-0.33 (0.54)
Earnings above 3x BYA (%)	2.23	2.16	2.27	-0.04 (0.38)	-0.11 (0.43)	-0.07 (0.37)
Benefit Receipt (January–December 2015)						
Number of months with SSDI payments	10.75	10.79	10.31	0.44*** (0.08)	0.48*** (0.09)	0.04 (0.09)
Total SSI benefits paid	\$38	\$35	\$38	\$-0 (\$12)	\$-2 (\$12)	\$-2 (\$14)
Number of months with SSI payments	0.20	0.20	0.17	0.02 (0.04)	0.02 (0.04)	-0.00 (0.05)

Source: Analysis of SSA administrative records (from the MEF, BODS, MBR, and SSR), with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 4,854, T22 = 3,041, C2 = 4,849

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

Consistent with previous findings, there is some evidence of an employment effect despite the lack of confirmatory evidence of an earnings effect. One possible explanation is that average earnings in the treatment groups may have increased relative to the control group, but not enough to be statistically significant (especially because the impact on employment is small and marginally significant). It is also possible that even as a greater proportion of subjects chose to earn above BYA, average earnings *within* one or more of the earnings ranges far above BYA may have declined (for illustration, a person who would earn 2.9 times BYA without the offset might choose to earn 2.0 times BYA if offered the offset). This possibility is consistent with theory which predicts that subjects who under current law would choose to earn more than BYA will *decrease* their earnings if the offset is available (thereby obtaining more nonwork time at the same or greater total income). Finally, the estimated impact on the proportion with earnings above BYA is small (2.6 percentage points for the offset plus WIC, and 3 percentage points for the offset plus EWIC), and modest differences in mean earnings for such a small proportion of the study sample could have little overall effect when averaged with earnings for the rest of the study sample.

There is no detectable evidence that EWIC does more (or less) than WIC to increase employment or the proportion with earnings above BYA in calendar year 2015 (Exhibit 9-6, column 6).

9.3.2. Exploratory Impacts on Benefit-Related Outcomes

This section considers exploratory impacts on benefit-related outcomes. There is strong exploratory evidence that the offset—both with WIC and with EWIC—increased the number of months of SSDI receipt in 2015 by a half of a month (roughly two weeks, or 0.44 – 0.48 months) (Exhibit 9-6, columns 4 and 5). This increase is a 4 percent increase over the average number of months of SSDI receipt for the control group (10.3 months). This strong evidence is consistent with the statistically significant positive effect on total benefits paid in 2015. This finding is consistent with the theory’s prediction that some treatment subjects whose earnings would have been above BYA under current law receive partial benefits under offset rules rather than having their benefits suspended.

There is no detectable evidence of any impact of the offset-plus-WIC or of the offset-plus-EWIC on SSI benefits received or number of months of SSI receipt in 2015.⁹⁸

Nor is there any detectable evidence that EWIC does more than WIC to affect the number of months of SSDI receipt, number of months of SSI receipt, or amount of SSI benefits.

9.4. Impact Variation by Beneficiary Background Characteristics

The analysis also explores whether the Stage 2 treatments affected earnings and benefits differently for beneficiaries with different background characteristics. Seven potential impact “moderators” of this sort were discussed in Section 2.3 and are listed here for reference:

• Short-duration beneficiaries (those receiving benefits 36 months or less when entering BOND)	Vs.	• Longer-duration beneficiaries (those receiving benefits 37 months or more when entering BOND)
• Beneficiaries who are employed at baseline	Vs.	• Beneficiaries who are not employed at baseline
• Beneficiaries with access to Medicaid buy-in programs	Vs.	• Beneficiaries without access to Medicaid buy-in programs
• Younger beneficiaries (less than age 50 at baseline)	Vs.	• Older beneficiaries (age 50 and older at baseline)
• Beneficiaries with primary impairment of major affective disorder	Vs.	• Beneficiaries with all other primary impairments

⁹⁸ Although, by design, Stage 2 subjects were not receiving SSI at enrollment, offset effects on months with SSI payments and the total annual SSI payment amount can occur because some subjects may gain SSI eligibility as they spend down their assets. The offset could raise earnings enough to slow entry onto SSI through asset spend-down for some beneficiaries or lower earnings enough to hasten spend-down and SSI entry by others. Cancelling effects on average earnings do not necessarily imply equal shares crossing this line between SSI ineligibility and eligibility, making impacts on these two SSI-related outcomes in either direction possible even in the absence of any true impact on average earnings.

• Beneficiaries with primary impairment of back disorder	Vs.	• Beneficiaries with all other primary impairments
• Beneficiaries with an associate's or bachelor's degree at baseline	Vs.	• Beneficiaries with no postsecondary degree at baseline

Appendix E contains impact estimates for all of the subgroups defined by these moderating characteristics. All moderator analyses of impact variation are exploratory. The significance tests reported here and in Appendix E are not adjusted for multiple comparisons. We examine how impacts vary with the moderators for each of four policy contrasts:

- The offset plus WIC compared to current law (T21 versus C2);
- The offset plus EWIC compared to current law (T22 versus C2);
- The offset with either type of work incentives counseling compared to current law (T22 combined with T21 versus C2);⁹⁹ and
- The offset plus EWIC compared to the offset plus WIC (T22 versus T21).

The focus of the analysis is whether impacts differ according to the moderating characteristic (e.g., whether impacts differ *between* subgroups defined by duration of prior SSDI receipt) rather than whether impacts are detected within any particular subgroup defined by the moderators (e.g., impacts on short-duration beneficiaries). If the impacts do not differ in a statistically significant manner, our practice is to focus on the full sample impact estimates rather than any subgroup-specific impact estimate. This practice is often adopted because full sample impact estimates are more precise (i.e., have smaller standard errors) and cannot confidently be improved upon as information about particular subpopulations (Bloom and Michalopoulos 2013). Column 7 in the exhibits of Appendix E display the estimate of the difference in impact for a subgroup and its counterpart and the corresponding standard error of the difference.

We examined impact moderation for all nine outcomes discussed earlier in this chapter. With nine outcomes, seven moderators, and four policy comparisons, there are 252 tests of differences in impacts that could potentially produce evidence of moderation to highlight in this chapter. As shown in Appendix E, there are 29 statistically significant differences in impact magnitude between subgroups at the $p < 0.10$ significance level, absent adjustment for multiple comparisons, out of the 252 tests performed. In this text, we mention the results that are strongly significant ($p < .01$), as well as results that are significant ($p < 0.10$ but $p > .01$) for which there are multiple significant differential impacts within the same domain (earnings or benefits). The differential impact estimates for subgroups defined by duration of SSDI receipt, Medicaid buy-in, and age do not meet these criteria. The other subgroup findings are summarized below:

⁹⁹ We combine the two treatment groups for the exploratory analysis of subgroups because of the lack of evidence of marginal effects of EWIC relative to WIC from the confirmatory analysis. Even if there is an (undetected) marginal impact, the estimates for the combined treatment group can be interpreted as the average impact of the offset under the two types of counseling. Combining the treatment groups in this way increases our ability to detect average impacts that differ by subgroups.

Employment. Consistent with 2013 subgroup analysis, in 2015 employment at baseline moderates the impact of T22 + T21 as compared to C2 on proportion with earnings above BYA, total SSDI benefits paid, and number of months of SSDI payments (Exhibit E-9), with a more positive impact on all three outcomes for those with a job—as opposed to no job—at baseline. Effects in the same direction are also apparent, though less statistically significant, in the comparison of T21 to C2, and T22 to C2 (Exhibits E-5 and E-6). Collectively, the findings are consistent with the hypothesis that subjects already working at baseline have a greater ability to earn—or interest in earning—at a level that takes advantage of the offset than do beneficiaries not already working at baseline. Despite these findings, there is no evidence that the offset rules increased average earnings within the subgroup employed at baseline. Also, we did not find evidence of a differential effect of EWIC compared to WIC based on employment at baseline (Exhibit E-8).

Major Affective Disorder. Major affective disorder is an impairment category that includes several mental illnesses such as depression, for which it may be possible to target more intensive counseling. A primary impairment of major affective disorder moderates the impact of T22 as compared to T21 (Exhibit E-19). EWIC provided to T22 subjects as compared to WIC for T21 subjects resulted in a more positive impact on earnings and the proportion with earnings greater than BYA for this group than for subjects with any other type of primary impairment. EWIC also led to a larger reduction in SSI amount and months of SSI payments for this impairment category compared to all others.

Back Disorder. A primary impairment of back disorder moderates the impact of T22 as compared to C2, and of T22 as compared to T21, on total earnings and earnings above one, two, and three times BYA (Exhibits E-22 and E-23). Compared to beneficiaries whose primary impairment is not back disorder, those with a back disorder experienced a less positive impact of T22 as compared to C2, and of T22 as compared to T21. This finding is consistent with the hypothesis that enhanced work incentives counseling, including outreach, helps nudge beneficiaries to increase their earnings and that there may be a smaller proportion of work-able beneficiaries amongst those with a primary impairment of back disorder as compared to those with a different primary impairment.

Education. There is some exploratory evidence that education level at baseline moderates the impact of T22 compared to T21 on total earnings and the proportion of beneficiaries with earnings above one, two, and three times BYA (Exhibit E-27). As compared to the offset plus WIC, the offset plus EWIC has a more positive impact on these outcomes for beneficiaries with at least an associate's degree at baseline. Surprisingly, EWIC relative to WIC has a significantly negative effect on most of these outcomes for those without a postsecondary degree.

The main focus of the subgroup analysis is to compare impacts across subgroups rather than to report impacts within subgroups. To only briefly summarize impacts within subgroups, about a quarter of the subgroup-specific impact estimates presented in Appendix E are statistically significant at the $p < .10$ level.

Most of these statistically significant results reflect impacts that are apparent in the full-sample exploratory results.¹⁰⁰

9.5. Summary of Results

There is no detectable confirmatory evidence that the offset plus WIC, or the offset plus EWIC, had an impact on total earnings in 2015. However, there is confirmatory evidence that the offset plus WIC, and the offset plus EWIC, had a positive impact on total SSDI benefits paid in 2015. We find no detectable confirmatory evidence that the offset plus EWIC changed earnings or benefits more than the offset plus WIC.

Some exploratory findings showed impact:

- Consistent with theory, both the offset plus WIC and the offset plus EWIC increased the proportion of sample members with earnings above BYA in 2015 compared to current law, with the offset plus EWIC also increasing overall employment;
- Both the offset plus WIC and the offset plus EWIC increased the average number of months of SSDI benefit receipt in 2015 compared to current law.

Similar to the 2012, 2013, and 2014 findings, we find no detectable evidence in 2015 that impacts for EWIC were different from impacts for WIC.

As a complement to these findings from administrative data, the next chapter reports impact findings on employment, earnings, and other outcomes measured in the 36-Month Survey of Stage 2 beneficiaries.

¹⁰⁰ Given the large number of impacts examined, it is also to be expected that some subgroup-specific impact estimates will be statistically significant when the corresponding exploratory full-sample estimates are not significant. We are unable to determine whether these subgroup-specific estimates represent noteworthy new information or are simply due to chance.

10. Impacts on Additional Employment Outcomes and Household Circumstances

This chapter presents impact results for a range of outcomes derived from the 36-Month Survey of Stage 2 BOND subjects. (Other survey results were presented in Chapters 5 and 6, “Knowledge of How Earnings Affect Benefit Amounts” and “Employment Barriers and Facilitators”.) This chapter considers the impact of the offset on employment-related outcomes and a range of household circumstances including income and hardship, type of residence, marital status, health status, income assistance benefits, health insurance, and time use.

Except for the survey analogues of the employment, earnings, and benefit receipt outcomes examined with administrative data in Chapter 9, we have not made any theoretical predictions about how the offset will affect these outcomes in this chapter. Further, we do not have theoretical predictions for the effect of EWIC compared to WIC for any outcomes. All statistical tests here are exploratory.¹⁰¹

Relative to administrative data, survey data have advantages and disadvantages. Survey data cover a much broader range of outcomes than administrative data, which are confined to a few variables captured for operational purposes. Thus, analysis of Stage 2 survey provides a rich tapestry of information not otherwise available on the lives of SSDI beneficiaries who volunteered for the opportunity to use the offset.

However, relative to administrative data, survey data are also potentially subject to two disadvantages—recall bias and non-response bias. Neither of those biases appear to be particularly strong threats to the analyses in this chapter. With respect to recall bias, the survey outcomes examined here are primarily contemporary measures and thus not subject to recall bias. With respect to non-response bias, the response rate for the Stage 2 36-Month Survey is high, 76 percent of a base of all cases randomized (all randomized cases were selected for interviewing).¹⁰² While large differences in response rates across treatment conditions is often seen as a signal of non-response bias, the response rates for the T21 and T22 groups are only slightly higher than for the C2 group (76.7 percent and 77.3 percent, respectively, versus 74.4 percent). Still, with no survey data available for a quarter of the study subjects, it is possible that the survey-based impact estimates differ from what would have been obtained had survey data been collected for all cases. To reduce any risk of bias that results, all estimates presented in this chapter are weighted to adjust for survey non-response.¹⁰³

¹⁰¹ Findings concerning exploratory outcomes are dubbed “suggestive” when found statistically significant ($p < .10$), since they are not adjusted to contain the heightened risk of false positive findings when multiple tests of significance are run.

¹⁰² The response rate was 81 percent among those who could be interviewed, excluding the known deceased. (Eight percent of Stage 2 subjects died during the demonstration.)

¹⁰³ The non-response weights cause survey respondents whose baseline characteristics are most similar to survey non-respondents to have the greatest influence on analytic results.

Relatively few of the outcomes examined here show statistically significant impacts. Of the 537 tests of statistical significance conducted, only 49 are statistically significant at the 10 percent level or better, fewer than would be expected by chance alone in the absence of any true impacts.¹⁰⁴ Thus, the evidence for impacts in the current chapter is weak; many of the apparently statistically significant results could be due merely to chance. Thus, a main conclusion of this chapter is that impacts on most of the outcomes examined are either not present or are too small to be detected with the available sample sizes.

The next section explains the contents of the chapter and its appendix (Appendix F). The discussion then moves to impact findings for employment-related outcomes and other survey measures. The chapter concludes by summarizing the results.

10.1. Presentation of Findings

By chance alone, we would expect more statistically significant impact estimates than the number generated in our analysis. Three options exist for presenting results under these conditions:

- Discuss all statistically significant findings in the text, knowing that many may provide false clues for policy;
- Discount all the findings, discussing none of them in the text (but supplying them all in an appendix); or
- Find a criterion in addition to statistical significance to decide which findings are meaningful for policy and hence warrant discussion in the text.

We take the third course. First, we examine whether to discuss each of the three policy comparisons. Our criterion for discussing any of the three policy comparisons is if a large majority—two-thirds or more—of the statistically significant findings for that policy comparison suggest favorable economic, behavioral, and/or attitudinal responses to the intervention¹⁰⁵—or the direct effects of offset use (i.e., increased rates of Social Security disability benefit receipt). Out of all of the estimated impacts of the offset-with-WIC versus current law policy comparison analyzed for this chapter, 16 are statistically significant and 14 fit the criterion of suggesting favorable response or direct effects of offset use. For the offset-with-EWIC versus current law policy comparison, 16 are statistically significant and 13 meet the criterion. Therefore, this chapter presents findings from these two policy comparisons—offset-with-WIC versus current law and offset-with-EWIC versus current law.

In contrast, in 186 comparisons of the offset-plus-EWIC versus offset-plus-WIC, 10 are statistically significant, and only 3 suggest favorable economic, behavioral, and/or attitudinal responses to the more extensive counseling provided by the EWIC approach.¹⁰⁶ Given the lack of broad plausibility for these

¹⁰⁴ The expected number of significant results at the .10 level from 537 statistically independent tests, absent any non-zero impacts, is 54.

¹⁰⁵ Favorable responses are effects of the examined intervention consistent with the intervention's intent that benefit study subjects or society.

¹⁰⁶ Outcomes showing favorable significant findings concern beneficiaries' personal goals, mental health, and help-seeking behavior for medical care (see Exhibit 10-1 of the text and Exhibits F-8 and F-9 in Appendix F). The

results, we conclude that they are largely spurious and do not include them in the text discussion in this chapter. Nevertheless, all impact estimates and test findings generated, significant and non-significant for all policy comparisons and outcomes, are provided in Appendix F.

All of the statistically significant findings for the two selected policy comparisons—offset-with-WIC versus current law and offset-with-EWIC versus current law—are presented in this chapter. To avoid undue attention to findings that may provide false clues to policy, we develop a second criterion to evaluate how much emphasis to place on each of the statistically significant findings. We organize outcomes into 12 domains. Within each domain, outcomes share a common focus. For instance, the work-related expenses domain contains six outcomes describing the average amount beneficiaries spent on employment-related items: commuting to work, uniforms and licenses, child care, special equipment to accommodate a disability, personal assistance services related to a disability, and the sum of all employment-related items combined.

If there are significant findings for 20 percent or more of the impacts tested within a domain, the chapter text provides expansive discussion of those outcomes. Ten of the 12 domains yield statistically significant findings. Of those, two have significant findings for 20 percent or more of the impacts tested: employment and earnings and attitudes toward employment. Therefore, we dedicate Section 10.2 to discussion of those findings, as well as subgroup analyses for those findings. Other domains show significant results for 11 percent or fewer of their tests, leading us to list those findings for the selected policy comparisons in Section 10.3 while refraining from extensive discussion in that section.

10.2. Impacts on Employment Outcomes

Evidence of impact emerges from the survey for a number of employment-related outcomes, as shown in Exhibit 10-1. This exhibit displays measures of impact for 20 outcomes for each of the three policy comparisons of interest, a total of 60 findings.¹⁰⁷

None of the policy comparisons reveals a statistically significant impact on current employment in top row of the exhibit. The lack of a statistically significant effect on current employment for the comparison of the offset plus EWIC to current law is somewhat at odds with evidence from Chapter 9. Most of the 36-Month Survey interviews took place in 2015, the calendar year covered by the administrative data examined in Chapter 9. For the full year, a positive effect on employment of 2.4 percentage points occurred. That the measured effect from survey data is non-significant (and just 1.4 percentage points in magnitude) may reflect a number of factors: the survey's smaller sample size, potential skewing due to

other seven significant findings concern reduced pension receipt, reduced subsidized apartment living, reduced personal care or board-and-care home living, reduced supervised group residence living, increased Medicare coverage, increased Medi-GAP coverage, and reduced supplemental Medicare coverage (see Exhibits F-5, F-7, and F-9 in Appendix F).

¹⁰⁷ For completeness and consistency with other chapters, the comparison of the offset plus EWIC to the offset plus WIC is included in Exhibit 10-1, and in Exhibit 10-2 that follows. However, we do not discuss the comparisons because the estimates are not sufficiently consistent with theory as discussed in Chapter 9; and thus we suspect the estimates are spurious, regardless of their level of statistical significance.

survey non-response, interviews conducted predominantly at times when not employed, or individual beneficiary reporting errors.

Exhibit 10-1. Estimated Impacts on Employment-Related Outcomes of Stage 2 Subjects, at the Time of 36-Month Survey Interview and in Prior Months

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Current Employment Status						
Currently working for pay or profit (%)	28.8	28.7	27.3	1.5 (1.2)	1.4 (1.6)	-0.1 (1.2)
Number of current jobs	0.3	0.3	0.3	0.0 (0.0)	0.0 (0.0)	-0.0 (0.0)
Looked for work in the last four weeks (%)	18.2	19.2	16.2	2.0* (1.0)	3.0* (1.5)	1.0 (1.6)
Currently not working for pay and not looking for work (%)	52.9	52.0	56.5	-3.5** (1.2)	-4.4** (1.4)	-0.9 (1.6)
Recent Employment History						
Any employment since demonstration entry (%)	50.1	50.5	46.8	3.3** (1.1)	3.7* (1.7)	0.4 (1.9)
Any employment in last 12 months (%)	36.4	36.6	34.4	2.0 (1.2)	2.2 (1.4)	0.2 (1.3)
Number of months of employment in last 12 months	3.4	3.4	3.3	0.1 (0.1)	0.2 (0.2)	0.0 (0.1)
Total hours worked in last 12 months	304	311	277	26 (17)	34* (16)	8 (21)
Job Characteristics ^a						
Weeks per year working at current main job	11.7	11.7	10.9	0.8 (0.5)	0.7 (0.7)	-0.0 (0.6)
Hours per week working at current main job	6.8	6.9	6.1	0.7** (0.3)	0.8** (0.3)	0.1 (0.3)
Has a temporary or seasonal job (%)	6.0	4.8	5.4	0.6 (0.6)	-0.5 (0.7)	-1.1 (0.7)
Self-employed at current or main job (%)	4.8	4.4	4.4	0.4 (0.7)	-0.0 (0.7)	-0.4 (0.6)
Earnings						
Earnings in past 12 months	\$3,894	\$4,150	\$3,650	\$244 (\$293)	\$500 (\$299)	\$256 (\$273)
Annual earnings from current main job ^b	\$4,403	\$4,614	\$4,007	\$395 (\$313)	\$607 (\$408)	\$211 (\$299)
Current weekly earnings above weekly equivalent of BYA (%) ^c	11.1	11.7	8.2	2.9** (1.0)	3.5*** (1.1)	0.7 (1.1)
Current weekly earnings above 2 times weekly equivalent of BYA (%)	4.5	4.6	3.8	0.6 (0.7)	0.8 (0.6)	0.2 (0.6)
Current weekly earnings above 3 times weekly equivalent of BYA (%)	2.0	2.2	1.7	0.3 (0.5)	0.5 (0.5)	0.2 (0.4)

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Attitudes Toward Employment						
Personal goals include getting a job (if not working for pay); moving up in a job or learning new job skills (if currently employed) (%) ^d	69.7	73.2	67.5	2.2* (1.2)	5.6*** (1.4)	3.4** (1.3)
Personal goals include working and earning enough to stop receiving SSDI (%) ^e	65.9	67.1	63.7	2.2 (1.3)	3.4* (1.6)	1.2 (1.5)
Does volunteer work (%)	16.5	16.4	17.4	-0.9 (1.0)	-1.0 (1.1)	-0.1 (1.1)

Source: Analysis of BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 3,724, T22 = 2,350, C2 = 3,610

Impact estimates are regression-adjusted for baseline characteristics.

^a A respondent who is not currently working for pay or profit is coded as working zero weeks per year and zero hour per week. He or she is also coded as not having a temporary or seasonal job and as not self-employed.

^b Assuming working for 52 weeks per year.

^c Weekly equivalent of BYA = $(7/365) \times \text{BYA}$.

^d Unweighted sample sizes: T21 = 3,692, T22 = 2,327, C2 = 3,574. Sample sizes are different in this row because the question was asked only of beneficiaries representing themselves and thus do not include proxy respondents.

