

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these estimates have been updated over the course of the demonstration, making the published estimates in this report out of date.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 1 Interim Process, Participation, and Impact Report

Deliverable 24c2.2

**December 1, 2017**

*Submitted to:*

**Social Security Administration**

Attn: Ms. Joyanne Cobb

Office of Research, Demonstrations and  
Employment Support (ORDES)

500 E Street, SW

9<sup>th</sup> Floor, Rm. 905

Washington, DC 20254



**Contract No. SS00-10-60011**

*Prepared by:*

Sarah Croake

Priyanka Anand

Christopher Jones

Katherine Morrison

Cara Orfield

David Stapleton

Denise Hoffman

David R. Mann

Judy Geyer

Daniel Gubits

Stephen Bell

Andrew McGuirk

Tyler Rose

David Wittenburg

## Table of Contents

Acronyms Used in This Report.....	vi
Terminology.....	vii
Executive Summary .....	viii
<b>1. Introduction.....</b>	<b>1</b>
1.1. The BOND Policy Test .....	1
1.2. The BOND Evaluation .....	5
1.2.1. The Process Analysis .....	6
1.2.2. The Participation Analysis .....	10
1.2.3. The Impact Analysis.....	11
1.3. Organization of the Current Report.....	13
<b>2. Data Sources and Methodology .....</b>	<b>14</b>
2.1. Process Analysis.....	14
2.1.1. Data Sources for the Process Analysis .....	14
2.1.2. Methods for the Process Analysis .....	17
2.2. Participation Analysis.....	18
2.2.1. Data Sources for the Participation Analysis.....	18
2.2.2. Methods for the Participation Analysis .....	19
2.3. Impact Analysis.....	20
2.3.1. Data Sources for the Impact Analysis .....	21
2.3.2. Methods for the Impact Analysis .....	21
<b>3. Background Characteristics of BOND Sites and Subjects .....</b>	<b>30</b>
3.1. Geographic Characteristics.....	30
3.2. Economic Indicators.....	30
3.3. Non-BOND SSDI Counseling Services .....	34
3.4. Availability and Use of Employment Services and Other Work-Focused, Disability- Related Resources .....	35
3.5. Sites' Arrangements for Providing BOND Benefits Counseling .....	37
3.6. Number and Characteristics of BOND T1 Subjects.....	39
3.7. Summary .....	40
<b>4. BOND Benefits Counseling .....</b>	<b>41</b>
4.1. Design of BOND Counseling for Stage 1 Subjects.....	41
4.2. WIC Counselors' Caseloads.....	42
4.3. Benefits Counseling Services Received by T1 Subjects .....	45
4.4. BOND Post-Entitlement Services Provided by WIC Staff .....	48
4.5. Summary .....	49
<b>5. Offset Use and the Pathway to Benefit Offset Adjustment .....</b>	<b>50</b>
5.1. Introduction .....	50
5.1.1. Benefit Adjustment Processes Developed for BOND.....	50
5.1.2. Evidence of Progress Toward Benefit Adjustment Under Offset Rules .....	52
5.1.3. Organization of the Rest of the Chapter .....	56
5.2. Activities Related to Maintaining Sufficient Earnings to Use the Offset.....	56

5.3.	Activities Related to Work CDR Completion .....	57
5.3.1.	Identifying Beneficiaries in Need of a Work CDR .....	58
5.3.2.	Developing a Beneficiary's Work History .....	59
5.3.3.	SSA Processing of Work CDRs .....	59
5.4.	Activities Related to AEE Submission.....	60
5.5.	Activities Related to Benefit Adjustment Under the Offset Rules .....	62
5.5.1.	Implementation of the Benefit Adjustment Process .....	62
5.5.2.	Performance of BSAS .....	62
5.6.	Duration from First Offset Use to First Benefit Adjustment.....	64
5.7.	Variation in Steps to Offset Adjustment Across Sites and Beneficiaries .....	68
5.7.1.	Variation in Milestones Attainment Across Sites .....	68
5.7.2.	Variation in Milestone Attainment by Beneficiary Characteristics.....	69
5.8.	Duration of Offset Use .....	73
5.9.	Summary .....	75
<b>6.</b>	<b>Overpayments.....</b>	<b>77</b>
6.1.	Definition of Overpayments .....	77
6.2.	Prevalence of Overpayments .....	78
6.2.1.	Overpayments During the First Four Years of BOND.....	79
6.2.2.	Overpayments for First-Time Offset Users versus Overpayments for Beneficiaries with Previous Benefit Adjustments under BOND.....	81
6.3.	Comparison of T1 and C1 Experiences: Estimated Impacts of BOND on Overpayments .....	83
6.4.	Beneficiaries' Experiences with Overpayments.....	86
6.5.	Underpayments.....	87
6.6.	Summary .....	88
<b>7.</b>	<b>Impacts on Annual Earnings and SSDI Benefits Measured in Administrative Data .....</b>	<b>90</b>
7.1.	Confirmatory Impacts on 2015 Earnings and SSDI Benefits .....	92
7.2.	Exploratory Impacts on Other Earnings and Benefit Outcomes .....	96
7.2.1.	Estimated Impacts on Earnings-Related Outcomes .....	96
7.2.2.	Estimated Impacts on Benefit-Related Outcomes .....	97
7.3.	Impact Variation by Beneficiary Background Characteristics .....	98
7.4.	Summary .....	100
<b>8.</b>	<b>The End of the BOND Participation Period .....</b>	<b>102</b>
8.1.	Introduction .....	102
8.2.	Potential Effects of BPP Transition Processes on BOND Outcomes.....	103
8.3.	BPP Timing and Number of Beneficiaries Affected by the End of the BPP .....	104
8.4.	Implementation Activities Around the BPP .....	105
8.5.	Beneficiaries' Knowledge of, and Reactions to, the End of the BPP.....	106
8.5.1.	Beneficiaries' Knowledge of BPP Duration and End Date.....	106
8.5.2.	Beneficiaries' Reactions to the End of the BPP .....	107
8.6.	Summary .....	108
<b>9.</b>	<b>Conclusion.....</b>	<b>109</b>
9.1.	Use of WIC services declined, but some T1 subjects received services for the first time ....	109
9.2.	An ORDES staff increase is reducing the backlog of first benefit adjustments, but delays will persist until long-pending cases are completed.....	110