^e Unweighted sample sizes: T21 = 3,557, T22 = 2,240, C2 = 3,320. Sample sizes are different in this row for two reasons: the question was asked only of beneficiaries representing themselves and thus do not include proxy respondents, and findings include only those respondents who stated that they were receiving Social Security Disability Insurance benefits at the time of the interview.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

In the remainder of the top panel of Exhibit 10-1 (Current Employment Status), we see some exploratory evidence that the offset plus WIC and the offset plus EWIC increased the share of subjects who had looked for work in the four weeks prior to their interviews, compared to current law. Under current law, 16.2 percent of non-working subjects had looked for work in the last four weeks. The rate is 2.0 and 3.0 percentage points higher for offset-plus-WIC and offset-plus-EWIC beneficiaries, respectively. Consistent with these increases, exploratory evidence also suggests that the offset reduced the share of subjects neither working nor looking for work from a current law rate of 56.5 percent: by 3.6 percentage points when combined with WIC and by 4.4 percentage points when combined with EWIC.

The next panel of the exhibit on “Recent Employment History” provides estimated impacts for measures of employment since demonstration entry. These include both a long-run measure over the roughly three-year period between entry and completion of the survey and one covering just the most recent 12 months prior to interview. The top row of the panel provides exploratory evidence that the offset plus WIC increased the share who had worked at some point since demonstration entry. A gain of 3.3 percentage points occurred over and above the current law employment rate of 46.8 percent. Similarly, some evidence appears that the offset plus EWIC raised employment by 3.7 percentage points from the current-law rate. Both results are consistent with the theoretical prediction of an employment rate increase due to the offset discussed in Chapter 9 and are similar to administrative data presented in that chapter. The

administrative data for the same two policy comparisons give a non-significant impact finding on employment in calendar year 2015 for the offset plus WIC compared to current law, and a statistically significant 2.4 percentage point increase in employment for the offset plus EWIC compared to current law.

The remainder of the “Recent Employment History” panel shows little evidence of employment impacts in the 12 months prior to respondents’ 36-month interviews. With the majority of interviews taking place in 2015, the 12-month retrospective reference period used here fell predominantly in 2014—with an important portion of the interval also falling in 2015 and a small share in 2013. The employment rate over the 12 measured months—34.4 percent for the current law control group—does not significantly differ for the offset intervention group,¹⁰⁸ nor does the number of months employed. However, the offset plus EWIC does show some evidence of increasing total hours of work in the last 12 months, up 34 hours from a control group average of 277 hours (including zeros for those not working).

Turning next to “Job Characteristics” in the third panel of Exhibit 10-1, we see evidence that the offset increased hours worked per week at study subjects’ current main jobs. (Those not currently employed are coded as 0 for this outcome.) The gains were slightly less than one hour per week, on top of the 6.1 average hours of work per week for the control group: up 0.7 of an hour for the offset plus WIC and up 0.8 of an hour for the offset plus EWIC. None of the other measured job characteristics—weeks worked per year, temporary/seasonal job holding, or self-employment—show statistically significant impacts.

Consistent with evidence from 2015 administrative data in Chapter 9, the survey produced no evidence of impacts on current earnings annualized to a full year (with \$0 earnings included for those not currently working). This finding appears in the fourth panel of Exhibit 10-1 on “Earnings.” Lack of significant impact applies to both earnings from all jobs over the previous 12 months and earnings from the current main job held. As discussed in Chapter 9, theory is ambiguous as to the direction of this potential offset impact. An unambiguous prediction of theory—that the offset will increase the share of beneficiaries with earnings above the weekly equivalent of BYA—is borne out in the survey data, (reinforcing annual similar finding from administrative data reported in Chapter 9. In particular, survey data show that 8.2 percent of beneficiaries earn about BYA under current law (based on annualized current earnings measured at the interview point in 2014 or 2015). This share rose by 2.9 percentage points due to the offset plus WIC and by 3.5 percentage points due to the offset plus EWIC. Impacts of these magnitudes constitute the largest proportionate gains over current law outcome levels (35 and 43 percent increases, respectively) among the 20 outcomes in Exhibit 10-1. They are also similar in magnitude to impacts reported from administrative data for calendar year 2015 in Chapter 9. As in the earlier administrative data results no significant effects are found in the survey data concerning earnings above twice BYA or earnings above three times BYA.

The final panel of Exhibit 10-1 addresses beneficiaries’ “Attitudes toward Employment.” Strong evidence exists that the offset plus EWIC led more beneficiaries to have personal goals emphasizing employment success—gaining employment or, if employed, moving up through skill acquisition. Compared to 67.5

¹⁰⁸ Administrative data in the BOND report *Fourth-Year Snapshot of Earnings and Benefit Impacts for Stage 2* (Geyer et al., 2017) show a significant employment impact in 2014 for the offset-plus-WIC versus current law policy comparison, but not for the other policy comparisons.

percent of subjects who hold those goals under current law, an additional 5.6 percentage points are induced to have those aspirations by the offset plus EWIC. Some evidence of an effect in the same direction, though smaller in magnitude, appears for the offset-plus-WIC group, estimated gain of 2.2 percentage points. The offset plus EWIC compared to current law also appears to influence the personal goal of earning enough to stop receiving SSDI, raising the share with this aspiration by 3.4 percentage points (compared to 63.7 percent under current law). No evidence of impacts on volunteer work appears for any policy comparison.

Beneficiaries who held jobs at baseline in theory were more likely to use the BOND benefit offset. Splitting these study subjects out from the rest of the population, we repeated the impact analysis for two subsets: beneficiaries who were not employed at baseline and beneficiaries who were employed at baseline (Exhibit 10-2). Significant findings for the former group—in the top half of Exhibit 10-2—largely mimic those seen for the full population in Exhibit 10-1. In particular, study subjects not employed at baseline show evidence of greater employment and a larger share with earnings above the weekly equivalent of BYA with the offset. This is true for the offset combined with either WIC or EWIC, compared to current law. A statistical test suggests that, for those not employed at baseline, the impact of the offset plus EWIC compared to current law on any employment since demonstration entry, 5.2 percentage points, exceeded the corresponding measure for those employed at baseline. For beneficiaries not employed at baseline, evidence also appears that the offset increases job search at follow-up whether accompanied by WIC or by EWIC.

Exhibit 10-2. Estimated Impacts on Employment-Related Outcomes of Stage 2 Subjects, at the Time of 36-Month Survey Interview for Subgroups Defined by Employment at Baseline (in 2010)

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Subjects NOT Employed at Baseline						
Current and Recent Employment Status						
Currently working for pay or profit (%)	17.6	17.8	16.3	1.3 (1.2)	1.5 (2.1)	0.2 (1.5)
Looked for work in the last four weeks (%)	20.0	20.7	17.7	2.3* (1.2)	3.1* (1.7)	0.8 (2.2)
Currently not working for pay and not looking for work (%)	62.4	61.4	66.1	-3.7** (1.4)	-4.7** (1.8)	-1.0 (2.2)
Any employment since demonstration entry (%)	35.8	36.9	31.7	4.1** (1.4)	5.2**†† (2.1)	1.1 (2.5)
Current Earnings						
Annual earnings from current main job ^a	\$2,507	\$2,683	\$2,317	\$190 (\$252)	\$366 (\$309)	\$176 (\$227)
Current weekly earnings above weekly equivalent of BYA (%) ^b	6.1	7.0	4.6	1.5*†† (0.7)	2.4** (0.8)	0.9 (0.7)
Current weekly earnings above 2 times weekly equivalent of BYA (%)	2.3	2.5	2.2	0.0 (0.5)	0.3 (0.5)	0.2 (0.4)
Current weekly earnings above 3 times weekly equivalent of BYA (%)	1.0	1.2	0.8	0.2 (0.3)	0.4 (0.4)	0.2 (0.2)

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Subjects Employed at Baseline						
Current and Recent Employment Status						
Currently working for pay or profit (%)	61.8	60.4	59.6	2.2 (2.7)	0.8 (3.2)	-1.4 (1.9)
Looked for work in the last four weeks (%)	12.7	14.5	12.0	0.8 (1.8)	2.8 (2.2)	1.8 (1.2)
Currently not working for pay and not looking for work (%)	25.4	24.7	28.1	-2.7 (2.5)	-3.4 (2.9)	-0.7 (2.0)
Any employment since demonstration entry (%)	92.3	90.5	91.4	0.9 (1.6)	-0.9†† (1.8)	-1.8 (1.6)
Current Earnings						
Annual earnings from current main job ^a	\$10,174	\$10,419	\$8,939	\$1,235 (\$715)	\$1,480 (\$1,071)	\$246 (\$821)
Current weekly earnings above weekly equivalent of BYA (%) ^b	26.2	26.0	18.6	7.6***†† (2.5)	7.4* (3.8)	-0.2 (3.3)
Current weekly earnings above 2 times weekly equivalent of BYA (%)	11.2	10.9	8.4	2.9 (1.9)	2.6 (1.9)	-0.3 (2.2)
Current weekly earnings above 3 times weekly equivalent of BYA (%)	5.1	5.1	4.0	1.1 (1.1)	1.1 (1.3)	0.0 (0.7)

Source: Analysis of BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes for respondents employed at baseline: T21 = 957, T22 = 550, C2 = 879

Unweighted sample sizes for respondents not employed at baseline: T21 = 2,738, T22 = 1,787, C2 = 2,708

Of the 9,684 36-Month Survey respondents analyzed in this chapter, 65 are missing baseline survey data and are omitted from this exhibit.

Impact estimates are regression-adjusted for baseline characteristics.

^a Assuming working for 52 weeks per year.

^b Weekly equivalent of BYA = $(7/365) \times \text{BYA}$.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

†/††/††† Impact estimate for subjects not employed at baseline differs from impact estimate for subjects employed at baseline at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparison adjustment).

These subgroup analyses reveal one further potentially important result for beneficiaries who were employed at baseline (bottom half of Exhibit 10-2). For those beneficiaries—who under current law show much greater work activity during the follow-up period than beneficiaries not employed at baseline—the offset in combination with either WIC or EWIC increased the share with earnings above the weekly equivalent of BYA. The difference in impact magnitude for above-BYA earnings—between the subgroup employed at baseline and the subgroup not employed at baseline—is statistically significant (see “†” notation in the exhibit) for the offset-plus-WIC versus current-law policy comparison. The estimates of impact on this outcome for those employed at baseline are much larger than for the full population, around 7.5 percentage points rather than 3 percentage points. This is consistent with the finding in Chapter 9 that baseline employment is associated with a larger positive impact of the offset on the share

of beneficiaries with follow-up earnings above BYA. But no other evidence appears that would suggest that the offset alters employment outcomes for beneficiaries employed at baseline. Strong influences on other aspects of employment and earnings were evidently confined to those beneficiaries who were not employed at baseline. When both subgroups—employed and not employed at baseline—experienced favorable impacts, evidence of impact on the full population grows quite strong. Only for earnings above BYA does this happen, bearing out expectations of how the offset is most likely to affect employment behavior: by inducing beneficiaries to earn enough to take advantage of the partial benefits offered when earning above BYA.

10.3. Impacts on Other Outcomes

Our estimates of impact in other domains are statistically significant for 22 of 429 tests conducted. Exhibits F-1 through F-11 in Appendix F provide the full set of impact results for these 10 outcome domains. The domains in which one or more statistically significant findings arise are fringe benefits from employment, work-related expenses, household income and material hardship, income support benefits, type of dwelling place, health status, health insurance, and time use. Statistically significant impacts are spread out across these domains. No domain has more than five statistically significant impacts. In two domains, we find no statistically significant impacts at all.

As explained in Section 10.1 above, we consider the set of statistically significant findings for the offset-plus-WIC versus current-law policy comparison broadly plausible. In addition to the subset of these results addressed in Section 10.2 (on employment), the remaining statistically significant findings from this comparison suggest that, compared to current law, the offset plus WIC:

- Raised the percentage of subjects working at a job with paid vacation by 1.5 percentage points ($p < 0.10$) [see Exhibit F-1 in Appendix F for details].
- Increased beneficiaries' work-related commuting expenses by \$2.02 per week ($p < 0.5$) [Exhibit F-2].
- Reduced the percentage of subjects living in households below the federal poverty line by 2.6 percentage points ($p < 0.10$) [Exhibit F-4].
- Increased the percentage of subjects who self-reported receipt of Social Security disability benefits¹⁰⁹ in the past month by 3.2 percentage points ($p < 0.01$) [Exhibit F-5].¹¹⁰
- Increased self-reported Social Security disability benefits received by \$32 per month ($p < 0.05$) [Exhibit F-6].¹¹¹

¹⁰⁹ “Social Security disability benefits”—the term used in interviewing respondents—is expected to include both SSDI benefits and SSI benefits received due to disability. The survey interview questions were framed in this manner because respondents seemed unlikely to be able to accurately distinguish between incomes from the two different SSA programs.

¹¹⁰ This result is consistent with evidence from administrative data in Chapter 9 of a small but statistically significant increase in the number of months receiving SSDI in calendar year 2015.

¹¹¹ This result is consistent with evidence from administrative data in Chapter 9 of a statistically significant increase in SSDI benefits over calendar year 2015 and no effect on SSI benefits.

- Reduced the percentage of subjects receiving other assistance not on a regular basis by 0.7 of a percentage point ($p < 0.10$) [Exhibit F-5].
- Decreased the amount of other assistance received not on a regular basis by \$9.02 per month ($p < 0.05$) [Exhibit F-6].
- Reduced the percentage of subjects living in a single-family home by 2.7 percentage points ($p < 0.10$) [Exhibit F-7].
- Increased the percentage of subjects living in other supervised group residences by 0.4 of a percentage point ($p < 0.05$) [Exhibit F-7].
- Increased time spent working for pay by 0.8 of an hour per week ($p < 0.05$) [Exhibit F-11].¹¹²

Noteworthy in not showing a statistically significant impact at 36 months are measures of average household income, income support benefits received regularly (besides Social Security disability benefits), share of beneficiaries living independently, and health status. (See Exhibits F-4 through F-8 in Appendix F for details). The household income finding is particularly surprising given the substantial positive effects measured from administrative data in Chapter 9 on both SSDI benefits (statistically significant) and earnings in 2015.

We also consider the set of statistically significant findings for the offset-plus-EWIC versus current-law policy comparison broadly plausible. In addition to the subset of these results already presented, findings suggest that—compared to current law—the offset plus EWIC:

- Increased beneficiaries' work-related commuting expenses by \$1.40 per week ($p < 0.10$) [Exhibit F-2].
- Reduced the percentage of subjects living in households below the federal poverty line by 3.0 percentage points ($p < 0.10$) [Exhibit F-4].
- Increased the percentage of subjects who self-reported receipt of Social Security disability benefits in the past month by 3.0 percentage points ($p < 0.01$) [Exhibit F-5].¹¹³
- Increased self-reported Social Security disability benefits by \$26 per month ($p < 0.10$) [Exhibit F-6].¹¹⁴
- Increased the percentage of subjects needing help with personal care by 2.1 percentage points ($p < 0.10$) [Exhibit F-8].
- Increased the percentage of underweight subjects by 1.0 percentage point ($p < 0.05$) [Exhibit F-8].

¹¹² Note that this outcome differs from hours worked per week on the respondent's current main job reported and discussed above in conjunction with Exhibit 10-1. The outcome here, and its measured impacts (see Exhibit F in Appendix F), are slightly higher due to the inclusion of hours worked in jobs other than the current main job.

¹¹³ This result is consistent with evidence from administrative data in Chapter 9 of a small but statistically significant increase in the number of months receiving SSDI in calendar year 2015.

¹¹⁴ This result is consistent with evidence from administrative data in Chapter 9 of a statistically significant increase in SSDI benefits over calendar year 2015 and no effect on SSI benefits.

- Reduced the percentage of beneficiaries with supplemental Medicare coverage by 0.8 of a percentage point ($p < 0.05$) [Exhibit F-9].
- Increased time spent working for pay by 0.9 of an hour per week ($p < 0.05$) [Exhibit F-11].¹¹⁵

Several of the findings here regarding the effects of the offset plus EWIC versus current law echo those found for the offset plus WIC versus current law in the previous bullet list: impacts on work-related commuting expenses, living below the poverty line, self-reported Social Security benefit receipt and amount, and hours of paid work. The eight instances in which the two sets of results differ should not be taken as evidence that EWIC surpasses WIC in effectiveness nor the reverse. Only two of the eight corresponding statistical tests of relative effectiveness between EWIC and WIC, found in Appendix F (see final column of Exhibits F-1, F-4, F-7, F-8, and F-9), indicate statistically significant differences. Those differences are part of a pattern that earlier discussion of the comparison of the offset plus EWIC to the offset plus WIC deemed unlikely to reflect true differential effectiveness.

Again, it is notable that no statistically significant impacts are found at 36 months concerning household income, income support benefits received (besides Social Security disability benefits), living independently, and health status. (See Exhibits F-4 through F-8 in Appendix F for details.) The household income finding is particularly surprising given the substantial positive effects measured from administrative data in Chapter 9 on both SSDI benefits (statistically significant) and earnings in 2015.

Findings for the offset-plus-EWIC versus offset-plus-WIC policy comparison, beyond those presented above, can be found in Appendix F. Because, as a group, the statistically significant estimated impacts for that comparison lack plausibility as consequences of higher intensity counseling provided by EWIC, these results are not discussed here.

Overall, the limited number and varying domains of the statistically significant impacts found for all policy comparisons—combined with the fact that we did not adjust the test statistics to account for the large number of hypothesis tests involved (537)—may mean that the statistically significant estimates listed above reflect chance differences between the different samples when in fact no impacts occurred. However, the lack of detectable impacts for the vast majority of outcomes considered in this chapter does not necessarily point to an absence of impacts of sufficient size to be of interest to policymakers. Rather, it may be that with the available sample sizes we are unable to detect substantively important impacts that did occur.¹¹⁶ To illustrate, consider in Exhibit 10-2 above the point estimate for the impact of the offset plus EWIC compared to current law on the percentage of subjects looking for work at the time of the 36-Month Survey, for the subgroup of beneficiaries employed at baseline. Its value is 2.8 percentage points. This value represents a 23 percent increase relative to the current law level for this outcome (12.0). If it

¹¹⁵ Note that this outcome differs from hours worked per week on the respondent's current main job reported and discussed above in conjunction with Exhibit 10-1. The outcome here, and its measured impacts (see Exhibit F-11 in Appendix A10), are slightly higher due to the inclusion of hours worked in jobs other than the current main job.

¹¹⁶ This problem arises when the power to detect some impacts that would be of substantive interest is low. See McCloskey and Ziliak (1996) for a discussion about the distinction between statistical significance and policy or economic significance.

reflects a true impact of this magnitude in the small subset of the SSDI population most interested in using the offset it might be considered substantively important by some even though it is not statistically significant.

10.4. Summary

This chapter presents 537 estimated impacts in 12 domains using the data from the Stage 2 36-Month Survey. Forty-nine of the 537 statistical significance tests of potential effects of the offset (or of differential effects of EWIC versus WIC given the offset) showed evidence of non-zero impacts at the 10-percent significance level or stronger. Statistically significant effects were spread across outcome domains and subgroups (defined by employment/non-employment at baseline). The small percentage of statistically significant findings (7 percent of the impacts tested) may in part reflect the limited power of the survey- to detect impacts of substantive importance, given its limited sample size. Or it may be that few impacts large enough to matter to policy actually took place.

From the measured effects that are statistically significant, it appears that the BOND offset (in combination with either WIC or EWIC) had effects compared to current law in multiple domains 36 months following demonstration entry. In particular, the offset combined with either counseling approach appears to have caused more beneficiaries to work—50 or 51 percent at some point since demonstration entry, compared to 47 percent for the current law control group. It also appears to have increased work effort about an hour per week and to have caused more non-working beneficiaries to look for work. These results accord with a measured positive effect of the offset on the share of beneficiaries who hold personal goals of getting or moving up in a job.

In addition, the share of study subjects with annualized earnings above BYA was increased by the offset in combination with WIC by 2.9 percentage points, and by the offset in combination with EWIC by 3.5 percentage points. These results largely held up when we separately examined impacts for beneficiaries who were not employed at baseline but—except for the earnings-above-BYA result—were not present for beneficiaries who were employed at baseline. Finally, the offset increased work-related commuting expenses by an estimated \$2.07 or \$1.40 per week depending on whether it was combined with WIC or with EWIC.

Additional evidence of effects of the offset when combined with WIC, compared to current law, include more jobs with paid vacation, fewer households living below the federal poverty line, and smaller amounts of income support received from irregular sources outside the household. There was also evidence that the offset combined with EWIC had additional effects on beneficiaries compared to current law: fewer beneficiaries living below the federal poverty line, a larger share with a personal goal of earning enough to stop receiving SSDI, and an increased share in need of personal care or classified as underweight.

Finally, the number of statistically significant differential impact findings for EWIC compared to WIC, given the offset, was quite small and on the whole not plausible as consequences of more intensive counseling. Evidence that EWIC affects outcomes differently than WIC has not been found among the 12 domains examined in this chapter.

The survey results presented in this chapter are broadly (but not exactly) consistent with the administrative data findings on employment, earnings, and disability benefits in Chapter 9. The 36-Month

Survey data allow analysis of many additional outcomes, albeit with somewhat lower precision because of the smaller sample sizes involved. Examination of these outcomes reveals that the effects of the BOND interventions on Stage 2 subjects go beyond the simple employment and benefits “story” told in Chapter 9. But these effects concern only a small share of the additional outcomes examined and carry small consequences in terms of the magnitude of the measured impacts.

11. Conclusion

This chapter summarizes and discusses the findings of the second interim report on Stage 2 of BOND. Stage 2 uses an experimental design to learn about the impacts of the benefit offset relative to current law for those beneficiaries most likely to use it—SSDI-only beneficiaries who volunteer for the opportunity to use for the offset. The second primary goal of Stage 2 is determine the effects of the delivery of more intensive enhanced work incentives counseling (EWIC) services, given the offset, compared to typical work incentives counseling (WIC) services. To achieve these goals, Stage 2 uses three-way random assignment into an offset-plus-WIC group, an offset-plus-EWIC group, and a current-law benefits group.

This report documents results of the Stage 2 process and participation analyses through the sixth calendar year of implementation (2016). The report also provides a large set of impact findings on self-reported beneficiary outcomes three years after random assignment, including knowledge and understanding of offset rules, perceived barriers to employment, employment services and other services used to facilitate employment, family income, and workforce and health outcomes. Readers should keep in mind the selected nature of the sample when considering the results of this report. The results generalize to all those Stage 2-eligible (SSDI-only and ages 18-59) beneficiaries in the nation who would have volunteered had they been given the opportunity. The results, however, do not generalize to the entire SSDI population.

The report also provides impact estimates for annual earnings and benefit outcomes based on SSA administrative data for 2015, and compares estimated impacts to estimates for earlier years.¹¹⁷ It also presents analyses of work-related overpayments for Stage 2 for the first time. These analyses are based on BTS and SSA administrative data through 2014 and include estimates of the impacts of the offset on the prevalence and size of overpayments.

This chapter highlights the most notable findings from the report and draws cross-cutting lessons from the evidence presented.

11.1. As designed, counseling receipt declined each year but T22 subjects were still much more likely to receive counseling in later years.

Chapter 4 explores Implementation Team data on counseling, showing that the percent of Stage 2 beneficiaries receiving counseling each year declined in comparison to the year prior, consistent with the design of BOND. Still, assignment to the offset-plus-EWIC group significantly increased the likelihood of counseling receipt in 2015 and 2016, when 47 percent of the offset-plus-EWIC group received work incentives counseling compared to 5 percent of the offset-plus-WIC group. Almost all of the offset-plus-EWIC subjects who had contact with a counselor in 2015 and 2016 received EWIC-specific counseling using EWIC-specific tools or services. The three most common EWIC-specific services delivered in 2015 and 2016 were service coordination, barriers and needs assessments, and referrals to organizations that

¹¹⁷ Geyer et al. (forthcoming), Gubits et al. (2017), and Gubits et al. (2014) report findings from earlier impact analyses of Stage 2.

teach pre-employment skills development, offer job placement services, and counsel clients on strategies for job retention.

For beneficiaries interested in higher earnings, work incentives counseling is intended to help beneficiaries understand the consequences of work on total income and to provide referrals to vocational rehabilitation services and other providers for direct assistance in finding a job and retaining a job. The higher intensity of work incentives counseling delivered in the later years of the demonstration to the offset-plus-EWIC group, relative to the offset-plus WIC group, reinforces hypotheses that, relative to WIC, EWIC would result in greater understanding of the benefit offset rules, and thus increase employment and the proportion looking for a job.

11.2. Three years after demonstration entry, roughly half of the beneficiaries assigned to the benefit offset rules did not understand those rules

Chapter 5 presents three-year follow-up results showing that only about half of the Stage 2 treatment subjects provide responses consistent with an accurate understanding of how the benefit offset works—in particular, how earnings affect SSDI benefits under the offset. The results also show that the responses of the offset-plus-EWIC subjects are only slightly more accurate than those of the offset-plus-WIC subjects. This result suggests that the additional counseling available through EWIC did not meaningfully improve understanding. In addition, treatment group beneficiaries who were working when they enrolled in the study demonstrate lack of understanding of the offset rules at the same rate as those who were not working, despite the potentially higher salience of the opportunity for combining work and benefits using the offset in the former group. The results for the control group subjects also show a relatively high amount of confusion about the standard SSDI program rules and the relationship of earnings to benefits. Only about half of control group subjects provide responses consistent with an accurate understanding of the current-law rules that apply to them, with a substantial proportion believing that they are subject to rules consistent with the benefit offset rules of the treatment group. These findings are similar to those in the earlier survey response 12 months after demonstration entry (Gubits et al. 2017); thus, despite more time to work with WIC or EWIC staff and more time to consider using the offset, we find no meaningful improvement over time in the knowledge of either treatment nor control subjects pertaining to their own earnings rules.

Understanding the offset is presumably a crucial prerequisite for a behavioral response to the offset. These results suggest that this prerequisite has only been satisfied for about half of the treatment subjects. In addition, the results do not show that EWIC—compared to WIC—has substantially improved beneficiary understanding of the offset offer, one of its key purposes.

11.3. Assignment to the benefit offset rules led to a modest increase in employer accommodations

Chapter 6 presents evidence of some modest differences between treatment and control subjects in their perceived barriers to work and in receipt of employment supports and workplace accommodations. Slightly lower proportions of treatment group subjects reported that fear of losing SSDI benefits made it difficult to work compared to control group subjects (29 percent versus 31 percent). Compared to the control group, higher proportions of the offset-plus-EWIC group received employment supports (48 percent versus 45 percent) and engaged in schooling or training (20 percent versus 18 percent). These self-reported differences are small in comparison to the differences in counseling delivery observed in the

BTS data (Chapter 4), and in comparison to the expectation that the offset-plus-EWIC group would receive greater assistance in identifying employment supports, compared to WIC. There are similar small gains in the treatment group of employment facilitators for those already working. The treatment groups reported higher levels (by 2 to 3 percentage points) of workplace accommodation than the control group. Nearly two-thirds of Stage 2 volunteers working at the time of the 36-Month Survey received some kind of workplace accommodation.

Health barriers to employment and the frequent need for employer accommodations in the work place are important factors in understanding why offset use was not higher. There is no evidence that treatment reduced the percentage of beneficiaries perceiving that their physical or mental condition limited their ability to work. In addition, nearly half of survey respondents reported at least some unmet need for an employment support and there is no evidence that assignment to the treatment group reduced unmet need. The most common factors to overcome an employment barrier that went unmet were training to learn a new job or skill, help to find a job, on-the-job training, coaching or support services; and transportation assistance. In focus groups, interviewees and staff reported low satisfaction with existing outside employment support services.

11.4. As of December 2016, 15 percent of treatment subjects are known to have used the offset—the majority for more than one year. There is no evidence that WIC and EWIC resulted in different rates of offset use.

Chapter 7 explains that 22.3 percent of Stage 2 treatment subjects had an identified cessation date, implying they completed the TWP and SSA had determined that they had at least one post-TWP month with SGA-level earnings. This means that they were poised to use the offset if their annual earnings exceeded BYA. The majority of these beneficiaries (86 percent) successfully submitted an AEE to SSA. Of those who submitted, SSA adjusted the benefits of 79 percent using the offset rules (15 percent of all Stage 2 treatment subjects).

Of the beneficiaries who used the offset, 66.2 percent used it for at least two years, and nearly half (47.5 percent) used it for at least three years. A substantial proportion of the offset users in this sample had already been using the offset for more than one calendar year before SSA first adjusted their benefits under offset rules. There are several reasons to believe that not all offset users initially make this choice deliberately: (1) half of the treatment group lacked an accurate understanding of the offset rules (Chapter 5), (2) 21 percent of offset users did not submit AEEs prior to their initial benefit adjustment (Section 7.6 and 11.5), and (3) a substantial number of the users in this sample had already been using the offset for at least two calendar years before seeing any change in their benefit checks and thus it may not have been clear to them that they were using the offset (Section 7.6 and 11.5).

As of December 2016, there is no evidence that EWIC, compared to WIC led to any significant differences in the proportion of subjects completing the three milestones of benefit adjustment (differences ranged from 0.8 to 1.2 percentage points). This is a change from previously-reported analysis of data available through December 2014, in which EWIC (compared to WIC) seemed to increase the proportion reaching each milestone (point estimates ranged from 2.2 to 2.8 percentage points; Gubits et al. 2017). The impact of EWIC relative to WIC on attainment of the milestones in the earlier period might have been because EWIC services accelerated the processing of benefit adjustments for those engaged in SGA, rather than a greater likelihood of sustained engagement above SGA.

11.5. Benefit adjustments continue to lag initial offset use

In most instances, SSA first adjusts benefits long after a beneficiary's first month of offset use—the first month to which the adjustment is applied.¹¹⁸ For the Stage 2 treatment subjects whose first adjustments occurred in 2016, SSA identified that 80 percent had offset use prior to 2016. For all offset users with first adjustments in 2013 through 2016, the median duration from the first month of offset use to the first adjustment was 15 months, or slightly more than one year. Proactive beneficiary involvement in the benefit adjustment process (defined as submitting an Annual Earnings Estimate) speeds up the process (slightly) to a median of 12 months, compared to a median of 20 months for cases without an AEE.

Because a benefit adjustment conveys important information to a beneficiary (either new information about how earnings affect benefits, or confirmation of expectations) lengthy adjustment delays may mean that beneficiaries' understanding of how the offset works is less accurate or less certain than if adjustments had occurred more quickly. As a result, employment behavior—and hence earnings and benefits—might have been different had adjustments occurred more quickly. This statement applies to all beneficiaries, both treatment and control. Many control subjects also experienced delays in benefit adjustments, although the limited evidence available to date suggests that their delays were typically shorter than for treatment subjects.

11.6. Overpayments were more prevalent for treatment subjects than for C2 subjects, but smaller on average

The long delays in the benefit adjustment process have resulted in high rates of overpayments among offset users. Chapter 8 reports that 91 percent of Stage 2 offset users from 2011 to 2014 had at least one work-related overpayment or incorrect payment (which we refer to collectively as “overpayments”) between random assignment and December 2014. For those with an overpayment, the mean amount of the overpayment was \$4,309 across the entire period. Overpayments occur for reasons related to the timeliness and accuracy of benefit adjustment, including: beneficiaries' delayed submission of earnings reports, the submission of revised or inaccurate AEEs, the large backlog in SSA's processing of work CDRs, and BSAS errors.

Overpayments are more prevalent for treatment group subjects than for control group subjects, but smaller on average. Based on benefit adjustments made through October 2016, overpayment prevalence for treatment subjects during the demonstration's first four years was 11.4 percent, versus 7.4 percent for control subjects. The average total overpayment amount from 2011 to 2014 for treatment subjects with an overpayment was \$4,309, compared with \$10,107 for control subjects with an overpayment.

According to WIC and EWIC counselors who participated in focus groups in 2016, some treatment subjects had neutral reactions to overpayments while others formed negative associations between overpayments and the BOND offset. Several counselors reported in focus groups that a few beneficiaries planned to reduce their earnings because of an overpayment. Counselors and other BOND staff tried to

¹¹⁸ These delays and their causes are discussed in Hoffman et al. (2017), Gubits et al. (2017), Derr et al. (2015), and Wittenburg et al. (2012).

moderate beneficiaries' reactions by preparing them for overpayments as they accrued during work CDR delays. For example, staff explain that an overpayment is likely and encourage beneficiaries to save instead of spend the money. In addition, some EWICs described educating beneficiaries about setting up repayment plans with their local field offices. They encouraged beneficiaries to continue working and also reminded them that overpayments occur under current law and are typically larger. We do not know the average effect of overpayments on treatment subjects' earnings, if any.

11.7. For 2015, there is no evidence of an impact on total earnings and there is evidence of a positive impact on SSDI benefits paid during the year

The impact evaluation has two confirmatory outcomes: benefits and earnings. Consistent with findings from earlier years in the demonstration, Chapter 9 reports that there is no confirmatory evidence of an impact on total earnings in 2015 for either offset-plus-WIC or offset-plus-EWIC subjects relative to control subjects. Exploratory analysis reveals both the offset plus WIC and the offset plus EWIC increased the proportion of sample members with earnings above BYA in 2015 compared to current law, with the offset plus EWIC also increasing overall employment.

For the second confirmatory outcome, we found evidence of a positive effect of the benefit offset on total SSDI benefits *paid* in 2015 compared to current law, similar to previously reported findings for 2014 (Geyer et al. 2017). The point estimates for 2015, \$512 and \$544 per year for the offset-plus-WIC and the offset-plus-EWIC groups respectively, is about 4.5 percent of the control group mean. Theory predicts that the offset will have (1) a negative average effect on benefits for those who would not engage in SGA under current law but who are induced to do so by the BOND offset and (2) a positive average effect on benefits for those who would engage in SGA under current law. The overall positive impact of BOND for benefits paid implies that the latter effect dominates. On net, benefit increases among those who would engage in SGA under current law exceed benefit reductions for those who are induced to engage in SGA by the BOND offset.

The benefit impact estimates for 2015 will change in the future, after SSA completes retroactive adjustments for the 2015 benefits paid to many treatment and control subjects with earnings. In the *Final Report*, we will produce estimates of impacts on benefits paid *for* a given year after accounting for all retroactive adjustments observed. Our estimates of negative impacts on mean overpayments to treatment subjects through 2014—on average, \$50 less than for control subjects—suggest that retroactive adjustments will make the estimated positive impact on benefits paid *for* 2015 larger than the estimate for the impact on benefits paid *in* 2015. However, unequal processing times between treatment and control subjects imply that larger impacts on benefits paid for 2015 are not a certainty.

There is no confirmatory evidence that, relative to the offset plus WIC, the offset plus EWIC had an impact on earnings or benefits paid.

The results show that EWIC combined with the offset rules had larger earnings impacts for those with a primary impairment of major affective disorder, as compared to current law or the offset rules paired with WIC. Major affective disorder is an impairment category that includes several mental illnesses such as depression, for which it may be possible to target more intensive counseling.

11.8. The offset rules had a modest impact on some self-reported measures of work effort

Chapter 10 provides 555 impact estimates in 12 outcome domains measured in the 36-Month Survey. Thirty-seven of the 555 outcomes, or 7 percent, showed some evidence of impacts at the 10 percent significance level or stronger. Statistically significant effects were spread across outcome domains and subgroups (defined by employment/non-employment at baseline).

This exploratory evidence in Chapter 10 suggests that, compared to current law, the offset plus WIC appears to have moved work effort up about an hour per week and caused more non-working beneficiaries to look for work. The share with annualized earnings above BYA increased 3 percentage points. Work-related commuting expenses and jobs with paid vacation both increased relative to current law. The evidence further suggests that the proportion of households living below the federal poverty line fell by 2.6 percentage points because of the offset and WIC.

The offset had a number of similar effects when combined with EWIC, compared to current law. The evidence suggests that the offset plus EWIC led to an increase of 4 percentage points on employment since demonstration entry and an increase of 3 percentage points on the share of non-workers looking for a job. Similar to the impact of the offset plus WIC, hours worked per week rose nearly an hour on average. Compared to control subjects, more offset-plus-EWIC subjects reported personal goals around getting or moving up in a job and earning enough to leave SSDI.

There was no evidence of impacts on fringe benefits from employment, type of business or employment, receipt of benefits outside of the SSDI/SSI programs, living situation, health, health insurance coverage, or marital status. In addition, the number of statistically significant differential impact findings for EWIC compared to WIC was quite small and did not fit a specific pattern.

11.9. Summary

This report adds to evidence from earlier Stage 2 reports that—both with WIC and with EWIC—the benefit offset does not affect the average earnings of Stage 2 volunteers who were assigned to treatment. There is exploratory evidence that the benefit offset led to modest increases in work effort, as demonstrated by increases in the proportion employed, the proportion earning more than BYA, the proportion receiving accommodations from employers, and more frequent receipt of work or job assessments.

Multiple factors likely explain why the share of treatment subjects earning enough to use the offset is not larger than what we have observed to date. Implicit in the logic of BOND is that people have to understand the offset in order to change their behavior in response to this new work incentive. However, a great deal of evidence has emerged from in-depth interviews of beneficiaries and the 36-Month Survey that understanding of the offset is limited among treatment group subjects, including those who were working at baseline. Some control group subjects also exhibit confusion about the SSDI rules that apply to them, with 30 percent incorrectly believing that benefits would be reduced but not to zero if earnings are above SGA-level after the TWP. Beneficiaries' understanding of offset rules might improve were the offset rules adopted permanently nationally, as knowledge of the rules spread among all beneficiaries, their service providers, and other stakeholders. Poor health, perceived barriers to employment, lack of employment assistance, and the time to achieve sustained SGA-level earnings are other factors. Finally,

another factor that may limit the impact of benefit offset is the lag in benefit offset adjustments. Beneficiary failure to comply with the SSA requirement to report earnings to BOND or SSA staff, and SSA delays in completing work Continuing Disability Reviews continue to create significant delays between benefit adjustment and initial use of the benefit offset.

This report also adds to the evidence that the benefit offset had a positive impact on benefits. Although the impact estimated for benefits will change as more benefits are adjusted retroactively to reflect needed adjustments and overpayments, it appears that such changes will be at most modest relative to the size of the current impact estimates. The reason for the positive impact on benefits is clear: many treatment subjects who, under current law, would have had their benefits suspended due to earnings for at least some of the study period are receiving a partial benefit under the offset. These amounts are larger, in aggregate, than the reduction in benefits among those treatment subjects who were induced by the offset to increase their earnings from below BYA to above BYA and thus start receiving the benefit offset. Holding constant the increase in benefits paid to the former group, the impact on average benefits would have been smaller, or even negative, if more of the remaining treatment subjects had been induced to increase their earnings to above BYA, or to increase their earnings by a greater amount.

Finally, this report adds to the evidence that EWIC did not lead to different impacts on earnings or benefits than WIC. Even in the later years, offset-plus-EWIC subjects were more likely than offset-plus-WIC subjects to receive service coordination, barriers and needs assessments, referrals, and other work incentives counseling activities. However, these counseling efforts did not result in meaningful differences in understanding, earnings, benefits, or workforce engagement.

The Final Evaluation Report will synthesize these and all earlier findings of both Stage 1 and Stage 2, and will also present a cost-benefit analysis for each stage.

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Appendix A. Construction of Analysis Weights for Stage 2 36-Month Survey Outcomes

This appendix describes the method used to construct analysis weights for survey outcomes from the 36-Month Survey. All other details of the impact estimation methodology used in this report are identical to those used in the *2015 Stage 2 Interim Process, Participation, and Impact Report* and the *Third-Year Snapshot of Earnings and Benefit Impacts for Stage 2*.

The construction of the survey non-response component of the 36-Month Survey analysis weights is largely similar to that of the non-response component of the 12-Month Survey analysis weights (described in Appendix A of Gubits et al. 2017). However, the process for the 36-Month Survey weights differs in two respects from that used for the 12-Month Survey weights. Both of these changes are made to improve the precision of impact estimates while still strongly reducing the risk of nonresponse bias. Our concern is that the procedures used to model nonresponse propensity at 12 months are vulnerable to something called “overfitting.” A nonresponse model is overfit if it contains large regression coefficients for predictors that are, in fact, not causes of nonresponse and should therefore have coefficients of zero. Overfitting easily occurs when the number of potential predictors is large relative to the sample size. When nonresponse propensity models are overfit, the resulting nonresponse-adjustment weights vary more than necessary. This excess weight variation increases standard errors on impact estimates without any reduction in nonresponse bias.

The two changes made to the process are:

- 1) A reduction in the number of covariates included in the propensity-to-respond-to-survey regression model. The 36-month propensity model used 57 predictor variables, compared to the 174 predictor variables (all impact model covariates) used in the 12-month model.
- 2) Estimated nonresponse propensities to respond are estimated with “cross-validation,” using the reduced set of predictors.

A.1. Model Winnowing

We used a forward stepwise regression procedure¹¹⁹ to select most of the variables for the model. This procedure selected from the 99 non-interaction variables from the impact model and their corresponding indicator variables for missing values. (Interaction variables were left out of the propensity model as they are suspected to contribute to overfitting.) To check for robustness in the set selection we ran the procedure with different selection and stopping rules. Finally, for those variables with missing values, indicator variables for missing values were added to the set (and the value of 0 was imputed for all missing values). Exhibit A-1 shows the full set of 57 variables.

¹¹⁹ We used the STEPWISE selection method of the GLMSELECT procedure in the SAS statistical package.

A.2. Cross-Validation

After the set of predictor variables had been winnowed, personal probabilities of nonresponse were calculated with a procedure called cross validation. With this procedure, the sample is randomly partitioned into a number of mutually exclusive and exhaustive subgroups. We used a partition with ten random subgroups. For the members of each random subgroup, the nonresponse model was fit using only the other 90 percent of the assignment group to estimate the model coefficients. These estimated coefficients were then used to make an external projection of nonresponse propensity for the excluded 10 percent subgroup. This procedure is well known to reduce overfitting.

Specifically, the model regresses an indicator variable equal to one if a person responded to the survey, on selected baseline characteristics.

$$(3) \quad R_{pkg} = X_{pkg}\Theta_g + \epsilon_{pkg}$$

where

R_{pkg} is equal to one if participant p in site k in assignment group g responded to the survey,

X_{pkg} = a vector of baseline characteristics (listed in exhibit A-1) for individual p in site k in assignment group g ,

Θ_g = a vector of coefficients for assignment group g , and

ϵ_{pkg} = an idiosyncratic error term for participant p , in site k , and assignment group g .

We use the coefficients from each run of this predictive model to calculate the propensity to respond to the survey ($X_{pkg}\widehat{\Theta}_g$) for the subjects in the excluded random subset, given their baseline characteristics. The ten regressions thus generate estimated propensities for the entire assignment group.

Then, we divide each assignment group into quintiles based on estimated propensity to respond. The non-response adjustment factor for each respondent is

$$nrw_{gq} = \left(\frac{NR_{gq} + R_{gq}}{R_{gq}} \right)$$

where:

- nrw_{gq} denotes the non-response adjustment factor for a respondent in group g with response propensity quintile q .
- NR_{gq} denotes the *weighted* number of *non-respondents* in group g with response propensity quintile q , where the weights are the analytical weights for administrative outcomes $w_{mkj\ell}^A$ (i.e., NR_{gq} is the sum of the administrative outcome weights for the non-respondents in group g with response propensity quintile q).
- R_{gq} denotes the *weighted* number of *respondents* in group g with response propensity quintile q where the weights are the analytical weights for administrative outcomes $w_{mkj\ell}^A$ (i.e., R_{gq} is the sum of the administrative outcome weights for the respondents in group g with response propensity quintile q). (See Appendix A of Gubits et al. 2017 for a description of $w_{mkj\ell}^A$).

The analytical weight for survey outcomes is then given by:

$$w_{mkj\ell gq}^S = w_{mkj\ell}^A \times nrw_{gq}$$

where:

- $w_{mkj\ell gq}^S$ denotes the Stage 2 weight for survey outcomes for a volunteer of national stratum m , site k , category j , and stratum ℓ , assignment group g , and response propensity quintile q . (See Appendix A of Gubits et al. 2017 for a description of national stratum m , category j , and stratum ℓ .)

Exhibit A-1. Baseline Covariates Included in Stage 2 36-Month Nonresponse Propensity Model

Covariates (measured at baseline unless otherwise specified)
Age
Age (squared)
Body mass index 25 or higher
Change in health during past year (much better, somewhat better + about the same, somewhat worse, or much worse)
Dummy for missing change in health in past year
Dummy for missing engaged in volunteer work status
Dummy for missing H.S. diploma/GED status
Dummy for missing health limitation in moderate activities
Dummy for missing health status
Dummy for missing information on access to car, truck, or van
Dummy for missing information on body mass index
Dummy for missing information on length of past-year hospital stays
Dummy for missing information on need help getting around outside
Dummy for missing information on occurrence of past-year hospital stay
Dummy for missing marriage status
Dummy for missing non-group residence status
Dummy for missing self-employed status
Dummy for missing vocational school/college degree status
Educational attainment is less than high school diploma/GED
Educational attainment is vocational school diploma, 2-year college degree, or above
Engaged in volunteer work
First added to BOND sample in June 2011 (after Stage 1 random assignment)
Gender
Has a representative payee
Has access to a car, truck, or van
Health is poor
Health is very good
Health limits in moderate activities "a lot"
Is a disabled adult child (DAC) beneficiary
Lives in non-group residence (single family home, regular apartment, or mobile home)
Marital status (widowed, divorced, separated, never married, married + never married)
Needs the help of another to get around outside home

Covariates (measured at baseline unless otherwise specified)	
Primary impairment category:	
Neoplasms	
Back or other musculoskeletal	
Nervous system disorders	
Genitourinary system disorders	
Injuries	
Severe visual impairments	
Digestive system	
Mental disorders + Circulatory system disorders + Respiratory + Other impairments + Unknown impairments	
Randomly assigned in 2012	
Self-employed	
Short-duration SSDI receipt (36 months or fewer)	
Site dummies	
Stayed in hospital more than 30 days in year before baseline	
Stayed overnight in a hospital in 12 months before baseline	

Appendix B. Additional Material: (Chapter 5) How Treatment Subjects Describe BOND and (Chapter 6) Barriers and Facilitators

This appendix provides additional material supporting the participation analyses in Chapters 5 and 6. Section B.1 provides supporting material for Chapter 5 (knowledge of how earnings affect benefit amounts). Section B.2 provides supporting material for Chapter 6 (barriers and facilitators).