9.3. The share of T1 subjects who have used the offset has grown in the first six years of the demonstration, although limited understanding of the offset may have hampered growth, and most users used the offset for more than one year..... 111

9.4. Overpayments were more prevalent for T1 subjects than for C1 subjects, but smaller on average, and were less prevalent and smaller after the first benefit adjustment occurred under the offset..... 112

9.5. For 2015, there is no evidence of an impact of BOND on total earnings and there is strong evidence of a positive impact on SSDI benefits paid during the year ..... 112

9.6. About 9 percent of T1 subjects reached the end of the BPP in 2016, and there is no reason to think they changed behavior substantially before the BPP ended ..... 113

9.7. Taking Stock ..... 114

**References..... 115**

**Appendix A. Sample Sizes for Overpayments Analysis..... 119**

**Appendix B. Subgroup Exhibits for 2015 Earnings and Benefit Impacts ..... 120**

**Appendix C. Implementation of the End of the BPP ..... 127**

## List of Exhibits

Exhibit 1-1.	Overview of BOND Random Assignment Process .....	4
Exhibit 1-2.	Earlier and Future Reports on BOND Participation, Process, and Impact Analyses for Stage 1 and Stage 2 .....	5
Exhibit 2-1.	Qualitative Data Collection – Summer 2016 WIC/EWIC Focus Groups.....	16
Exhibit 2-2.	Poll Responses by Question.....	17
Exhibit 2-3.	Definitions of Confirmatory and Exploratory Administrative Outcomes and Predicted Direction of Impacts, If Any .....	23
Exhibit 3-1.	Characteristics of BOND Sites .....	31
Exhibit 3-2.	Employment Rates in the BOND Sites, 2011 and 2015 .....	32
Exhibit 3-3.	Number of T1 Subjects and Set-ups by Site Through December 31, 2016 .....	39
Exhibit 4-1.	Active WIC Cases by Year .....	43
Exhibit 4-2.	WIC Caseloads per FTE in 2016 .....	44
Exhibit 4-3.	Percent of T1 Subjects Who Received WIC Services, by Year.....	46
Exhibit 4-4.	Percent of T1 Subjects Who Received WIC Services, by Service Type .....	47
Exhibit 5-1.	Percentage of T1 Subjects with Documented Steps Toward Benefit Adjustment (through December 2016).....	54
Exhibit 5-2.	Counts of Offset Users by Year, Based on December 2016 Data .....	55
Exhibit 5-3.	Cumulative T1 Offset Users and Cumulative T1 Subjects with an Offset Adjustment, Based on December 2016 Data .....	65
Exhibit 5-4.	Duration from First Offset Use to First Benefit Adjustment .....	67
Exhibit 5-5.	Percentage of T1 Subjects Achieving Steps towards Benefit Adjustment Under the Offset by Site, through December 2016 .....	69
Exhibit 5-6.	Treatment Subject Characteristics by Steps Toward Benefit Offset Adjustment (through December 2016).....	71
Exhibit 5-7.	Predictors of Benefit Adjustment Under the Offset Rules through December 2016.....	72
Exhibit 5-8.	Calendar Years of Offset Use for Treatment Subjects with First Use Observed in 2014 or Earlier, as of December 2016 .....	74
Exhibit 6-1.	Unadjusted Prevalence of Overpayments in 2011, 2012, 2013, or 2014.....	81
Exhibit 6-2.	Overpayments to T1 Offset Users in 2011, 2012, 2013, and 2014, Before and After First Offset Adjustment .....	82
Exhibit 6-3.	Estimated Impacts on Overpayments in 2011, 2012, 2013, and 2014.....	84
Exhibit 7-1.	Estimated Impacts on 2015 Total Earnings and Total SSDI Benefits Paid .....	92
Exhibit 7-2.	Trends in Annual Earnings in the First Five Years of BOND .....	94
Exhibit 7-3.	Trends in Monthly SSDI Benefits Paid in the First Five Years of BOND .....	95
Exhibit 7-4.	Estimated Impacts on 2015 Employment and Benefit Receipt.....	97
Exhibit 7-5.	Beneficiary Characteristics for Subgroup Impacts on 2015 Employment, Earnings, and Benefit Receipt.....	98
Exhibit 7-6.	Summary of Differences in Subgroup Impacts for 2015 .....	99
Exhibit 8-1.	Timing of the BOND Participation Period .....	104
Exhibit A-1.	Sample Sizes for Overpayment Analysis.....	119
Exhibit B-1.	Impact Estimates for Subgroups Defined by Duration of SSDI Receipt.....	120
Exhibit B-2.	Impact Estimates for Subgroups Defined by Baseline SSI Status .....	121