B.1. How Stage 2 Treatment Subjects Describe BOND Three Years After Random Assignment

As part of the Stage 2 36-Month Survey, Stage 2 subjects were asked an open-ended question about how they would describe “the BOND program” to a friend or relative. Our expectation is that treatment and control subjects would provide different answers, because their experiences in the demonstration are presumably different, and that, compared to T21 subjects, T22 subjects would provide answers that are indicative of the enhancements to their counseling. The evaluation team created response codes and applied up to five codes to each open-ended response. Except for the 1 percent of survey responses that were completed by proxies, all Stage 2 survey respondents were asked the question.

Exhibit B-1 shows how T21, T22, and C2 subjects described the “BOND program.” The percentages in each of the first two columns sum to more than 100 percent because the description provided by each respondent could receive up to five codes. The most frequent response, provided by about 37 percent of treatment subjects and 23 percent of control subjects, was “offset program/allows people to work/make more money/not lose benefits,” responses that are consistent with the demonstration’s recruitment slogan “earn more, keep more.” The other most frequent responses for all three groups, were “good/helpful/would recommend” and “help to find employment/return to work/job counseling.” The control subjects more frequently mentioned the fact that BOND involved a lottery (7 percent mentioned the lottery in some fashion, versus an average of 1 percent for the two treatment groups), perhaps because the lottery’s outcome was not favorable to them. They were also more likely to report that the BOND program concerned the provision of return to work services.

Exhibit B-1. Three-Year Follow-up: How Stage 2 Treatment Subjects Describe BOND

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Have heard of BOND	97.5	98.2	97.2	0.3 (0.5)	1.0* (0.5)	0.7 (0.4)
How Stage 2 Subjects Would Describe the BOND Program to a Friend or Relative						
Good/helpful/ would recommend	27.5	32.3	23.1	4.4*** (1.2)	9.2*** (1.4)	4.8*** (1.4)
Not helpful/poor/dislike program	3.7	3.2	5.5	-1.8** (0.6)	-2.2*** (0.6)	-0.4 (0.6)
Promotes higher self-esteem/independence/better quality of life	1.7	2.1	1.0	0.7 (0.5)	1.1* (0.5)	0.5 (0.5)

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Incentive program/encourages people to work	2.5	2.4	1.3	1.3*** (0.4)	1.1** (0.4)	-0.2 (0.5)
Offset program/ allows people to work/make more money/not lose benefits	35.7	34.5	21.3	14.4*** (1.4)	13.1*** (1.7)	-1.3 (1.4)
Help to find employment/return to work/job counseling	19.1	20.3	19.6	-0.5 (1.2)	0.7 (1.4)	1.1 (1.2)
Help with job training/education	4.1	5.2	4.8	-0.7 (0.5)	0.5 (0.7)	1.2 (0.6)
Determine improvements/services needed/effectiveness of services (for people to return to work)	5.0	2.8	9.1	-4.1*** (1.1)	-6.3*** (0.8)	-2.2** (0.8)
Different levels of assistance/different groups/lottery/randomly chosen	1.4	1.1	6.5	-5.0*** (0.8)	-5.4*** (0.8)	-0.4 (0.3)
Don't understand program/confusing/ complicated	0.5	1.0	1.1	-0.5* (0.2)	-0.1 (0.3)	0.4 (0.3)
Don't know/don't remember/nothing/ refused	8.1	6.7	11.1	-3.0** (1.3)	-4.5*** (0.9)	-1.4 (1.1)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

Unweighted sample sizes: T21 = 3,785, T22 = 2,384, C2 = 3,661

Impact estimates are regression-adjusted for baseline characteristics. Weekly equivalent of BYA = $(7/365) \times \text{BYA}$.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

B.2. Supporting Material for Barriers and Facilitators Analysis (Chapter 6)

Exhibit B-2. Estimated Impacts on Unmet Need for Employment Support of Stage 2 Subjects Since Random Assignment

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Did not receive at least one employment support that was needed since RA (%)	49.7	48.2	47.9	1.8 (1.7)	0.3 (1.5)	-1.5 (1.8)
Type of Employment Support Received Since RA						
Needed but did not receive a work or job assessment (%)	14.1	14.7	13.5	0.7 (1.1)	1.2 (1.1)	0.5 (1.1)
Needed but did not receive help to find job (%)	23.6	23.0	22.1	1.5 (1.1)	0.9 (1.3)	-0.6 (1.3)
Needed but did not receive training to learn new job or skill (%)	24.9	24.0	22.5	2.4* (1.2)	1.5 (1.3)	-0.8 (1.3)
Needed but did not receive advice about modifying job or workplace (%)	13.7	13.0	12.2	1.4 (0.9)	0.7 (1.0)	-0.7 (1.1)
Needed but did not receive on-the-job training, coaching, or support services (%)	19.5	18.4	18.2	1.3 (1.1)	0.2 (1.2)	-1.1 (1.2)
Needed but did not receive personal care assistance (%)	8.8	7.9	7.3	1.5* (0.7)	0.7 (0.8)	-0.9 (0.8)
Needed but did not receive transportation assistance (%)	17.7	17.6	17.0	0.7 (1.6)	0.6 (1.2)	-0.2 (1.1)
Needed but did not receive help in keeping a job (%)	12.8	11.6	12.5	0.3 (0.9)	-0.8 (1.1)	-1.2 (1.0)
Needed but did not receive any kind of assistive device (%)	10.6	9.8	10.4	0.2 (0.9)	-0.6 (1.0)	-0.8 (0.9)
Needed but did not receive other employment support (%)	8.7	9.2	8.2	0.5 (0.8)	1.0 (1.0)	0.5 (0.9)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

The sum of means in this section may exceed the mean reported in the same column in the first row because subjects may have an unmet need for several types of employment supports.

Unweighted sample sizes: T21 = 3,785, T22 = 2,384, C2 = 3,661

Impact estimates are regression-adjusted for baseline characteristics.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit B-3. Estimated Impacts on Special Equipment Used to Help Stage 2 Subjects Work at Current Paid Job at the Time of 36-Month Survey Interview

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Uses any disability-related special equipment to help work at current job (%) ^a	7.5	8.0	7.3	0.1 (0.7)	0.7 (0.8)	0.5 (0.8)
Type of Equipment Used^b						
Brace (%)	3.3	2.8	2.7	0.6 (0.5)	0.1 (0.6)	-0.6 (0.5)
Cane, crutches, or walker (%)	2.3	2.4	2.1	0.2 (0.4)	0.3 (0.5)	0.1 (0.5)
Wheelchair (%)	0.8	0.8	1.1	-0.3 (0.3)	-0.3 (0.3)	0.0 (0.3)
Modified computer hardware (%)	0.6	0.4	0.7	-0.1 (0.2)	-0.2 (0.2)	-0.2 (0.2)
Modified computer software (%)	0.6	0.5	0.8	-0.2 (0.2)	-0.3 (0.3)	-0.1 (0.2)
Work station items (%)	0.9	1.6	0.8	0.1 (0.2)	0.8** (0.3)	0.7* (0.3)
Other (%)	2.0	2.4	2.3	-0.3 (0.4)	0.1 (0.6)	0.4 (0.4)
Source of Payments for Special Equipment^c						
Special equipment is self-paid (%)	4.5	4.4	4.6	-0.1 (0.7)	-0.2 (0.7)	-0.1 (0.6)
Special equipment is paid by family (%)	0.1	0.1	0.2	-0.1 (0.1)	-0.0 (0.1)	0.0 (0.1)
Amount paid by self/family	\$12.74	\$19.57	\$19.19	\$-6.45 (\$5.74)	\$0.38 (\$12.86)	\$6.83 (\$9.37)
Special equipment is paid by health insurance (%)	1.3	1.3	1.0	0.3 (0.3)	0.4 (0.3)	0.0 (0.3)
Special equipment is paid by Medicare (%)	1.1	1.1	0.9	0.2 (0.3)	0.2 (0.4)	-0.0 (0.3)
Special equipment is paid by Medicaid (%)	0.4	0.5	0.3	0.2 (0.3)	0.3 (0.2)	0.1 (0.2)
Special equipment is paid by employer (%)	1.0	0.7	1.1	-0.0 (0.3)	-0.3 (0.3)	-0.3 (0.4)
Special equipment is paid by state vocational rehabilitation agency (%)	0.4	0.5	0.5	-0.0 (0.2)	0.1 (0.2)	0.1 (0.2)
Special equipment is paid by non-profit organization serving people with disabilities (%)	0.1	0.1	0.1	-0.1 (0.1)	-0.1 (0.1)	0.0 (0.1)
Special equipment is paid by worker's compensation (%)	0.2	0.0	0.1	0.1 (0.1)	-0.1 (0.1)	-0.1 (0.1)

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Special equipment is paid by disability insurance (%)	0.0	-0.0	0.0	0.0 (0.0)	-0.0 (0.0)	-0.0 (0.0)
Special equipment is paid by other source (%)	0.4	0.4	0.5	-0.1 (0.2)	-0.0 (0.2)	0.1 (0.2)

Source: Analysis of BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

Unweighted sample sizes: T21 = 3,724, T22 = 2,350, C2 = 3,610

Impact estimates are regression-adjusted for baseline characteristics.

^a Respondents not currently working are counted as having not used any disability-related special equipment.

^b The sum of percentages in this section may exceed the percentage reported in the same column in the first row of the exhibit because subjects may have used multiple types of equipment.

^c The sum of percentages in this section may exceed the percentage reported in the same column in the first row of the exhibit because subjects may have used multiple sources of funding for their special equipment.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit B-4. Estimated Impacts on Payee of Personal Assistance Services Provided to Stage 2 Subjects Since Random Assignment

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Received personal assistance that helps you work (%)	2.3	3.0	2.7	-0.4 (0.5)	0.3 (0.5)	0.7 (0.5)
Personal assistance is self-paid (%)	0.6	0.7	0.4	0.2 (0.2)	0.4 (0.4)	0.2 (0.4)
Personal assistance is paid by family (%)	0.0	0.0	0.1	-0.1 (0.1)	-0.1 (0.1)	-0.0 (0.0)
Amount paid by self/family for personal assistance	0.1	0.5	0.2	-0.1 (0.1)	0.3 (0.3)	0.4 (0.3)
Personal assistance is paid by health insurance (%)	0.0	0.1	0.0	-0.0 (0.1)	0.1 (0.1)	0.1 (0.1)
Personal assistance is paid by Medicare (%)	0.4	0.1	0.0	0.3* (0.2)	0.1 (0.1)	-0.2 (0.2)
Personal assistance is paid by Medicaid (%)	0.1	0.1	0.1	-0.0 (0.1)	0.0 (0.1)	0.0 (0.1)
Personal assistance is paid by employer (%)	0.3	0.4	0.5	-0.2 (0.2)	-0.1 (0.2)	0.2 (0.2)
Personal assistance is paid by state vocational rehabilitation agency (%)	0.5	0.4	0.7	-0.2 (0.2)	-0.4 (0.3)	-0.1 (0.2)
Personal assistance is paid by non-profit organization serving people with disabilities (%)	0.3	0.3	0.3	-0.0 (0.2)	-0.0 (0.2)	0.0 (0.2)
Personal assistance is paid by worker's compensation (%)	0.0	0.0	0.0	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Personal assistance is paid by disability insurance (%)	0.1	0.1	0.0	0.1 (0.1)	0.1 (0.1)	-0.0 (0.1)
Personal assistance is paid by other resource (%)	0.4	0.8	0.4	-0.0 (0.2)	0.4 (0.3)	0.4 (0.3)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

Unweighted sample sizes: T21 = 3,785, T22 = 2,384, C2 = 3,661

Impact estimates are regression-adjusted for baseline characteristics.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit B-5. Estimated Impacts on 2015 Transportation Access for Stage 2 Volunteers: All Policy Comparisons

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
At time of Survey, percent of subjects who:						
Are able to drive a car (%)	79.3	78.7	78.4	0.9 (0.9)	0.3 (1.0)	-0.6 (1.1)
If going places, percent of subjects who usually get there by:						
Own car, truck or van (%)	67.4	66.1	66.7	0.8 (1.3)	-0.6 (1.2)	-1.3 (1.1)
Public bus (%)	22.6	23.7	22.4	0.2 (1.5)	1.3 (1.4)	1.0 (1.2)
Train or subway (%)	9.3	8.8	9.7	-0.4 (0.8)	-0.9 (0.9)	-0.5 (0.9)
Relying on friends or relatives (%)	52.3	54.2	54.5	-2.3 (1.6)	-0.4 (2.0)	1.9 (1.5)
Walking (%)	32.4	33.0	31.5	0.9 (1.3)	1.5 (1.4)	0.6 (1.4)
Taxi, van or paratransit service (%)	21.6	22.4	22.0	-0.4 (1.1)	0.4 (1.2)	0.8 (1.2)
Wheelchair (%)	5.9	6.2	6.1	-0.2 (0.6)	0.1 (0.8)	0.3 (0.7)
Motorized scooter (%)	3.6	5.0	4.4	-0.8 (0.6)	0.6 (0.9)	1.4* (0.6)
Other form of transportation (%)	6.0	6.0	5.1	0.8 (0.6)	0.9 (0.8)	0.1 (0.7)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

Unweighted sample sizes: T21 = 3,785, T22 = 2,384, C2 = 3,661

Impact estimates are regression-adjusted for baseline characteristics.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit B-6. Estimated Impacts on Self-Reported Service Locations and Referrals and Types of Personal Assistance

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Percent who received on-the-job training, coaching, or support services (%)	14.1	14.3	13.3	0.8 (1.2)	1.1 (1.5)	0.3 (1.1)
Percent who received on-the-job training, job coaching, or support services, by location type:						
A vocational rehabilitation agency (%)	4.4	5.1	4.2	0.2 (0.6)	0.9 (0.7)	0.6 (0.8)
A welfare agency (%)	0.5	0.5	0.4	0.2 (0.2)	0.1 (0.2)	-0.1 (0.2)
A mental health agency (%)	2.2	2.0	1.5	0.6 (0.5)	0.4 (0.7)	-0.2 (0.6)
A state agency (%)	1.5	1.6	1.1	0.4 (0.4)	0.6 (0.4)	0.1 (0.4)
A workforce center of unemployment office (%)	2.3	2.7	2.0	0.3 (0.5)	0.7 (0.5)	0.4 (0.5)
An employer (%)	8.6	7.2	8.1	0.5 (1.1)	-0.9 (0.9)	-1.4 (0.8)
Other (%)	1.5	2.2	1.9	-0.4 (0.4)	0.3 (0.5)	0.7 (0.4)
Percent who received on-the-job training, job coaching, or support services, by person who referred:						
Parent/guardian (%)	0.2	0.2	0.3	-0.1 (0.2)	-0.2 (0.1)	-0.0 (0.1)
Spouse/partner (%)	0.0	0.1	0.0	0.0 (0.1)	0.0 (0.1)	0.0 (0.0)
Friend (%)	1.0	0.9	1.3	-0.2 (0.3)	-0.3 (0.3)	-0.1 (0.3)
Job coach (%)	0.4	0.9	0.7	-0.2 (0.2)	0.2 (0.3)	0.4 (0.3)
Employer/supervisor (%)	4.0	3.5	3.8	0.2 (0.6)	-0.3 (0.6)	-0.5 (0.6)
Other relative (%)	0.2	0.0	0.2	0.0 (0.2)	-0.2 (0.2)	-0.2* (0.1)
Benefit specialist (%)	0.6	1.5	0.5	0.2 (0.2)	1.0* (0.5)	0.9* (0.5)
Medical Provider (%)	0.5	0.6	0.5	-0.0 (0.2)	0.1 (0.2)	0.1 (0.2)
Other (%)	1.6	0.9	1.3	0.3 (0.4)	-0.4 (0.3)	-0.7* (0.4)
Received personal assistance that helps you work (%)	2.3	3.0	2.7	-0.4 (0.5)	0.3 (0.5)	0.7 (0.5)
Percent employed and who received personal assistance service, by assistance type:						
Job coach (%)	1.3	1.8	2.0	-0.7 (0.4)	-0.2 (0.5)	0.5 (0.4)
Sign language interpreter (%)	0.1	0.2	0.1	0.0 (0.1)	0.1 (0.1)	0.1 (0.1)
Reader/interpreter for the blind (%)	0.0	0.1	0.1	-0.1 (0.1)	-0.0 (0.1)	0.0 (0.1)

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Personal care attendant/personal assistant (%)	0.3	0.8	0.2	0.1 (0.1)	0.6** (0.3)	0.5* (0.2)
Other (%)	0.8	0.3	0.4	0.4 (0.3)	-0.2 (0.2)	-0.5* (0.3)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

The sum of means in this section may exceed the mean reported in the same column in the first row because subjects may have an unmet need for several types of employment supports.

Unweighted sample sizes: T21 = 3,785, T22 = 2,384, C2 = 3,661

Impact estimates are regression-adjusted for baseline characteristics.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit B-7. Estimated Impacts on Self-Reported Training Locations and Referrals

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Percent received training to learn a new job or skill	11.3	11.9	11.3	0.0 (0.9)	0.6 (1.3)	0.6 (1.0)
Percent who received training to learn a new job or skill, by location of training:						
A vocational rehabilitation agency (%)	3.4	4.6	4.2	-0.7 (0.6)	0.4 (0.8)	1.2 (0.8)
A welfare agency (%)	0.4	0.1	0.2	0.1 (0.2)	-0.2 (0.2)	-0.3* (0.2)
Mental health agency (%)	0.9	1.0	1.1	-0.1 (0.3)	-0.1 (0.4)	0.0 (0.3)
A state agency (%)	0.9	0.9	1.3	-0.4 (0.3)	-0.3 (0.3)	0.0 (0.3)
Workforce center or unemployment office (%)	2.1	2.2	2.0	0.1 (0.6)	0.3 (0.6)	0.1 (0.5)
An employer (%)	5.4	3.9	5.0	0.4 (0.6)	-1.1 (0.6)	-1.5** (0.6)
A school/University/online course (includes technical, community) (%)	1.5	2.3	1.8	-0.2 (0.3)	0.6 (0.6)	0.8 (0.5)
Other (%)	1.6	1.1	1.7	-0.1 (0.4)	-0.6 (0.4)	-0.6 (0.4)
Percent who received training to learn a new job or skill, by type of person who referred						
Parent/guardian (%)	0.0	0.1	0.2	-0.2 (0.1)	-0.2 (0.1)	0.0 (0.1)
Spouse/partner (%)	0.1	0.0	0.0	0.1 (0.1)	-0.0 (0.0)	-0.1 (0.1)
Friend (%)	0.7	0.7	0.7	-0.0 (0.2)	0.0 (0.3)	0.1 (0.3)
Job coach (%)	0.5	0.6	0.4	0.1 (0.2)	0.2 (0.2)	0.1 (0.2)
Employer/supervisor (%)	2.4	1.7	1.8	0.6 (0.4)	-0.0 (0.4)	-0.6 (0.4)
Other relative (%)	0.2	0.3	0.4	-0.1 (0.2)	-0.0 (0.2)	0.1 (0.2)
Benefit specialist (%)	0.5	1.3	0.4	0.1 (0.2)	0.8* (0.4)	0.7 (0.4)
Medical Provider (%)	0.3	0.2	0.4	-0.1 (0.2)	-0.1 (0.2)	-0.0 (0.2)
Other (%)	1.2	1.1	1.2	-0.0 (0.5)	-0.1 (0.3)	-0.1 (0.5)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

The sum of means in this section may exceed the mean reported in the same column in the first row because subjects may have an unmet need for several types of employment supports.

Unweighted sample sizes: T21 = 3,785, T22 = 2,384, C2 = 3,661

Impact estimates are regression-adjusted for baseline characteristics.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit B-8. Estimated Impacts on Educational Attainment at 36-Month Survey

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Has a high school diploma or a GED (%)	89.1	89.0	88.6	0.5 (0.4)	0.4 (0.5)	-0.2 (0.6)
Has some college or post secondary vocational courses (%)	21.8	23.5	21.3	0.6 (1.1)	2.2 (1.2)	1.7 (1.2)
Has an associates degree or vocational school diploma (%)	15.5	15.6	15.4	0.0 (0.9)	0.1 (1.0)	0.1 (1.0)
Has a bachelor's degree (%)	11.8	12.0	11.7	0.1 (0.8)	0.3 (0.9)	0.2 (1.0)
Has some graduate work (%)	1.4	1.1	1.4	0.1 (0.3)	-0.3 (0.4)	-0.4 (0.4)
Has a graduate degree (%)	5.7	5.9	5.9	-0.2 (0.6)	-0.1 (0.6)	0.2 (0.6)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

The sum of means in this section may exceed the mean reported in the same column in the first row because subjects may have an unmet need for several types of employment supports.

Unweighted sample sizes: T21 = 3,785, T22 = 2,384, C2 = 3,661

Impact estimates are regression-adjusted for baseline characteristics.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit B-9. Estimated Impacts on Current Education and Training Activities at 36-Month Survey

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Currently enrolled in school or taking classes (%)	5.4	5.6	5.1	0.3 (0.6)	0.5 (0.7)	0.2 (0.7)
Currently working towards a degree, certificate, or license (%)	4.1	4.3	3.9	0.1 (0.6)	0.4 (0.6)	0.3 (0.6)
Enrolled in school full-time (%)	2.2	2.2	1.8	0.4 (0.4)	0.3 (0.5)	-0.0 (0.5)
Enrolled in school part-time (%)	2.0	2.1	2.2	-0.2 (0.4)	-0.1 (0.5)	0.1 (0.5)
Currently working towards a GED or high school equivalence program completion (%)	0.2	-0.0	0.2	0.1 (0.1)	-0.2* (0.1)	-0.3* (0.1)
Currently working towards a vocational or training program completion (%)	0.9	0.8	0.7	0.2 (0.3)	0.1 (0.3)	-0.2 (0.4)
Currently working towards an Associate's degree (%)	0.8	1.2	1.0	-0.2 (0.3)	0.3 (0.3)	0.5 (0.4)
Currently working towards a Bachelor's degree (%)	1.4	1.4	1.4	0.0 (0.3)	0.0 (0.4)	0.0 (0.4)
Currently working towards a graduate degree (%)	0.7	0.6	0.5	0.2 (0.2)	0.1 (0.3)	-0.1 (0.3)
Currently working towards other degree or certificate type (%)	0.2	0.3	0.2	-0.1 (0.1)	0.1 (0.2)	0.2 (0.2)
Currently not working towards a degree, certificate, or license and only taking classes (%)	1.1	1.2	1.0	0.1 (0.3)	0.2 (0.5)	0.1 (0.5)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for offset participation. Standard errors are in parentheses.

The sum of means in this section may exceed the mean reported in the same column in the first row because subjects may have an unmet need for several types of employment supports.

Unweighted sample sizes: T21 = 3,785, T22 = 2,384, C2 = 3,661

Impact estimates are regression-adjusted for baseline characteristics.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Appendix C. The Work CDR Process

For SSA to establish eligibility for the offset and adjust benefits under offset rules, it must complete a work CDR based on documented earnings. This appendix provides details about the process of conducting work CDRs and how it evolved over the course of BOND.

C.1. Identifying Beneficiaries in Need of a Work CDR

The first step in the work CDR process is for SSA or BOND staff to identify beneficiaries who need a work CDR (Exhibit C-1). This step differs depending on whether beneficiaries report their earnings. SSA requires all SSDI beneficiaries to report earnings. BOND treatment subjects and Stage 2 control subjects may report earnings to either BOND staff or SSA. According to BTS data as of March 2017, despite similar employment rates,¹²⁰ 15 percent of Stage 2 control subjects had ever submitted work reports to the demonstration.¹²¹ This compares to 43 percent of Stage 2 treatment subjects. The difference may occur because control subjects are less likely than treatment subjects to report their earnings to BOND staff (who document the reports in BTS) rather than to SSA (where staff do not document the reports in BTS) or because they are less likely to report earnings to either entity. These reporting differences are salient because of process differences for beneficiaries who do and do not report earnings and also because of varying practices across BOND and SSA in initiating work CDRs among beneficiaries in the former group.

¹²⁰ According to 2015 administrative data, Stage 2 treatment and control subjects worked at similar rates: between 35 and 38 percent were employed at any point during the year (see Exhibit 9-2).

¹²¹ WICs and EWICs reminded Stage 2 treatment subjects to report earnings to the demonstration. EWICs provided this reminder to all T22s during monthly outreach to their caseloads. WICs did the same for T21s who proactively engaged with their services.

Exhibit C-1. Process for Developing a Work CDR**1) Need for work CDR identified**

SSA or BOND staff identify those in need of a work CDR based on beneficiary-reported earnings or information from other sources, such as an SSA-initiated review of IRS records

2) Work history information compiled

Beneficiaries, often with the help of SSA or BOND staff, compile information on their work histories

3) SSA verifies information and completes work CDR

Once SSA receives work history information, SSA staff (1) evaluate the earnings documentation, (2) render a decision about whether and when a beneficiary's disability ceased due to work activity, and (3) prepare relevant forms and notices

When beneficiaries submit work reports to BOND staff, those staff are responsible for reviewing available data to determine if the BOND beneficiaries are in need of work CDRs. If the BOND beneficiaries are in need of work CDRs, BOND staff follow the BOND guidelines for the timing of CDR initiation and, if appropriate, submit requests to SSA's ORDES BOND work unit to initiate work CDRs. Since the start of BOND, WIC and EWIC staff have shared responsibility for identifying beneficiaries in need of a work CDR among those who report earnings with the site office staff who enrolled Stage 2 subjects (until September 2012) and BOND Implementation Team staff.

As indicated in the *Stage 2 Early Assessment Report* (Gubits et al. 2013) and the *2016 Stage 1 Interim Process, Participation, and Impact Report* (Hoffman et al. 2017), the process for identifying beneficiaries in need of work CDRs may have differed between BOND treatment subjects and current-law beneficiaries at several points in the demonstration. In 2013, the BOND Implementation Team began ongoing, monthly reviews of BTS data to identify treatment beneficiaries in need of a work CDR. In contrast, the process for control group subjects remained that SSA staff screened work reports as they were submitted.

In addition, SSA's guidance on work CDR initiation early in the demonstration varied between treatment subjects and current-law beneficiaries. From 2011 until spring 2014, BOND staff were to request a work CDR if a beneficiary had earnings over the SGA amount and was likely to have completed at least seven TWP months. This differed from the guidance for current-law beneficiaries, which was to request initiation of a work CDR whenever a beneficiary reported new work at any level. As of 2014, the BOND-specific guidance changed to match the current-law approach. Even when this difference existed, it may not have caused differences between the initiation of work CDRs for treatment and control subjects. This is because ORDES work unit staff reported that, to promote efficiency, many workers in the SSA process (for control subjects) adopted an approach similar to the BOND guidance, and developed a work CDR only when they thought a beneficiary was likely to be working at or above the SGA amount.

As noted above, despite working at similar rates, treatment subjects were more likely than control subjects to ever have submitted a work report to BOND staff (43 percent compared to 15 percent). It is therefore plausible that control subjects submitted work reports to SSA staff (rather than BOND staff) at a higher rate than treatment subjects. If this was indeed the case, then the difference in guidance issued to SSA staff and BOND staff may have led to accelerated work CDR processing for control subjects relative to treatment subjects prior to Spring 2014. However, data are not currently available to measure any potential differences in the timing of work CDR initiation between the two groups.

Treatment and control subjects who do not report their earnings will face delays in the work CDR process compared to beneficiaries who report their earnings to BOND or SSA. Under both current law (SSA 2011) and under BOND (Derr et al. 2015), many beneficiaries fail to report work. In early 2015, several members of the BOND Implementation Team reported that this behavior appeared to be ongoing. For beneficiaries who do not report work, the start of the work CDR process cannot occur until SSA receives information on earnings from another source, typically IRS earnings records. SSA reviews IRS earnings records three times a year, typically starting in late spring or summer of the following calendar year.¹²² SSA receives earnings information sooner if beneficiaries report their earnings in real time.

C.2. Developing Work History

When either SSA or BOND staff identify the need for a work CDR, ORDES BOND work unit staff send the beneficiary administrative forms and a request to document past work activity. In many cases, beneficiaries need assistance in completing these forms. Either BOND staff or SSA field office staff are available to provide assistance, if requested. WIPA counselors and SSA field staff may provide similar assistance for control group subjects.

According to both BOND and ORDES staff, the process of developing work history has generally operated well (Derr et al. 2015). However, there are some exceptions. In some cases, beneficiaries may not provide information in a timely fashion (Derr et al. 2015). During 2015 interviews, ORDES and BOND Implementation Team staff reported instances in which SSA field office staff declined to provide assistance with paperwork to treatment group beneficiaries because of their BOND treatment subject status, and ORDES began taking corrective action in late 2014. ORDES and BOND staff reported that these situations were occurring less frequently by late 2016.

C.3. SSA Processing of Work CDRs

SSA has been delayed in processing work CDRs for treatment subjects since the start of the demonstration.¹²³ Despite recent improvements, WIC and EWIC staff cite delays in work CDR processing as a key barrier to timely first benefit adjustment under offset rules for treatment group subjects. During focus groups with WICs and EWICs in 2016, participants in every focus group raised delays to work CDR processing as a major challenge to implementing BOND.

¹²² The timing of SSA review of earnings information was misstated in Footnote 57 of Derr et al. (2015).

¹²³ Once SSA receives work history information from a beneficiary, SSA staff need to complete three steps: (1) evaluate the earnings documentation, (2) render a decision about whether and when a beneficiary's disability ceased due to work activity, and (3) prepare relevant forms and notices (see Step 3 of Exhibit C-1).

Since the start of the demonstration, SSA has had a significant backlog of treatment group subjects needing a work CDR.¹²⁴ Backlogs also exist for control group subjects. However, because the current-law process is external to BOND, the Evaluation Team did not collect qualitative information on lags in the current-law process. Despite several efforts to shorten work CDR processing times for treatment subjects, backlogs persisted between 2011 and 2015. Reasons for the persistence of the backlog include: fluctuating and at times insufficient staffing resources in the ORDES work unit; challenges with coordinating between SSA field offices and processing centers, BOND staff, and treatment subjects; and inefficiencies in sharing information across data systems (Hoffman et al. 2017; Derr et al. 2015).

From 2013 through 2015, SSA's effort to reduce work CDR backlogs had primarily relied on transferring work CDRs from ORDES to staff at SSA processing centers. As we documented in the *2016 Stage 1 Interim Process, Participation, and Impact Report*, this effort succeeded in reducing the backlog to a degree, but it also introduced challenges. With the transfer, demonstration staff could not communicate directly with SSA staff external to the ORDES work unit, and the external SSA staff did not have direct access to BTS. The effects were: (1) to increase the burden of communications on ORDES work unit staff, who could act as intermediaries, and (2) less-effective communications, sometimes resulting in confusion or incomplete information on the part of beneficiaries, demonstration staff, and the external SSA staff.

The backlog grew when SSA reduced staff at the ORDES work unit in 2015, but declined substantially when SSA increased staffing in 2016. In 2015, SSA reduced the ORDES staff processing work CDRs from six full-time staff to two full-time and one part-time staff. Late in 2015, the BOND work unit staff reported that they had insufficient staff to process BOND work CDRs on a timely basis and described their workload as much larger than that of their field office counterparts who conduct work CDRs for current-law beneficiaries, including BOND control subjects. In spring 2016, SSA added six additional staff to the ORDES work unit, four of whom were assigned to processing work CDRs full time. In late 2016, ORDES staff described this increased staffing as allowing them, for the first time, to complete work that allows them to run automated reconciliation on a timely basis and make progress on the work CDR backlog. In the six months after these staff started, the number of cases pending in the backlog declined from about 900 to about half of that amount.

According to snapshots from SSA's eWork system, between December 2015 and December 2016 (approximately the same period as the ORDES staffing increase reported above), the percentage of BOND treatment group work CDR cases more than 270 days (nine months) old fell from 71 to 12 percent.¹²⁵ The corresponding figure for beneficiaries subject to current law (non-BOND cases and control group subjects) is one percent. Thus, it appears that, while work CDR backlogs were more substantial for BOND treatment subjects than for control group subjects during this period, the gap narrowed.

¹²⁴ At the start of the demonstration, BOND inherited some work CDR delays because some BOND subjects were already overdue for work CDR evaluation. In fiscal year 2010—before BOND began enrolling subjects—SSA took 124 days (about four months) to process work CDRs on average (SSA 2011).

¹²⁵ In contrast, between February and December 2015, the percentage of BOND treatment group work CDR cases more than 270 days old grew from 56 to 71 percent.

Appendix D. Sample Sizes for Overpayments Analysis

The methods used to estimate work-related overpayments are described in detail in Appendix C of the *2016 Stage 1 Interim Process, Participation, and Impact Report* (Hoffman et al. 2017). This appendix provides information on the sample sizes used in the overpayments analysis in the current report.

Using the December 2016 DBAD, Exhibit D-1 presents the numbers of beneficiaries in the T21, T22, and C2 groups in each year from 2011 through 2014. Because more beneficiaries are missing historical DBAD data in earlier years than in the later years, the sample size for the analysis is roughly constant or increasing slightly over time. There is no documentation explaining why the beneficiaries in our sample might be omitted from the DBAD.¹²⁶ Some observations are missing from both the DBAD and the underlying MBR for the same time period, while other observations are missing from the DBAD and are included in the MBR. Among those included in the MBR only, many have missing information, while some have information indicating benefit termination (for example, termination due to death). In addition, some beneficiaries have records in the December 2016 SSA administrative data but are missing basic programmatic information, another data anomaly that is not explained in existing documentation.

Exhibit D-1. Sample Sizes for Overpayment Analysis

	2011	2012	2013	2014
T21	4,308	4,469	4,469	4,470
T22	2,695	2,788	2,788	2,788
C2	4,296	4,453	4,452	4,453

¹²⁶ The DBAD selection criteria exclude all records from the MBR for those who had advance filing (applied for benefits before they were eligible), were suspended or terminated before 1990 and have a specific status in the current year, or applied for benefits before 1990 and were denied. These criteria should not apply to the BOND beneficiaries, who were current beneficiaries in 2010 when the BOND sample was selected.

Appendix E. Subgroup Exhibits for 2015 Earnings and Benefit Impacts

Exhibit E-1. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T21 Vs. C2) for Subgroups Defined by Duration of SSDI Receipt

Outcome	Short Duration			Long Duration			Estimated Difference in Impact (7)
	Average Outcome with Offset and WIC (T21) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and WIC (T21) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$5,032	\$5,097	\$-65 (\$421)	\$4,774	\$4,189	\$585 (\$383)	\$-650 (\$647)
Employment during year (%)	35.70	35.20	0.50 (1.68)	37.57	35.87	1.70 (1.51)	-1.21 (1.96)
Earnings above BYA (%)	12.61	11.05	1.57 (1.20)	12.39	8.98	3.40*** (1.04)	-1.84 (1.62)
Earnings above 2x BYA (%)	5.55	5.63	-0.08 (0.68)	4.74	3.85	0.89 (0.72)	-0.97 (0.94)
Earnings above 3x BYA (%)	2.77	3.25	-0.47 (0.66)	1.85	1.56	0.29 (0.46)	-0.76 (0.67)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$12,994	\$12,482	\$512** (\$171)	\$12,169	\$11,653	\$516** (\$201)	\$-4 (\$264)
Number of months with SSDI payments	10.71	10.24	0.47*** (0.13)	10.78	10.36	0.42*** (0.13)	0.05 (0.16)
Total SSI benefits paid	\$51	\$49	\$2 (\$16)	\$28	\$30	\$-2 (\$16)	\$4 (\$21)
Number of months with SSI payments	0.27	0.22	0.04 (0.05)	0.15	0.14	0.01 (0.05)	0.03 (0.07)

Source: SSA administrative records (from the MEF, BODS, MBR, and SSR), with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Short Duration T21 = 3,125, Short Duration C2 = 3,102, Long Duration T21 = 1,729, Long Duration C2 = 1,747.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

††††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-2. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 Vs. C2) for Subgroups Defined by Duration of SSDI Receipt

Outcome	Short Duration			Long Duration			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$5,413	\$5,097	\$316 (\$375)	\$4,650	\$4,189	\$461 (\$448)	\$-145 (\$623)
Employment during year (%)	38.45	35.20	3.25 (1.78)	37.61	35.87	1.74 (1.68)	1.50 (2.60)
Earnings above BYA (%)	14.14	11.05	3.10** (1.01)	11.88	8.98	2.89** (1.22)	0.20 (1.82)
Earnings above 2x BYA (%)	5.47	5.63	-0.16 (0.65)	4.21	3.85	0.36 (0.81)	-0.52 (1.08)
Earnings above 3x BYA (%)	2.86	3.25	-0.39 (0.49)	1.66	1.56	0.10 (0.62)	-0.48 (0.70)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$12,871	\$12,482	\$389* (\$189)	\$12,305	\$11,653	\$652** (\$223)	\$-263 (\$293)
Number of months with SSDI payments	10.64	10.24	0.41*** (0.11)	10.90	10.36	0.54*** (0.14)	-0.13 (0.20)
Total SSI benefits paid	\$33	\$49	\$-16 (\$12)	\$37	\$30	\$7 (\$19)	\$-24 (\$23)
Number of months with SSI payments	0.20	0.22	-0.02 (0.05)	0.19	0.14	0.05 (0.06)	-0.08 (0.08)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Short Duration T22 = 1,914, Short Duration C2 = 3,102, Long Duration T22 = 1,127, Long Duration C2 = 1,747.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-3. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 Vs. T21) for Subgroups Defined by Duration of SSDI Receipt

Outcome	Short Duration			Long Duration			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome with Offset and WIC (T21) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome with Offset and WIC (T21) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$5,413	\$5,032	\$380 (\$585)	\$4,650	\$4,774	\$-124 (\$374)	\$505 (\$876)
Employment during year (%)	38.45	35.70	2.75* (1.47)	37.61	37.57	0.04 (1.62)	2.71 (2.48)
Earnings above BYA (%)	14.14	12.61	1.53 (1.69)	11.88	12.39	-0.51 (1.07)	2.04 (2.43)
Earnings above 2x BYA (%)	5.47	5.55	-0.08 (0.96)	4.21	4.74	-0.53 (0.87)	0.45 (1.63)
Earnings above 3x BYA (%)	2.86	2.77	0.08 (0.80)	1.66	1.85	-0.20 (0.48)	0.28 (1.08)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$12,871	\$12,994	\$-123 (\$218)	\$12,305	\$12,169	\$136 (\$224)	\$-259 (\$221)
Number of months with SSDI payments	10.64	10.71	-0.07 (0.11)	10.90	10.78	0.12* (0.06)	-0.19 (0.11)
Total SSI benefits paid	\$33	\$51	\$-18 (\$13)	\$37	\$28	\$10 (\$21)	\$-28 (\$21)
Number of months with SSI payments	0.20	0.27	-0.07 (0.07)	0.19	0.15	0.04 (0.05)	-0.11 (0.09)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Short Duration T22 = 1,914, Short Duration T21 = 3,125, Long Duration T22 = 1,127, Long Duration T21 = 1,729.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-4. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 + T21 vs C2) for Subgroups Defined by Duration of SSDI Receipt

Outcome	Short Duration			Long Duration			Estimated Difference in Impact (7)
	Average Outcome with Offset and WIC and EWIC (T22 + T21) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and WIC and EWIC (T22 + T21) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$5,174	\$5,097	\$77 (\$289)	\$4,725	\$4,189	\$536 (\$367)	-\$459 (\$477)
Employment during year (%)	36.73	35.20	1.52 (1.56)	37.59	35.87	1.72 (1.34)	-0.20 (1.88)
Earnings above BYA (%)	13.18	11.05	2.14** (0.78)	12.18	8.98	3.20*** (0.98)	-1.06 (1.23)
Earnings above 2x BYA (%)	5.52	5.63	-0.11 (0.54)	4.53	3.85	0.68 (0.62)	-0.79 (0.53)
Earnings above 3x BYA (%)	2.81	3.25	-0.44 (0.42)	1.77	1.56	0.21 (0.41)	-0.65 (0.41)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$12,948	\$12,482	\$466** (\$153)	\$12,223	\$11,653	\$570** (\$180)	-\$104 (\$124)
Number of months with SSDI payments	10.69	10.24	0.45*** (0.11)	10.82	10.36	0.47*** (0.11)	-0.02 (0.17)
Total SSI benefits paid	\$44	\$49	\$-5 (\$12)	\$31	\$30	\$2 (\$13)	-\$7 (\$18)
Number of months with SSI payments	0.24	0.22	0.02 (0.04)	0.17	0.14	0.03 (0.04)	-0.01 (0.04)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics. Unweighted sample sizes: Short Duration T22 + T21 = 5,039, Short Duration C2 = 3,102, Long Duration T22 + T21 = 2,856, Long Duration C2 = 1,747.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-5. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T21 Vs. C2) for Subgroups Defined by Employment at Baseline

Outcome	Employed			Not Employed			Estimated Difference in Impact (7)
	Average Outcome with Offset and WIC (T21) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and WIC (T21) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$10,144	\$9,758	\$386 (\$640)	\$3,036	\$2,726	\$309 (\$224)	\$77 (\$676)
Employment during year (%)	65.22	66.25	-1.02 (2.50)	26.92	25.08	1.83 (1.13)	-2.86 (2.46)
Earnings above BYA (%)	26.82	21.79	5.03** (2.00)	7.44	5.61	1.83** (0.65)	3.20 (2.11)
Earnings above 2x BYA (%)	11.25	10.08	1.18 (1.42)	2.95	2.61	0.34 (0.49)	0.84 (1.48)
Earnings above 3x BYA (%)	5.05	5.17	-0.12 (1.23)	1.24	1.22	0.02 (0.29)	-0.14 (1.25)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$11,966	\$10,944	\$1,023*** (\$303)	\$12,726	\$12,395	\$331* (\$151)	\$692† (\$338)
Number of months with SSDI payments	10.23	9.26	0.97*** (0.20)	10.93	10.69	0.24** (0.09)	0.72†† (0.25)
Total SSI benefits paid	\$16	\$20	\$-3 (\$13)	\$45	\$44	\$1 (\$15)	\$-4 (\$18)
Number of months with SSI payments	0.09	0.07	0.01 (0.05)	0.23	0.21	0.02 (0.04)	-0.00 (0.06)

Source: SSA administrative records (from the MEF, BODS, MBR, and SSR), with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Employed T21 = 1,207, Employed C2 = 1,187, Not Employed T21 = 3,610, Not Employed C2 = 3,627.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-6. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 Vs. C2) for Subgroups Defined by Employment at Baseline

Outcome	Employed			Not Employed			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$10,745	\$9,758	\$987 (\$739)	\$2,992	\$2,726	\$266 (\$315)	\$721 (\$776)
Employment during year (%)	69.27	66.25	3.02 (2.46)	27.17	25.08	2.09 (1.50)	0.93 (3.14)
Earnings above BYA (%)	28.85	21.79	7.06** (2.33)	7.36	5.61	1.75* (0.85)	5.31† (2.44)
Earnings above 2x BYA (%)	10.86	10.08	0.78 (1.59)	2.61	2.61	0.00 (0.62)	0.78 (1.66)
Earnings above 3x BYA (%)	5.42	5.17	0.25 (1.15)	1.07	1.22	-0.15 (0.38)	0.40 (1.19)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$11,923	\$10,944	\$979** (\$336)	\$12,788	\$12,395	\$393** (\$170)	\$586 (\$377)
Number of months with SSDI payments	10.26	9.26	1.00*** (0.22)	10.99	10.69	0.30** (0.10)	0.69†† (0.24)
Total SSI benefits paid	\$4	\$20	\$-16 (\$15)	\$46	\$44	\$2 (\$16)	\$-18 (\$23)
Number of months with SSI payments	0.04	0.07	-0.03 (0.07)	0.25	0.21	0.04 (0.05)	-0.07 (0.09)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Employed T22 = 702, Employed C2 = 1,187, Not Employed T22 = 2,317, Not Employed C2 = 3,627.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-7. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 Vs. T21) for Subgroups Defined by Employment at Baseline

Outcome	Employed			Not Employed			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome with Offset and WIC (T21) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome with Offset and WIC (T21) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$10,745	\$10,144	\$601 (\$487)	\$2,992	\$3,036	\$-43 (\$167)	\$644 (\$507)
Employment during year (%)	69.27	65.22	4.04 (2.90)	27.17	26.92	0.26 (1.05)	3.79 (3.31)
Earnings above BYA (%)	28.85	26.82	2.03 (1.64)	7.36	7.44	-0.08 (0.69)	2.11 (1.86)
Earnings above 2x BYA (%)	10.86	11.25	-0.40 (1.19)	2.61	2.95	-0.33 (0.38)	-0.06 (1.25)
Earnings above 3x BYA (%)	5.42	5.05	0.37 (0.72)	1.07	1.24	-0.17 (0.30)	0.54 (0.68)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$11,923	\$11,966	\$-44 (\$334)	\$12,788	\$12,726	\$62 (\$244)	\$-106 (\$440)
Number of months with SSDI payments	10.26	10.23	0.03 (0.19)	10.99	10.93	0.06 (0.12)	-0.03 (0.29)
Total SSI benefits paid	\$4	\$16	\$-13 (\$10)	\$46	\$45	\$1 (\$20)	\$-14 (\$24)
Number of months with SSI payments	0.04	0.09	-0.05 (0.05)	0.25	0.23	0.02 (0.07)	-0.07 (0.10)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Employed T22 = 702, Employed T21 = 1,207, Not Employed T22 = 2,317, Not Employed T21 = 3,610.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-8. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 + T21 vs C2) for Subgroups Defined by Employment at Baseline

Outcome	Employed			Not Employed			Estimated Difference in Impact (7)
	Average Outcome with Offset and WIC and EWIC (T22 + T21) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and WIC and EWIC (T22 + T21) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$10,370	\$9,758	\$612 (\$580)	\$3,019	\$2,726	\$292 (\$250)	\$319 (\$344)
Employment during year (%)	66.74	66.25	0.49 (1.95)	27.02	25.08	1.94 (1.11)	-1.44 (2.24)
Earnings above BYA (%)	27.59	21.79	5.79** (1.80)	7.41	5.61	1.80** (0.64)	3.99††† (0.98)
Earnings above 2x BYA (%)	11.11	10.08	1.03 (1.25)	2.82	2.61	0.21 (0.51)	0.82 (0.81)
Earnings above 3x BYA (%)	5.19	5.17	0.02 (1.09)	1.18	1.22	-0.04 (0.29)	0.07 (1.12)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$11,950	\$10,944	\$1,006*** (\$273)	\$12,750	\$12,395	\$355** (\$135)	\$651††† (\$179)
Number of months with SSDI payments	10.24	9.26	0.98*** (0.18)	10.96	10.69	0.27*** (0.08)	0.71††† (0.18)
Total SSI benefits paid	\$12	\$20	\$-8 (\$13)	\$46	\$44	\$1 (\$11)	\$-9 (\$16)
Number of months with SSI payments	0.07	0.07	-0.00 (0.05)	0.24	0.21	0.03 (0.04)	-0.03 (0.05)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics. Unweighted sample sizes: Employed T22 + T21 = 1,909, Employed C2 = 1,187, Not Employed T22 + T21 = 5,927, Not Employed C2 = 3,627.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-9. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T21 Vs. C2) for Subgroups Defined by Access to Medicaid Buy-in Programs

Outcome	Access to Medicaid Buy-in Programs			No Access to Medicaid Buy-in Programs			Estimated Difference in Impact (7)
	Average Outcome with Offset and WIC (T21) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and WIC (T21) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$4,964	\$4,895	\$69 (\$284)	\$4,634	\$3,696	\$938 (\$701)	-\$869 (\$789)
Employment during year (%)	37.82	37.02	0.80 (1.55)	33.94	31.73	2.21 (1.69)	-1.41 (2.09)
Earnings above BYA (%)	12.87	10.49	2.37** (0.85)	11.37	8.12	3.25 (2.13)	-0.87 (2.38)
Earnings above 2x BYA (%)	5.30	4.89	0.42 (0.60)	4.45	3.82	0.63 (1.40)	-0.22 (1.47)
Earnings above 3x BYA (%)	2.35	2.53	-0.17 (0.54)	1.91	1.57	0.33 (0.63)	-0.51 (0.93)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$12,630	\$12,138	\$492** (\$168)	\$12,218	\$11,634	\$584* (\$305)	-\$91 (\$318)
Number of months with SSDI payments	10.74	10.33	0.41*** (0.10)	10.78	10.25	0.53*** (0.14)	-0.12 (0.17)
Total SSI benefits paid	\$38	\$44	\$-6 (\$16)	\$36	\$22	\$14 (\$12)	-\$20 (\$17)
Number of months with SSI payments	0.19	0.17	0.02 (0.05)	0.21	0.18	0.03 (0.06)	-0.01 (0.07)

Source: SSA administrative records (from the MEF, BODS, MBR, and SSR), with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Access to Medicaid Buy-in Programs T21 = 3,276, Access to Medicaid Buy-in Programs C2 = 3,288, No Access to Medicaid Buy-in Programs T21 = 1,578, No Access to Medicaid Buy-in Programs C2 = 1,561.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-10. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 Vs. C2) for Subgroups Defined by Access to Medicaid Buy-in Programs

Outcome	Access to Medicaid Buy-in Programs			No Access to Medicaid Buy-in Programs			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$5,177	\$4,895	\$282 (\$319)	\$4,406	\$3,696	\$710 (\$588)	-\$428 (\$642)
Employment during year (%)	39.96	37.02	2.95* (1.40)	32.52	31.73	0.79 (1.88)	2.16 (2.34)
Earnings above BYA (%)	13.16	10.49	2.67** (0.96)	11.90	8.12	3.78* (1.95)	-1.11 (1.98)
Earnings above 2x BYA (%)	4.75	4.89	-0.13 (0.68)	4.71	3.82	0.89 (0.81)	-1.02 (1.03)
Earnings above 3x BYA (%)	2.21	2.53	-0.32 (0.55)	2.03	1.57	0.46 (0.74)	-0.77 (0.95)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$12,736	\$12,138	\$598** (\$187)	\$12,034	\$11,634	\$400 (\$247)	\$198 (\$309)
Number of months with SSDI payments	10.86	10.33	0.53*** (0.11)	10.62	10.25	0.37** (0.15)	0.16 (0.19)
Total SSI benefits paid	\$41	\$44	\$-3 (\$17)	\$22	\$22	\$-0 (\$13)	\$-3 (\$21)
Number of months with SSI payments	0.23	0.17	0.06 (0.05)	0.11	0.18	-0.07 (0.05)	0.13 (0.08)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Access to Medicaid Buy-in Programs T22 = 2,067, Access to Medicaid Buy-in Programs C2 = 3,288, No Access to Medicaid Buy-in Programs T22 = 974, No Access to Medicaid Buy-in Programs C2 = 1,561.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-11. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 Vs. T21) for Subgroups Defined by Access to Medicaid Buy-in Programs

Outcome	Access to Medicaid Buy-in Programs			No Access to Medicaid Buy-in Programs			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome with Offset and WIC (T21) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome with Offset and WIC (T21) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$5,177	\$4,964	\$213 (\$244)	\$4,406	\$4,634	-\$228 (\$158)	\$441 (\$253)
Employment during year (%)	39.96	37.82	2.14* (1.01)	32.52	33.94	-1.42 (1.46)	3.57† (1.70)
Earnings above BYA (%)	13.16	12.87	0.30 (0.90)	11.90	11.37	0.53 (0.79)	-0.23 (1.29)
Earnings above 2x BYA (%)	4.75	5.30	-0.55 (0.43)	4.71	4.45	0.25 (0.76)	-0.80 (0.84)
Earnings above 3x BYA (%)	2.21	2.35	-0.15 (0.44)	2.03	1.91	0.12 (0.14)	-0.27 (0.41)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$12,736	\$12,630	\$105 (\$246)	\$12,034	\$12,218	-\$184 (\$173)	\$289 (\$292)
Number of months with SSDI payments	10.86	10.74	0.12* (0.06)	10.62	10.78	-0.16 (0.10)	0.28†† (0.12)
Total SSI benefits paid	\$41	\$38	\$2 (\$19)	\$22	\$36	-\$14 (\$10)	\$17 (\$21)
Number of months with SSI payments	0.23	0.19	0.04 (0.06)	0.11	0.21	-0.10* (0.05)	0.14 (0.08)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Access to Medicaid Buy-in Programs T22 = 2,067, Access to Medicaid Buy-in Programs T21 = 3,276, No Access to Medicaid Buy-in Programs T22 = 974, No Access to Medicaid Buy-in Programs T21 = 1,578.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-12. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 + T21 vs C2) for Subgroups Defined by Access to Medicaid Buy-in Programs

Outcome	Access to Medicaid Buy-in Programs			No Access to Medicaid Buy-in Programs			Estimated Difference in Impact (7)
	Average Outcome with Offset and WIC and EWIC (T22 + T21) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and WIC and EWIC (T22 + T21) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$5,046	\$4,895	\$152 (\$265)	\$4,547	\$3,696	\$851 (\$656)	\$-699 (\$725)
Employment during year (%)	38.65	37.02	1.64 (1.26)	33.40	31.73	1.67 (1.50)	-0.03 (1.88)
Earnings above BYA (%)	12.98	10.49	2.49*** (0.75)	11.57	8.12	3.45 (2.03)	-0.96 (2.15)
Earnings above 2x BYA (%)	5.09	4.89	0.20 (0.53)	4.55	3.82	0.73 (1.12)	-0.53 (1.25)
Earnings above 3x BYA (%)	2.30	2.53	-0.23 (0.50)	1.96	1.57	0.38 (0.68)	-0.61 (0.91)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$12,671	\$12,138	\$533*** (\$150)	\$12,147	\$11,634	\$513* (\$241)	\$20 (\$243)
Number of months with SSDI payments	10.78	10.33	0.46*** (0.09)	10.72	10.25	0.47*** (0.13)	-0.01 (0.13)
Total SSI benefits paid	\$39	\$44	\$-5 (\$12)	\$30	\$22	\$9 (\$9)	\$-13 (\$10)
Number of months with SSI payments	0.21	0.17	0.03 (0.04)	0.17	0.18	-0.00 (0.05)	0.04 (0.04)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Access to Medicaid Buy-in Programs T22 + T21 = 5,343, Access to Medicaid Buy-in Programs C2 = 3,288, No Access to Medicaid Buy-in Programs T22 + T21 = 2,552, No Access to Medicaid Buy-in Programs C2 = 1,561.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-13. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T21 Vs. C2) for Subgroups Defined by Age at Baseline

Outcome	Age 49 or Less at Baseline			Age 50 or More at Baseline			Estimated Difference in Impact (7)
	Average Outcome with Offset and WIC (T21) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and WIC (T21) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$6,374	\$5,954	\$420 (\$387)	\$3,387	\$3,196	\$191 (\$252)	-\$229 (\$459)
Employment during year (%)	43.72	42.14	1.58 (1.75)	29.85	29.07	0.78 (1.36)	-0.80 (2.01)
Earnings above BYA (%)	16.26	13.86	2.40* (1.11)	8.69	5.87	2.83*** (0.85)	0.43 (1.39)
Earnings above 2x BYA (%)	7.11	6.52	0.59 (0.82)	3.04	2.68	0.36 (0.55)	-0.23 (0.96)
Earnings above 3x BYA (%)	3.22	3.28	-0.06 (0.58)	1.25	1.26	-0.01 (0.33)	0.05 (0.66)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$11,459	\$10,742	\$717*** (\$184)	\$13,565	\$13,254	\$311 (\$200)	-\$406 (\$272)
Number of months with SSDI payments	10.55	10.00	0.56*** (0.13)	10.94	10.62	0.33** (0.13)	-0.23 (0.20)
Total SSI benefits paid	\$59	\$50	\$9 (\$16)	\$16	\$26	\$-10 (\$11)	\$-20 (\$19)
Number of months with SSI payments	0.27	0.25	0.02 (0.05)	0.13	0.10	0.03 (0.04)	0.01 (0.07)

Source: SSA administrative records (from the MEF, BODS, MBR, and SSR), with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Age 49 or Less at Baseline T21 = 2,407, Age 49 or Less at Baseline C2 = 2,385, Age 50 or More at Baseline T21 = 2,447, Age 50 or More at Baseline C2 = 2,464.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-14. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 Vs. C2) for Subgroups Defined by Age at Baseline

Outcome	Age 49 or Less at Baseline			Age 50 or More at Baseline			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$6,455	\$5,954	\$501 (\$419)	\$3,490	\$3,196	\$294 (\$321)	-\$207 (\$496)
Employment during year (%)	45.14	42.14	2.99 (1.96)	30.81	29.07	1.73 (1.56)	-1.26 (2.77)
Earnings above BYA (%)	16.79	13.86	2.93** (1.25)	8.87	5.87	3.00** (0.99)	0.07 (1.56)
Earnings above 2x BYA (%)	6.81	6.52	0.29 (0.87)	2.68	2.68	-0.01 (0.64)	-0.30 (1.04)
Earnings above 3x BYA (%)	3.29	3.28	0.01 (0.65)	1.03	1.26	-0.23 (0.36)	-0.24 (0.71)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$11,206	\$10,742	\$464** (\$202)	\$13,874	\$13,254	\$620** (\$227)	\$157 (\$305)
Number of months with SSDI payments	10.49	10.00	0.50*** (0.14)	11.09	10.62	0.47*** (0.12)	-0.02 (0.18)
Total SSI benefits paid	\$50	\$50	\$0 (\$20)	\$21	\$26	-\$5 (\$14)	-\$6 (\$25)
Number of months with SSI payments	0.27	0.25	0.03 (0.07)	0.12	0.10	0.02 (0.04)	-0.01 (0.08)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Age 49 or Less at Baseline T22 = 1,477, Age 49 or Less at Baseline C2 = 2,385, Age 50 or More at Baseline T22 = 1,564, Age 50 or More at Baseline C2 = 2,464.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-15. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 Vs. T21) for Subgroups Defined by Age at Baseline

Outcome	Age 49 or Less at Baseline			Age 50 or More at Baseline			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome with Offset and WIC (T21) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome with Offset and WIC (T21) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$6,455	\$6,374	\$81 (\$315)	\$3,490	\$3,387	\$103 (\$210)	\$22 (\$366)
Employment during year (%)	45.14	43.72	1.41 (1.58)	30.81	29.85	0.95 (1.39)	-0.46 (2.24)
Earnings above BYA (%)	16.79	16.26	0.54 (0.94)	8.87	8.69	0.18 (0.75)	-0.36 (1.10)
Earnings above 2x BYA (%)	6.81	7.11	-0.30 (0.63)	2.68	3.04	-0.37 (0.49)	-0.07 (0.75)
Earnings above 3x BYA (%)	3.29	3.22	0.07 (0.40)	1.03	1.25	-0.22 (0.37)	-0.29 (0.37)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$11,206	\$11,459	-\$253 (\$280)	\$13,874	\$13,565	\$310 (\$213)	\$563 (\$318)
Number of months with SSDI payments	10.49	10.55	-0.06 (0.07)	11.09	10.94	0.15 (0.10)	0.21 (0.13)
Total SSI benefits paid	\$50	\$59	-\$9 (\$26)	\$21	\$16	\$5 (\$12)	\$14 (\$27)
Number of months with SSI payments	0.27	0.27	0.01 (0.07)	0.12	0.13	-0.01 (0.03)	-0.02 (0.05)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Age 49 or Less at Baseline T22 = 1,477, Age 49 or Less at Baseline T21 = 2,407, Age 50 or More at Baseline T22 = 1,564, Age 50 or More at Baseline T21 = 2,447.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-16. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 + T21 vs C2) for Subgroups Defined by Age at Baseline

Outcome	Age 49 or Less at Baseline			Age 50 or More at Baseline			Estimated Difference in Impact (7)
	Average Outcome with Offset and WIC and EWIC (T22 + T21) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and WIC and EWIC (T22 + T21) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$6,406	\$5,954	\$451 (\$344)	\$3,427	\$3,196	\$232 (\$234)	-\$220 (\$303)
Employment during year (%)	44.27	42.14	2.12 (1.68)	30.23	29.07	1.16 (1.22)	-0.97 (2.05)
Earnings above BYA (%)	16.46	13.86	2.60** (0.98)	8.76	5.87	2.89*** (0.75)	0.29 (0.91)
Earnings above 2x BYA (%)	7.00	6.52	0.47 (0.71)	2.90	2.68	0.22 (0.54)	-0.26 (0.56)
Earnings above 3x BYA (%)	3.25	3.28	-0.03 (0.54)	1.17	1.26	-0.09 (0.29)	-0.06 (0.42)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$11,362	\$10,742	\$620*** (\$165)	\$13,686	\$13,254	\$432** (\$180)	-\$188 (\$190)
Number of months with SSDI payments	10.53	10.00	0.53*** (0.11)	11.00	10.62	0.38*** (0.10)	-0.15 (0.17)
Total SSI benefits paid	\$56	\$50	\$6 (\$14)	\$18	\$26	-\$8 (\$11)	-\$14 (\$12)
Number of months with SSI payments	0.27	0.25	0.02 (0.05)	0.13	0.10	0.03 (0.03)	0.00 (0.05)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Age 49 or Less at Baseline T22 + T21 = 3,884, Age 49 or Less at Baseline C2 = 2,385, Age 50 or More at Baseline T22 + T21 = 4,011, Age 50 or More at Baseline C2 = 2,464.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-17. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T21 Vs. C2) for Subgroups Defined by Primary Impairment of Major Affective Disorder

Outcome	Primary Impairment of Major Affective Disorder			All Other Primary Impairments			Estimated Difference in Impact (7)
	Average Outcome with Offset and WIC (T21) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and WIC (T21) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$5,215	\$4,832	\$383 (\$648)	\$4,798	\$4,509	\$289 (\$257)	\$94 (\$651)
Employment during year (%)	41.85	39.14	2.71 (2.82)	35.54	34.74	0.80 (1.11)	1.91 (2.78)
Earnings above BYA (%)	13.00	10.24	2.76 (1.99)	12.34	9.76	2.58*** (0.79)	0.18 (2.09)
Earnings above 2x BYA (%)	5.44	4.74	0.70 (1.50)	4.98	4.56	0.42 (0.60)	0.28 (1.70)
Earnings above 3x BYA (%)	2.39	2.04	0.34 (0.79)	2.20	2.32	-0.12 (0.51)	0.47 (0.90)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$12,122	\$11,931	\$191 (\$305)	\$12,613	\$12,019	\$595*** (\$152)	\$-404 (\$341)
Number of months with SSDI payments	10.88	10.43	0.44* (0.21)	10.72	10.28	0.44*** (0.09)	-0.00 (0.23)
Total SSI benefits paid	\$42	\$40	\$1 (\$23)	\$37	\$37	\$-1 (\$12)	\$2 (\$23)
Number of months with SSI payments	0.24	0.20	0.03 (0.08)	0.19	0.17	0.02 (0.04)	0.01 (0.09)

Source: SSA administrative records (from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Primary Impairment of Major Affective Disorder T21 = 902, Primary Impairment of Major Affective Disorder C2 = 876, All Other Primary Impairments T21 = 3,952, All Other Primary Impairments C2 = 3,973.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-18. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 Vs. C2) for Subgroups Defined by Primary Impairment of Major Affective Disorder

Outcome	Primary Impairment of Major Affective Disorder			All Other Primary Impairments			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$6,271	\$4,832	\$1,439* (\$692)	\$4,666	\$4,509	\$157 (\$272)	\$1,282 (\$732)
Employment during year (%)	43.24	39.14	4.10 (3.44)	36.69	34.74	1.95 (1.24)	2.14 (3.92)
Earnings above BYA (%)	17.58	10.24	7.34*** (2.12)	11.72	9.76	1.96** (0.83)	5.38†† (2.27)
Earnings above 2x BYA (%)	6.38	4.74	1.64 (1.47)	4.36	4.56	-0.20 (0.63)	1.84 (1.77)
Earnings above 3x BYA (%)	3.82	2.04	1.78 (1.11)	1.78	2.32	-0.55 (0.53)	2.33 (1.36)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$12,092	\$11,931	\$160 (\$350)	\$12,653	\$12,019	\$634*** (\$169)	\$-473 (\$388)
Number of months with SSDI payments	10.76	10.43	0.33 (0.21)	10.80	10.28	0.52*** (0.10)	-0.19 (0.24)
Total SSI benefits paid	\$15	\$40	\$-25 (\$17)	\$40	\$37	\$3 (\$14)	\$-28 (\$22)
Number of months with SSI payments	0.11	0.20	-0.09 (0.08)	0.22	0.17	0.05 (0.05)	-0.14 (0.11)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Primary Impairment of Major Affective Disorder T22 = 499, Primary Impairment of Major Affective Disorder C2 = 876, All Other Primary Impairments T22 = 2,542, All Other Primary Impairments C2 = 3,973.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-19. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 Vs. T21) for Subgroups Defined by Primary Impairment of Major Affective Disorder

Outcome	Primary Impairment of Major Affective Disorder			All Other Primary Impairments			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome with Offset and WIC (T21) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome with Offset and WIC (T21) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$6,271	\$5,215	\$1,056** (\$457)	\$4,666	\$4,798	\$-132 (\$205)	\$1,188†† (\$486)
Employment during year (%)	43.24	41.85	1.39 (2.51)	36.69	35.54	1.15 (0.94)	0.24 (2.51)
Earnings above BYA (%)	17.58	13.00	4.58*** (1.09)	11.72	12.34	-0.63 (0.72)	5.20††† (1.22)
Earnings above 2x BYA (%)	6.38	5.44	0.94 (1.04)	4.36	4.98	-0.62 (0.64)	1.56 (1.52)
Earnings above 3x BYA (%)	3.82	2.39	1.44 (1.22)	1.78	2.20	-0.42 (0.35)	1.86 (1.33)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$12,092	\$12,122	\$-31 (\$357)	\$12,653	\$12,613	\$39 (\$167)	\$-70 (\$255)
Number of months with SSDI payments	10.76	10.88	-0.11 (0.15)	10.80	10.72	0.08 (0.06)	-0.19 (0.16)
Total SSI benefits paid	\$15	\$42	\$-27 (\$16)	\$40	\$37	\$4 (\$15)	\$-30†† (\$13)
Number of months with SSI payments	0.11	0.24	-0.13* (0.06)	0.22	0.19	0.03 (0.05)	-0.15†† (0.06)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Primary Impairment of Major Affective Disorder T22 = 499, Primary Impairment of Major Affective Disorder T21 = 902, All Other Primary Impairments T22 = 2,542, All Other Primary Impairments T21 = 3,952.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-20. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 + T21 vs C2) for Subgroups Defined by Primary Impairment of Major Affective Disorder

Outcome	Primary Impairment of Major Affective Disorder			All Other Primary Impairments			Estimated Difference in Impact (7)
	Average Outcome with Offset and WIC and EWIC (T22 + T21) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and WIC and EWIC (T22 + T21) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$5,603	\$4,832	\$772 (\$638)	\$4,746	\$4,509	\$237 (\$227)	\$535 (\$635)
Employment during year (%)	42.36	39.14	3.22 (2.82)	35.99	34.74	1.25 (0.99)	1.96 (3.03)
Earnings above BYA (%)	14.69	10.24	4.45* (2.01)	12.10	9.76	2.34*** (0.67)	2.11 (2.12)
Earnings above 2x BYA (%)	5.79	4.74	1.05 (1.41)	4.74	4.56	0.18 (0.52)	0.87 (1.57)
Earnings above 3x BYA (%)	2.91	2.04	0.87 (0.72)	2.03	2.32	-0.29 (0.49)	1.16 (0.90)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$12,111	\$11,931	\$180 (\$278)	\$12,629	\$12,019	\$610*** (\$136)	\$-430 (\$255)
Number of months with SSDI payments	10.83	10.43	0.40** (0.17)	10.75	10.28	0.47*** (0.08)	-0.07 (0.19)
Total SSI benefits paid	\$32	\$40	\$-8 (\$19)	\$38	\$37	\$1 (\$10)	\$-9 (\$20)
Number of months with SSI payments	0.19	0.20	-0.01 (0.07)	0.20	0.17	0.03 (0.03)	-0.05 (0.09)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Primary Impairment of Major Affective Disorder T22 + T21 = 1,401, Primary Impairment of Major Affective Disorder C2 = 876, All Other Primary Impairments T22 + T21 = 6,494, All Other Primary Impairments C2 = 3,973.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

+/-/+/-/+ Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-21. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T21 Vs. C2) for Subgroups Defined by Primary Impairment of Back Disorder

Outcome	Primary Impairment of Back Disorder			All Other Primary Impairments			Estimated Difference in Impact (7)
	Average Outcome with Offset and WIC (T21) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and WIC (T21) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$4,306	\$4,370	\$-64 (\$775)	\$4,966	\$4,601	\$365 (\$246)	\$-429 (\$818)
Employment during year (%)	32.14	30.33	1.81 (2.87)	37.46	36.37	1.10 (1.21)	0.71 (3.06)
Earnings above BYA (%)	11.55	9.39	2.16 (2.00)	12.61	9.92	2.69*** (0.74)	-0.53 (2.09)
Earnings above 2x BYA (%)	5.16	4.83	0.32 (1.81)	5.07	4.56	0.51 (0.55)	-0.18 (1.95)
Earnings above 3x BYA (%)	2.42	3.09	-0.67 (1.05)	2.21	2.15	0.07 (0.35)	-0.73 (1.11)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$13,306	\$12,996	\$310 (\$356)	\$12,398	\$11,855	\$543*** (\$148)	\$-233 (\$395)
Number of months with SSDI payments	11.21	10.99	0.23 (0.23)	10.68	10.21	0.47*** (0.09)	-0.25 (0.25)
Total SSI benefits paid	\$27	\$18	\$9 (\$13)	\$39	\$41	\$-2 (\$13)	\$11 (\$16)
Number of months with SSI payments	0.18	0.10	0.08 (0.06)	0.20	0.18	0.02 (0.04)	0.06 (0.07)

Source: SSA administrative records (from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Primary Impairment of Back Disorder T21 = 661, Primary Impairment of Back Disorder C2 = 682, All Other Primary Impairments T21 = 4,193, All Other Primary Impairments C2 = 4,167.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-22. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 Vs. C2) for Subgroups Defined by Primary Impairment of Back Disorder

Outcome	Primary Impairment of Back Disorder			All Other Primary Impairments			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$3,140	\$4,370	-\$1,230 (\$705)	\$5,239	\$4,601	\$638* (\$303)	-\$1,869†† (\$786)
Employment during year (%)	28.64	30.33	-1.69 (3.12)	39.30	36.37	2.93** (1.22)	-4.63 (3.92)
Earnings above BYA (%)	7.07	9.39	-2.32 (1.78)	13.66	9.92	3.74*** (0.86)	-6.05†† (1.98)
Earnings above 2x BYA (%)	2.08	4.83	-2.75* (1.22)	5.13	4.56	0.57 (0.57)	-3.33†† (1.34)
Earnings above 3x BYA (%)	0.23	3.09	-2.86*** (0.87)	2.45	2.15	0.30 (0.40)	-3.16††† (0.95)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$13,340	\$12,996	\$343 (\$366)	\$12,425	\$11,855	\$570*** (\$165)	-\$227 (\$401)
Number of months with SSDI payments	11.47	10.99	0.48* (0.22)	10.69	10.21	0.48*** (0.10)	0.00 (0.24)
Total SSI benefits paid	\$59	\$18	\$41 (\$24)	\$32	\$41	-\$9 (\$14)	\$49 (\$30)
Number of months with SSI payments	0.36	0.10	0.26 (0.16)	0.17	0.18	-0.01 (0.04)	0.27 (0.18)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Primary Impairment of Back Disorder T22 = 424, Primary Impairment of Back Disorder C2 = 682, All Other Primary Impairments T22 = 2,617, All Other Primary Impairments C2 = 4,167.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-23. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 Vs. T21) for Subgroups Defined by Primary Impairment of Back Disorder

Outcome	Primary Impairment of Back Disorder			All Other Primary Impairments			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome with Offset and WIC (T21) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome with Offset and WIC (T21) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$3,140	\$4,306	\$-1,166 (\$642)	\$5,239	\$4,966	\$273 (\$182)	\$-1,439†† (\$617)
Employment during year (%)	28.64	32.14	-3.50 (2.82)	39.30	37.46	1.84 (1.03)	-5.34† (2.90)
Earnings above BYA (%)	7.07	11.55	-4.48* (2.07)	13.66	12.61	1.05 (0.60)	-5.53†† (2.00)
Earnings above 2x BYA (%)	2.08	5.16	-3.08** (1.31)	5.13	5.07	0.06 (0.43)	-3.14†† (1.31)
Earnings above 3x BYA (%)	0.23	2.42	-2.19** (0.77)	2.45	2.21	0.23 (0.33)	-2.43†† (0.76)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$13,340	\$13,306	\$33 (\$395)	\$12,425	\$12,398	\$27 (\$207)	\$6 (\$424)
Number of months with SSDI payments	11.47	11.21	0.26 (0.25)	10.69	10.68	0.01 (0.07)	0.25 (0.26)
Total SSI benefits paid	\$59	\$27	\$32 (\$25)	\$32	\$39	\$-7 (\$15)	\$39 (\$26)
Number of months with SSI payments	0.36	0.18	0.18 (0.16)	0.17	0.20	-0.03 (0.05)	0.21 (0.16)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Primary Impairment of Back Disorder T22 = 424, Primary Impairment of Back Disorder T21 = 661, All Other Primary Impairments T22 = 2,617, All Other Primary Impairments T21 = 4,193.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-24. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 + T21 vs C2) for Subgroups Defined by Primary Impairment of Back Disorder

Outcome	Primary Impairment of Back Disorder			All Other Primary Impairments			Estimated Difference in Impact (7)
	Average Outcome with Offset and WIC and EWIC (T22 + T21) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and WIC and EWIC (T22 + T21) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$3,851	\$4,370	\$-519 (\$680)	\$5,072	\$4,601	\$472* (\$255)	\$-991 (\$748)
Employment during year (%)	30.77	30.33	0.44 (2.52)	38.18	36.37	1.81 (1.09)	-1.37 (2.29)
Earnings above BYA (%)	9.80	9.39	0.41 (1.63)	13.02	9.92	3.10*** (0.68)	-2.69 (1.63)
Earnings above 2x BYA (%)	3.95	4.83	-0.88 (1.47)	5.10	4.56	0.54 (0.50)	-1.42 (1.61)
Earnings above 3x BYA (%)	1.56	3.09	-1.52 (0.91)	2.30	2.15	0.16 (0.33)	-1.68†† (0.74)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$13,319	\$12,996	\$323 (\$306)	\$12,408	\$11,855	\$553*** (\$132)	\$-231 (\$273)
Number of months with SSDI payments	11.32	10.99	0.33 (0.19)	10.68	10.21	0.48*** (0.08)	-0.15 (0.21)
Total SSI benefits paid	\$40	\$18	\$21 (\$14)	\$36	\$41	\$-5 (\$10)	\$26 (\$19)
Number of months with SSI payments	0.25	0.10	0.15* (0.07)	0.19	0.18	0.01 (0.03)	0.14 (0.09)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Primary Impairment of Back Disorder T22 + T21 = 1,085, Primary Impairment of Back Disorder C2 = 682, All Other Primary Impairments T22 + T21 = 6,810, All Other Primary Impairments C2 = 4,167.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-25. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T21 Vs. C2) for Subgroups Defined by Education at Baseline

Outcome	Less than Associate's Degree			Any Postsecondary Degree			Estimated Difference in Impact (7)
	Average Outcome with Offset and WIC (T21) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and WIC (T21) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$4,340	\$3,801	\$539* (\$288)	\$5,912	\$6,048	\$-136 (\$479)	\$-675 (\$534)
Employment during year (%)	34.80	33.01	1.79 (1.45)	40.66	41.04	-0.38 (1.83)	-2.17 (2.20)
Earnings above BYA (%)	11.40	8.48	2.92** (0.93)	14.47	12.41	2.05 (1.31)	-0.86 (1.54)
Earnings above 2x BYA (%)	4.23	3.47	0.76 (0.60)	6.78	6.72	0.06 (0.97)	-0.70 (1.10)
Earnings above 3x BYA (%)	1.63	1.65	-0.02 (0.36)	3.42	3.47	-0.05 (0.88)	-0.03 (0.82)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$11,830	\$11,433	\$397** (\$156)	\$13,940	\$13,245	\$695** (\$269)	\$298 (\$310)
Number of months with SSDI payments	10.74	10.40	0.34*** (0.10)	10.76	10.17	0.59*** (0.15)	0.25 (0.18)
Total SSI benefits paid	\$43	\$51	\$-8 (\$16)	\$26	\$11	\$15 (\$12)	\$23 (\$17)
Number of months with SSI payments	0.22	0.23	-0.01 (0.04)	0.13	0.06	0.07 (0.04)	0.08 (0.06)

Source: SSA administrative records (from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Less than Associate's Degree T21 = 3,290, Less than Associate's Degree C2 = 3,224, Any Postsecondary Degree T21 = 1,524, Any Postsecondary Degree C2 = 1,586.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-26. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 Vs. C2) for Subgroups Defined by Education at Baseline

Outcome	Less than Associate's Degree			Any Postsecondary Degree			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$4,026	\$3,801	\$225 (\$256)	\$6,881	\$6,048	\$833 (\$549)	\$607 (\$603)
Employment during year (%)	35.75	33.01	2.73* (1.39)	42.40	41.04	1.36 (2.07)	-1.37 (2.48)
Earnings above BYA (%)	10.91	8.48	2.43** (0.89)	16.62	12.41	4.20** (1.53)	1.78 (1.77)
Earnings above 2x BYA (%)	2.99	3.47	-0.48 (0.52)	8.23	6.72	1.51 (1.16)	1.99 (1.27)
Earnings above 3x BYA (%)	0.99	1.65	-0.66* (0.33)	4.61	3.47	1.14 (0.84)	1.80† (0.91)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$11,841	\$11,433	\$408** (\$171)	\$14,047	\$13,245	\$802* (\$409)	\$394 (\$513)
Number of months with SSDI payments	10.82	10.40	0.42*** (0.11)	10.77	10.17	0.60*** (0.17)	0.18 (0.26)
Total SSI benefits paid	\$45	\$51	\$-6 (\$17)	\$17	\$11	\$6 (\$15)	\$12 (\$23)
Number of months with SSI payments	0.26	0.23	0.03 (0.06)	0.07	0.06	0.02 (0.05)	-0.01 (0.08)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Less than Associate's Degree T22 = 2,035, Less than Associate's Degree C2 = 3,224, Any Postsecondary Degree T22 = 981, Any Postsecondary Degree C2 = 1,586.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-27. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 Vs. T21) for Subgroups Defined by Education at Baseline

Outcome	Less than Associate's Degree			Any Postsecondary Degree			Estimated Difference in Impact (7)
	Average Outcome with Offset and EWIC (T22) (1)	Average Outcome with Offset and WIC (T21) (2)	Impact Estimate (3)	Average Outcome with Offset and EWIC (T22) (4)	Average Outcome with Offset and WIC (T21) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$4,026	\$4,340	-\$313* (\$146)	\$6,881	\$5,912	\$968* (\$502)	\$1,282†† (\$542)
Employment during year (%)	35.75	34.80	0.94 (0.82)	42.40	40.66	1.74 (1.89)	0.80 (1.80)
Earnings above BYA (%)	10.91	11.40	-0.49 (0.63)	16.62	14.47	2.15 (1.19)	2.64† (1.30)
Earnings above 2x BYA (%)	2.99	4.23	-1.24* (0.57)	8.23	6.78	1.45 (1.10)	2.69† (1.41)
Earnings above 3x BYA (%)	0.99	1.63	-0.64** (0.21)	4.61	3.42	1.19 (0.86)	1.83† (0.84)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$11,841	\$11,830	\$11 (\$178)	\$14,047	\$13,940	\$107 (\$476)	\$97 (\$524)
Number of months with SSDI payments	10.82	10.74	0.08 (0.08)	10.77	10.76	0.01 (0.19)	-0.07 (0.24)
Total SSI benefits paid	\$45	\$43	\$2 (\$20)	\$17	\$26	-\$10 (\$15)	-\$12 (\$23)
Number of months with SSI payments	0.26	0.22	0.04 (0.06)	0.07	0.13	-0.05 (0.06)	-0.09 (0.07)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Less than Associate's Degree T22 = 2,035, Less than Associate's Degree T21 = 3,290, Any Postsecondary Degree T22 = 981, Any Postsecondary Degree T21 = 1,524.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Exhibit E-28. Estimated Impacts on 2015 Outcomes of the Offset Compared to Current Law (T22 + T21 vs C2) for Subgroups Defined by Education at Baseline

Outcome	Less than Associate's Degree			Any Postsecondary Degree			Estimated Difference in Impact (7)
	Average Outcome with Offset and WIC and EWIC (T22 + T21) (1)	Average Outcome under Current Law (C2) (2)	Impact Estimate (3)	Average Outcome with Offset and WIC and EWIC (T22 + T21) (4)	Average Outcome under Current Law (C2) (5)	Impact Estimate (6)	
Earnings Outcomes (January–December 2015)							
Total earnings	\$4,220	\$3,801	\$419 (\$246)	\$6,302	\$6,048	\$255 (\$431)	\$-165 (\$326)
Employment during year (%)	35.16	33.01	2.15 (1.37)	41.36	41.04	0.32 (1.64)	-1.83 (1.81)
Earnings above BYA (%)	11.21	8.48	2.73*** (0.83)	15.33	12.41	2.92** (1.17)	0.19 (1.40)
Earnings above 2x BYA (%)	3.76	3.47	0.29 (0.47)	7.36	6.72	0.64 (0.87)	0.36 (0.52)
Earnings above 3x BYA (%)	1.38	1.65	-0.26 (0.31)	3.90	3.47	0.43 (0.71)	0.69 (0.62)
Benefit Outcomes (January–December 2015)							
Total SSDI benefits paid	\$11,834	\$11,433	\$401** (\$138)	\$13,983	\$13,245	\$738** (\$243)	\$337 (\$290)
Number of months with SSDI payments	10.77	10.40	0.37*** (0.09)	10.77	10.17	0.59*** (0.14)	0.22 (0.15)
Total SSI benefits paid	\$44	\$51	\$-7 (\$12)	\$22	\$11	\$11 (\$10)	\$19 (\$13)
Number of months with SSI payments	0.24	0.23	0.00 (0.04)	0.10	0.06	0.05 (0.04)	0.05 (0.03)

Source: SSA administrative records, from the MEF, BODS, MBR, and SSR, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: See Chapter 2 for variable definitions. Weights reflecting sample selection are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: Less than Associate's Degree T22 + T21 = 5,325, Less than Associate's Degree C2 = 3,224, Any Postsecondary Degree T22 + T21 = 2,505, Any Postsecondary Degree C2 = 1,586.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test with 9 degrees of freedom (and with no multiple comparisons adjustment).

†/††/††† Difference in impact estimates is significantly different from zero at the .10/.05/.01 levels, respectively, using an F-test.

Appendix F. Additional Survey Outcomes from Chapter 10

Exhibit F-1. Estimated Impacts on Fringe Benefits from Employment for Stage 2 Subjects at the Time of 36-Month Followup Survey Interview

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Employment with Fringe Benefits						
Has current job that offers any fringe benefits (%)	14.8	14.7	13.6	1.1 (0.9)	1.1 (1.0)	-0.1 (1.0)
Specific Fringe Benefits						
Has current job that offers health care insurance (%)	9.9	8.9	8.7	1.2 (0.8)	0.2 (1.1)	-1.0 (0.8)
Has current job that offers dental benefits (%)	8.6	7.3	7.4	1.2 (0.7)	-0.1 (0.8)	-1.3 (0.8)
Has current job that provides sick days with pay (%)	8.3	7.5	7.4	1.0 (0.7)	0.1 (0.8)	-0.9 (0.9)
Has current job that offers long-term disability benefits (%)	4.5	4.3	4.1	0.4 (0.6)	0.2 (0.7)	-0.2 (0.6)
Has current job that offers short-term disability benefits (%)	5.7	5.3	5.4	0.4 (0.6)	-0.1 (0.7)	-0.4 (0.7)
Has current job that offers flexible health or dependent care spending accounts (%)	3.2	3.1	3.1	0.1 (0.5)	-0.0 (0.6)	-0.2 (0.7)
Has current job that provides paid vacation (%)	10.5	9.8	9.0	1.5* (0.8)	0.8 (0.9)	-0.7 (0.9)
Has current job that offers free or low-cost child care (%)	0.7	0.4	0.6	0.1 (0.3)	-0.2 (0.3)	-0.2 (0.3)
Has current job that offers transportation assistance (%)	2.5	2.1	2.6	-0.0 (0.4)	-0.5 (0.5)	-0.4 (0.5)
Has current job that offers pension or retirement benefits (%)	8.1	7.8	7.3	0.7 (0.8)	0.4 (1.1)	-0.3 (0.8)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 3,724, T22 = 2,350, C2 = 3,610

Impact estimates are regression-adjusted for baseline characteristics.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit F-2. Estimated Impacts on Employment-Related Expenses of Stage 2 Subjects at the Time of 36-Month Followup Survey Interview

Outcome	Average amounts for T21 subjects who gave response (1)	Average amounts for T22 subjects who gave response (2)	Average amounts for C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Total weekly work-related expenses ^a	\$13.46	\$13.06	\$10.88	\$2.58 (\$1.55)	\$2.18 (\$1.58)	\$-0.40 (\$1.55)
Specific Work-Related Expenses						
Weekly work-related commuting expenses	\$9.64	\$9.01	\$7.62	\$2.02** (\$0.88)	\$1.39* (\$0.71)	\$-0.63 (\$0.94)
Other weekly work-related expenses such as uniforms, licenses, permits, union dues, special tools	\$3.07	\$3.78	\$2.55	\$0.51 (\$1.06)	\$1.22 (\$1.11)	\$0.71 (\$1.21)
Weekly work-related child care expenses	\$1.16	\$0.57	\$0.61	\$0.54 (\$0.34)	\$-0.04 (\$0.22)	\$-0.58 (\$0.36)
Weekly work-related expenses for special equipment to accommodate disability, such as a brace, cane, or modified computer software, not reimbursed or covered by insurance	\$0.10	\$0.14	\$0.18	\$-0.08 (\$0.05)	\$-0.04 (\$0.05)	\$0.04 (\$0.04)
Weekly work-related expenses for personal assistance services related to disability, such as a sign language interpreter or personal care attendant, not reimbursed or covered by insurance	\$0.12	\$0.48	\$0.18	\$-0.06 (\$0.15)	\$0.30 (\$0.33)	\$0.36 (\$0.30)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 3,724, T22 = 2,350, C2 = 3,610

Impact estimates are regression-adjusted for baseline characteristics.

^a A respondent not currently working is counted as having zero weekly work-related expenses. A missing value for any of the individual expense categories makes total expense categories missing even when other expense categories do not have missing data for that respondent; as a result, the amount reported for total expenses in the first row (the average of non-missing values for that variables) does not necessarily equal the sum of the amounts reported in the individual expense category rows below (all of which are averages for somewhat different samples).

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit F-3. Estimated Impacts on Type of Business or Industry and Occupation of the Paid Jobs of Stage 2 Subjects at the Time of 36-Month Followup Survey Interview

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Type of Business or Industry						
Not currently working for pay or profit (%)	71.2	71.3	72.7	-1.6 (1.2)	-1.4 (1.6)	0.1 (1.2)
Natural resources and mining (%)	0.3	0.1	0.3	-0.0 (0.2)	-0.2 (0.1)	-0.2 (0.1)
Goods production (%)	1.8	1.2	1.6	0.3 (0.3)	-0.4 (0.4)	-0.6 (0.4)
Trade, transportation, and utilities (%)	7.1	7.1	6.8	0.3 (0.7)	0.3 (0.8)	0.0 (0.7)
Information (%)	0.7	0.7	0.4	0.3 (0.2)	0.4 (0.2)	0.1 (0.3)
Financial activities (%)	1.1	1.2	0.9	0.2 (0.3)	0.3 (0.3)	0.1 (0.3)
Professional and business services (%)	3.6	3.6	4.1	-0.5 (0.7)	-0.4 (0.7)	0.0 (0.6)
Education and health services (%)	8.2	8.8	7.9	0.3 (1.1)	0.9 (0.8)	0.7 (1.0)
Leisure and hospitality (%)	3.7	3.9	3.2	0.5 (0.5)	0.7 (0.6)	0.1 (0.6)
Other services (%)	1.8	1.7	1.6	0.2 (0.4)	0.2 (0.4)	-0.1 (0.4)
Public administration (%)	0.7	0.5	0.7	0.0 (0.2)	-0.2 (0.2)	-0.2 (0.3)
Occupation						
Not currently working for pay or profit (%)	71.2	71.3	72.7	-1.6 (1.2)	-1.4 (1.6)	0.1 (1.2)
Management, business, and financial occupations (%)	1.8	2.4	1.7	0.1 (0.5)	0.7 (0.5)	0.6 (0.4)
Computer, engineering, and science occupations (%)	0.9	0.8	0.9	0.0 (0.3)	-0.0 (0.3)	-0.1 (0.3)
Community and social services occupations (%)	3.8	3.4	3.6	0.2 (0.6)	-0.1 (0.5)	-0.3 (0.6)
Health care practitioners and technical occupations (%)	0.6	1.0	0.9	-0.2 (0.2)	0.1 (0.3)	0.4 (0.3)
Service occupations (%)	8.7	8.5	8.9	-0.3 (1.2)	-0.4 (1.5)	-0.2 (1.3)
Sales and related occupations (%)	2.8	3.5	2.8	0.1 (0.5)	0.7 (0.5)	0.6 (0.5)
Office and administrative support occupations (%)	5.2	5.6	4.7	0.4 (0.6)	0.9 (0.7)	0.4 (0.7)
Farming, fishing, and forestry occupations (%)	0.1	0.1	0.0	0.1 (0.1)	0.1 (0.1)	-0.1 (0.1)
Construction and Extraction Occupations (%)	0.5	0.2	0.4	0.1 (0.1)	-0.1 (0.2)	-0.2 (0.2)
Installation, Maintenance, and Repair Occupations (%)	0.6	0.4	0.6	-0.0 (0.2)	-0.3 (0.2)	-0.3 (0.2)

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Production Occupations (%)	1.2	0.6	0.8	0.4 (0.3)	-0.2 (0.2)	-0.6 (0.5)
Transportation and Material Moving Occupations (%)	2.8	2.5	2.2	0.6 (0.5)	0.3 (0.4)	-0.3 (0.4)
Military Specific Occupations (%)	0.0	0.0	0.0	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 3,724, T22 = 2,350, C2 = 3,610

Impact estimates are regression-adjusted for baseline characteristics.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit F-4. Estimated Impacts on Household Income and Material Hardship Outcomes for Stage 2 Subjects in Past Year

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Household Income						
Household income in 2014 ^a	\$27,412	\$27,887	\$27,177	\$236 (\$597)	\$711 (\$712)	\$475 (\$640)
Living Below Poverty Line						
Household income below federal poverty line in 2014 (%) ^a	31.7	31.3	34.3	-2.6* (1.4)	-3.0* (1.6)	-0.4 (1.5)
Could Not Meet Household Expenses						
Did not meet all essential expenses any time in past 12 months (%)	51.1	51.8	51.8	-0.7 (1.4)	0.1 (1.5)	0.8 (1.5)
Did not pay full amount of rent or mortgage (any time in past 12 months) (%)	26.1	26.3	24.8	1.3 (1.2)	1.6 (1.3)	0.2 (1.3)
Evicted for not paying rent or mortgage (any time in past 12 months) (%) ^b	2.6	2.2	2.3	0.3 (0.4)	-0.0 (0.4)	-0.3 (0.5)
Could not pay full amount of utility bills (any time in past 12 months) (%)	39.6	38.1	38.3	1.2 (1.3)	-0.3 (1.7)	-1.5 (1.4)
Utility turned off service because of nonpayment (any time in past 12 months) (%) ^c	8.1	9.2	7.9	0.2 (0.7)	1.3 (0.8)	1.1 (0.8)
Telephone or cell company disconnected because of nonpayment (any time in past 12 months) (%)	23.6	23.0	22.5	1.1 (1.1)	0.5 (1.3)	-0.6 (1.3)
Food Security						
Low food security (%) ^d	23.5	21.9	22.6	0.9 (1.2)	-0.7 (1.3)	-1.6 (1.4)
Very low food security (%) ^d	31.3	32.1	32.7	-1.4 (1.2)	-0.6 (1.4)	0.8 (1.4)
Food security scale ^e	6.2	6.4	6.3	-0.1 (0.1)	0.1 (0.1)	0.1 (0.1)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 3,724, T22 = 2,350, C2 = 3,610

^a The survey question asked respondents to indicate the total combined income of all members of the household during the most recent calendar year. Survey data collection began in March 2014 and ended in February 2016. For the large majority of sample respondents, the survey question asked about 2014 income (69%). Poverty designations calculated using 2013, 2014 and 2015 federal poverty lines. The federal poverty line for 2015 is \$11,770 for a household of one

^b This question was asked only of respondents who reported that they did not pay their full rent or mortgage at some time in the past 12 months, which was 26.1% of the weighted responses. Respondents who paid their full rent or mortgage throughout the past 12 months are coded as zeros.

^c This question was asked only of respondents who reported that they could not pay the full amount of gas, oil, or electricity bills in past 12 months, which was 39.6% of the weighted responses. Respondents who did not face any difficulty in paying the full amount of gas, oil, or electricity bills are treated as zeros.

^d Low food security includes beneficiaries who designated two to four of the following as applicable over the past 12 months: (1) often or sometimes ran out of food and didn't have money to get more, (2) often or sometimes couldn't afford to eat balanced meals, (3) cut or skipped meals for financial reasons, (4) cut or skipped meals for financial reasons in almost every month or some months

but not every month, (5) ate less than desired for financial reasons, (6) was hungry but didn't eat for financial reasons. Very low food security includes beneficiaries who designated five or six of these statements as applicable over the past 12 months.

^e Unweighted sample sizes: T21 = 2,453, T22 = 1,494, C2 = 2,357. Sample sizes are different in this row because the food security index does not assign a value for people who do not give an affirmative response to any of the indicators of food insecurity, because the extent of food insecurity for these people is unknown. The food security scale comes from the U.S. Department of Agriculture U.S. Household Food Security Survey Module: Six-Item Short Form Survey. The minimum value is 2.86, the maximum value is 8.48. The higher the score, the less food secure.

Impact estimates are regression-adjusted for baseline characteristics.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit F-5. Estimated Impacts on Self-Reported Benefit Receipt for Stage 2 Subjects at the Time of 36-Month Followup Survey Interview

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Receipt of any benefits (excluding SSDI) in the last month (%)	51.7	52.9	52.1	-0.4 (1.6)	0.8 (1.5)	1.3 (1.9)
Specific Benefits Received						
Receipt of SSDI in the last month (%)	97.0	96.7	93.7	3.2*** (0.5)	3.0*** (0.6)	-0.3 (0.5)
Receipt of SNAP (Food Stamps) in the last month (%)	31.7	32.7	31.8	-0.0 (1.2)	1.0 (1.4)	1.0 (1.4)
Receipt of public assistance/welfare (TANF) benefits in the last month (%)	1.3	1.3	1.2	0.1 (0.3)	0.1 (0.3)	-0.0 (0.4)
Receipt of veterans' benefits in the last month (%)	3.1	2.6	3.4	-0.3 (0.5)	-0.8 (0.5)	-0.5 (0.5)
Receipt of workers' compensation benefits in the last month (%)	0.9	1.2	0.9	-0.0 (0.3)	0.3 (0.3)	0.4 (0.3)
Receipt of private disability insurance benefits in the last month (%)	2.1	2.9	2.8	-0.8 (0.8)	0.0 (0.5)	0.8 (0.6)
Receipt of disability insurance for a disabled adult child in the last month (%)	0.8	1.1	0.6	0.2 (0.4)	0.5 (0.5)	0.3 (0.3)
Receipt of unemployment insurance benefits in the last month (%)	0.4	0.4	0.4	0.0 (0.2)	-0.0 (0.2)	-0.0 (0.2)
Receipt of government housing assistance in the last month (%)	12.2	11.4	11.6	0.6 (0.9)	-0.1 (1.0)	-0.8 (1.0)
Receipt of private pensions or government employee pensions in the last month (%)	5.9	4.7	5.8	0.1 (0.6)	-1.1 (0.7)	-1.2* (0.6)
Receipt of other government assistance (for example, energy assistance or child care assistance) in last month (%)	7.6	7.6	8.6	-1.0 (0.8)	-1.0 (1.0)	-0.0 (0.8)
Receiving other assistance on a regular basis (%)	4.2	3.9	3.7	0.5 (0.5)	0.2 (0.6)	-0.3 (0.6)
Receiving other assistance not on a regular basis (%)	1.8	2.1	2.5	-0.7* (0.4)	-0.5 (0.7)	0.3 (0.6)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 3,724, T22 = 2,350, C2 = 3,610

Impact estimates are regression-adjusted for baseline characteristics.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit F-6. Estimated Impacts on Self-Reported Benefit Amounts for Stage 2 Subjects at the Time of 36-Month Followup Survey Interview

Outcome	Average amount for T21 subjects who gave response (1)	Average amount for T22 subjects who gave response (2)	Average amount for C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Total benefit income in the last month (excluding SSDI) ^a	\$235	\$211	\$227	\$8 (\$22)	\$-16 (\$22)	\$-24 (\$26)
Specific Benefits Amounts						
SSDI received in the last month	\$1,066	\$1,060	\$1,033	\$33** (\$11)	\$27* (\$12)	\$-6 (\$12)
SNAP (Food Stamps) received in the last month	\$41.38	\$41.86	\$39.23	\$2.15 (\$2.75)	\$2.64 (\$2.68)	\$0.48 (\$2.73)
Public assistance/welfare (TANF) benefits received in the last month	\$1.93	\$2.16	\$2.01	\$-0.08 (\$0.72)	\$0.15 (\$0.93)	\$0.23 (\$1.13)
Veterans' benefits received in the last month	\$40.09	\$29.52	\$40.67	\$-0.57 (\$8.96)	\$-11.15 (\$10.33)	\$-10.58 (\$9.32)
Workers' compensation benefits received in the last month	\$5.13	\$10.84	\$6.45	\$-1.31 (\$2.10)	\$4.39 (\$3.39)	\$5.70 (\$4.29)
Private disability insurance benefits received in the last month	\$21.52	\$29.40	\$25.81	\$-4.28 (\$6.17)	\$3.59 (\$7.89)	\$7.88 (\$7.65)
Disability insurance for a disabled adult child received in the last month	\$5.19	\$8.55	\$3.71	\$1.49 (\$2.37)	\$4.85 (\$3.80)	\$3.36 (\$2.95)
Unemployment insurance (UI) benefits received in the last month	\$2.44	\$2.56	\$1.63	\$0.81 (\$0.95)	\$0.93 (\$1.28)	\$0.12 (\$1.43)
Private pensions or government employee pensions received in the last month	\$44.55	\$37.72	\$42.40	\$2.15 (\$7.84)	\$-4.69 (\$6.11)	\$-6.84 (\$6.22)
Other government assistance (for example, energy assistance or child care assistance) received in the last month	\$23.25	\$15.56	\$20.92	\$2.33 (\$9.09)	\$-5.36 (\$7.11)	\$-7.69 (\$6.76)
Other assistance received on a regular basis in the last month	\$40.49	\$25.92	\$25.86	\$14.62 (\$8.63)	\$0.05 (\$7.09)	\$-14.57 (\$9.30)
Other assistance not received on a regular basis in the last month	\$7.19	\$10.41	\$16.21	\$-9.02** (\$3.94)	\$-5.80 (\$6.16)	\$3.22 (\$4.56)

Source: BOND Stage 2 36-Month Interim Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 3,724, T22 = 2,350, C2 = 3,610

Impact estimates are regression-adjusted for baseline characteristics.

^a A missing value for any of the individual benefit income categories makes total benefit income missing even when other benefit income categories do not have missing data for that respondent; as a result, the amount reported for total benefit income in the first row (the average of non-missing values for that variables) does not necessarily equal the sum of the amounts reported in the rows for individual benefit income category rows below (each of which are averages for somewhat different samples).

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit F-7 Estimated Impacts on Living Situations of Stage 2 Subjects at the Time of 36-Month Followup Survey Interview

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Household Size						
Number of people in household	1.23	1.28	1.30	-0.07 (0.04)	-0.02 (0.04)	0.05 (0.04)
Residence Type						
Single-family home (%)	54.7	55.2	57.5	-2.7* (1.4)	-2.3 (1.5)	0.5 (1.5)
Attached home (townhome, duplex, condo)	2.2	2.2	1.7	0.5 (0.4)	0.6 (0.5)	0.1 (0.5)
Mobile home (%)	7.3	7.6	7.6	-0.4 (0.7)	-0.1 (1.0)	0.3 (0.8)
Regular apartment (%)	31.1	31.4	29.6	1.5 (1.2)	1.9 (1.4)	0.3 (1.7)
Supervised apartment (%)	0.9	0.4	0.6	0.3 (0.3)	-0.3 (0.3)	-0.6* (0.3)
Group home (%)	0.5	0.7	0.5	-0.0 (0.3)	0.2 (0.3)	0.3 (0.3)
Halfway house (%)	0.1	-0.0	0.1	-0.0 (0.1)	-0.1 (0.1)	-0.1 (0.1)
Personal care or board and care home (%)	0.4	0.0	0.1	0.3 (0.1)	-0.1 (0.1)	-0.3** (0.1)
Assisted living facility (%)	0.4	0.6	0.5	-0.1 (0.2)	0.1 (0.2)	0.2 (0.2)
Nursing or convalescent home (%)	0.1	0.3	0.2	-0.0 (0.1)	0.1 (0.2)	0.2 (0.2)
Shelter (%)	0.2	0.1	0.2	0.0 (0.1)	-0.1 (0.1)	-0.1 (0.1)
Other supervised group residence or facility (%)	0.5	-0.0	0.1	0.4** (0.2)	-0.1 (0.1)	-0.5** (0.2)
Other (%)	1.7	1.5	1.5	0.2 (0.5)	0.0 (0.6)	-0.2 (0.4)
Disability Focus						
Lives in a facility for people with disabilities including supervised apartment, group home, halfway house, personal care or board and care home, assisted living facility, nursing home, or other dwelling place (%)	1.9	1.1	1.7	0.2 (0.4)	-0.5 (0.7)	-0.8 (0.5)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 3,724, T22 = 2,350, C2 = 3,610 Impact estimates are regression-adjusted for baseline characteristics.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit F-8. Estimated Impacts on Health Outcomes of Stage 2 Subjects at the Time of 36-Month Followup Survey Interview

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Health Status (global)						
Health is excellent (%)	2.5	2.9	3.2	-0.6 (0.5)	-0.3 (0.5)	0.4 (0.5)
Health is very good (%)	8.5	8.9	7.8	0.7 (1.0)	1.1 (0.9)	0.5 (0.8)
Health is good (%)	25.2	24.1	25.2	-0.0 (1.2)	-1.1 (1.3)	-1.1 (1.3)
Health is fair (%)	43.1	41.6	43.3	-0.2 (1.7)	-1.8 (1.5)	-1.6 (1.5)
Health is poor (%)	20.7	22.5	20.5	0.2 (1.2)	2.1 (1.2)	1.8 (1.2)
Physical Health and Functioning						
Composite Physical Health Score (SF physical component summary) ^{a, b}	35.2	34.6	35.4	-0.3 (1.0)	-0.9 (1.1)	-0.6 (0.9)
Composite Mental Health Score (SF mental component summary) ^{a, b}	53.0	54.6	54.1	-1.1 (0.7)	0.5 (0.7)	1.6** (0.7)
Stayed overnight in the hospital in the last 12 months (%)	29.9	28.0	29.9	-0.0 (1.2)	-1.9 (1.3)	-1.9 (1.5)
Number of nights in the hospital in the last 12 months	3.7	3.5	3.9	-0.2 (0.6)	-0.4 (0.5)	-0.2 (0.5)
Number of days in the last 12 months when illness or injury kept subject in bed for more than half the day	47.0	47.8	46.3	0.7 (2.6)	1.5 (3.0)	0.8 (2.6)
Needs help with personal care such as bathing, dressing (%)	15.8	18.3	16.2	-0.3 (0.9)	2.2* (1.1)	2.5 (1.6)
Needs help of another person in order to get around inside own home (%)	10.3	10.3	10.1	0.2 (0.8)	0.2 (0.9)	0.0 (0.9)
Needs help of another person in order to get around outside own home (%)	21.4	21.8	21.6	-0.3 (1.0)	0.1 (1.2)	0.4 (1.2)
Emotional Health and Functioning						
Has a lot of trouble concentrating long enough to finish everyday tasks (%) ^b	48.4	48.1	46.6	1.8 (1.3)	1.5 (1.5)	-0.3 (1.4)
Has a lot of trouble coping with day-to-day stress (%) ^b	50.0	48.7	49.7	0.3 (1.3)	-0.9 (1.4)	-1.2 (1.5)
Overweight and Obesity c						
Underweight (%)	1.5	2.2	1.3	0.2 (0.3)	1.0** (0.4)	0.7 (0.4)
Overweight (%)	27.9	30.2	29.4	-1.5 (1.4)	0.8 (1.6)	2.3 (1.9)
Obese (%)	46.9	46.1	46.2	0.8 (1.2)	-0.1 (1.3)	-0.9 (1.4)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 3,724, T22 = 2,350, C2 = 3,610

^a Optum SF Health Survey Scale. The scale ranges from 0 to 100. Higher scores represent better health. Mean scale score for the U.S. adult population is 50.

^b Unweighted sample sizes: T21 = 3,692, T22 = 2,327, C2 = 3,574. Sample sizes are different in this row because this question was asked only of beneficiaries and thus excludes proxy respondents.

^c Underweight is defined as a Body Mass Index (BMI) under 18.5. Overweight is defined as a BMI between 25.0 and 29.9. Obese is defined as a BMI of 30.0 or greater.

Impact estimates are regression-adjusted for baseline characteristics.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit F-9. Estimated Impacts on Health Insurance Coverage of Stage 2 Subjects at the Time of 36-Month Followup Survey Interview

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Health Insurance						
Has health insurance coverage (%)	98.6	98.6	98.4	0.2 (0.3)	0.1 (0.4)	-0.1 (0.4)
Insured by Medicaid (%)	29.9	30.0	30.2	-0.2 (1.2)	-0.2 (1.4)	0.0 (1.4)
Insured by Medicare (%)	83.8	86.3	83.8	-0.0 (1.0)	2.4 (1.4)	2.5** (1.1)
Insured by CHAMPUS/CHAMP-VA, Veterans Affairs, or other military health insurance program (%)	5.0	4.8	5.5	-0.5 (0.6)	-0.6 (0.7)	-0.1 (0.7)
Insured by Indian Health Service (%)	0.1	0.0	0.2	-0.1 (0.1)	-0.2 (0.1)	-0.1 (0.1)
Insured by Medi-GAP (%)	0.6	1.3	1.0	-0.4 (0.2)	0.3 (0.3)	0.7** (0.3)
Insured by state program (%)	4.3	3.8	4.6	-0.2 (0.6)	-0.8 (0.6)	-0.6 (0.6)
Has private insurance through own employer (%)	6.1	6.0	5.0	1.1 (0.6)	0.9 (0.8)	-0.2 (0.9)
Has private insurance through spouse/partner/family employer (%)	7.7	8.6	8.4	-0.6 (0.7)	0.2 (0.8)	0.8 (0.8)
Has private insurance paid by self or family (%)	4.3	3.5	3.6	0.7 (0.5)	-0.2 (0.6)	-0.9 (0.8)
Has medicare advantage plan (%)	1.3	1.1	1.5	-0.2 (0.4)	-0.4 (0.4)	-0.2 (0.4)
Has medicare prescription part D (%)	1.5	1.2	1.1	0.4 (0.4)	0.1 (0.4)	-0.3 (0.5)
Has supplemental Medicare coverage (%)	1.2	0.4	1.2	-0.0 (0.3)	-0.8** (0.3)	-0.8** (0.3)
Has other insurance plan (%)	11.5	12.4	10.7	0.7 (0.9)	1.7 (1.0)	0.9 (1.1)
Has private disability insurance paid by self or family (%)	0.2	0.2	0.2	0.0 (0.1)	-0.0 (0.1)	-0.1 (0.1)
Use of Health Care						
Delayed seeking medical care due to cost (%)	34.7	30.7	33.0	1.7 (1.3)	-2.4 (1.8)	-4.0** (1.4)
Needed medical care but didn't get it because couldn't afford it (%)	29.7	27.5	28.6	1.0 (1.2)	-1.2 (1.6)	-2.2 (1.6)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 3,724, T22 = 2,350, C2 = 3,610

Impact estimates are regression-adjusted for baseline characteristics.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit F-10. Estimated Impacts on Marital Status of Stage 2 Subjects at Time of 36-Month Followup Interview

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Married (%)	30.1	30.1	30.3	-0.2 (0.8)	-0.2 (0.8)	-0.0 (0.8)
Widowed (%)	5.1	4.5	5.0	0.1 (0.4)	-0.5 (0.4)	-0.6 (0.4)
Divorced (%)	27.8	28.0	27.4	0.4 (0.7)	0.7 (0.8)	0.2 (0.8)
Separated (%)	6.2	6.3	6.1	0.0 (0.5)	0.2 (0.7)	0.1 (0.8)
Never married (%)	30.8	31.1	31.2	-0.4 (0.5)	-0.2 (0.6)	0.2 (0.6)
Currently living with a spouse or someone like a spouse (%)	35.7	36.2	36.4	-0.7 (0.9)	-0.2 (1.0)	0.5 (1.0)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 3,724, T22 = 2,350, C2 = 3,610

Impact estimates are regression-adjusted for baseline characteristics.

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).

Exhibit F-11. Estimated Impacts on Time Use of Stage 2 Subjects at the Time of 36-Month Followup Survey Interview

Outcome	Percent of T21 subjects who gave response (1)	Percent of T22 subjects who gave response (2)	Percent of C2 subjects who gave response (3)	Estimated Impact of Offset and WIC vs. Current Law (T21 vs. C2) (4)	Estimated Impact of Offset and EWIC vs. Current Law (T22 vs. C2) (5)	Estimated Impact of EWIC instead of WIC Given Offset (T22 vs. T21) (6)
Hours per week spent on measured activities ^a	35.0	36.1	35.3	-0.2 (0.8)	0.9 (0.9)	1.1 (0.9)
Specific Time Use						
Hours per week working in a job for pay	7.2	7.3	6.4	0.8** (0.3)	0.9** (0.3)	0.1 (0.4)
Hours per week commuting to and from work	1.3	1.5	1.2	0.1 (0.1)	0.3 (0.2)	0.2 (0.2)
Hours per week doing unpaid work at family business	0.4	0.4	0.4	0.0 (0.1)	0.0 (0.1)	-0.0 (0.1)
Hours per week volunteering for an organization	1.2	1.3	1.3	-0.1 (0.1)	0.0 (0.2)	0.1 (0.1)
Hours per week in school, working toward a degree program, or in a training program	1.0	1.0	1.0	-0.0 (0.1)	-0.0 (0.2)	0.0 (0.2)
Hours per week homemaking, including caring for others, food preparation, yard work, and house repairs	14.6	15.3	15.5	-0.9 (0.5)	-0.2 (0.6)	0.7 (0.6)
Hours per week devoted to personal health care and self-grooming	9.1	9.2	9.2	-0.1 (0.3)	-0.0 (0.3)	0.1 (0.3)

Source: BOND Stage 2 36-Month Survey, with covariates from Stage 2 baseline survey and baseline SSA administrative data used in impact analysis regression equations.

Notes: Weights for sample selection and survey non-response are used to ensure that the BOND subjects who met analysis criteria are representative of the national population of SSDI-only beneficiaries who would volunteer for study enrollment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics.

Unweighted sample sizes: T21 = 3,724, T22 = 2,350, C2 = 3,610

Impact estimates are regression-adjusted for baseline characteristics.

^a A missing value for any of the individual time use categories makes total hours per week missing even when other time use categories do not have missing data for that respondent; as a result, the amount reported for total hours per week in the first row (the average of non-missing values for that variables) does not necessarily equal the sum of the amounts reported in the rows for individual time use categories below (each of which are averages for somewhat different samples).

*/**/** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test (with no multiple comparisons adjustment).