Exhibit B-3. Stage 1 Impact Estimates for Subgroups Defined by Employment in 2010..... 122

Exhibit B-4. Impact Estimates for Subgroups Defined by Access to Medicaid Buy-In Programs ..... 123

Exhibit B-5. Impact Estimates for Subgroups Defined by Age at Baseline ..... 124

Exhibit B-6. Impact Estimates for Subgroups Defined by Primary Impairment of Major  
Affective Disorder ..... 125

Exhibit B-7. Impact Estimates for Subgroups Defined by Primary Impairment of Back Disorder .... 126

## Acronyms Used in This Report

<b>AEE</b>	Annual Earnings Estimate	<b>FTE</b>	Full-Time Equivalent
<b>AIME</b>	Average Indexed Monthly Earnings	<b>GP</b>	Grace Period
<b>BODS</b>	BOND Operations Data System	<b>I&amp;R</b>	Information and Referral
<b>BOND</b>	Benefit Offset National Demonstration	<b>IRP</b>	Initial Reinstatement Period
<b>BPP</b>	BOND Participation Period	<b>IRS</b>	Internal Revenue Service
<b>BS&amp;A</b>	Benefits Summary and Analysis	<b>MBI</b>	Medicaid Buy-In
<b>BSAS</b>	BOND Stand Alone System	<b>MBR</b>	Master Beneficiary Record
<b>BTS</b>	Beneficiary Tracking System	<b>MEF</b>	Master Earnings File
<b>BYA</b>	BOND Yearly Amount	<b>ORDES</b>	Office of Research, Demonstration and Employment Support
<b>CDR</b>	Continuing Disability Review	<b>PHUS</b>	Payment History Update System
<b>CPE</b>	Centralized Post Entitlement	<b>SGA</b>	Substantial Gainful Activity
<b>CWIC</b>	Community Work Incentive Coordinators	<b>SSA</b>	Social Security Administration
<b>DAC</b>	Disabled Adult Child	<b>SSDI</b>	Social Security Disability Insurance
<b>DAF</b>	Disability Analysis File	<b>SSI</b>	Supplemental Security Income
<b>DBAD</b>	Disabled Beneficiary and Dependent files	<b>SSR</b>	Supplemental Security Record
<b>DWB</b>	Disabled Widow/Widowers Benefits	<b>SVRA</b>	State Vocational Rehabilitation Agency
<b>EN</b>	Employment Network	<b>TWP</b>	Trial Work Period
<b>EOYR</b>	End of Year Reconciliation	<b>WIC</b>	Work Incentive Counseling, Or Counselor
<b>EPE</b>	Extended Period of Eligibility	<b>WIPA</b>	Work Incentives, Planning, and Assistance
<b>EXR</b>	Expedited Reinstatement		
<b>EWIC</b>	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 SSA’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. Stage 1 supports an evaluation of how the BOND \$1 for \$2 benefit offset would affect earnings and program outcomes if applied to the national SSDI population. This report is the second of two Stage 1 Interim Process, Participation, and Impact Reports. The report documents results of the Stage 1 process and participation analyses through the sixth year of implementation (2016) and presents estimates of impacts on earnings and benefit outcomes during the fifth calendar year of implementation (2015). The report also uses SSA administrative data to describe the prevalence and size of overpayments and to estimate the impact of the benefit offset on overpayments.

## Summary of Key Findings

### 1. Offset Usage and Beneficiaries’ Knowledge of Offset Rules

As of December 2016, 3.5 percent of Stage 1 beneficiaries in a treatment group that is subject to the BOND offset rules (T1 subjects) were known to have used the offset. The number of identified offset users (that is, those whose benefits SSA had adjusted under the offset) among T1 subjects has increased each year since they first entered the demonstration in May 2011. As documented in earlier reports, limited understanding of the offset rules may have reduced the extent to which T1 subjects have used the offset. Work Incentive Counseling (WIC) staff—counselors tasked with helping T1 subjects understand how the rules affect their benefits—reinforced this point in more recent focus groups.

As of December 2016, 5 percent of T1 subjects sought and received WIC services at some point during the demonstration. The share of T1 subjects who received WIC services in 2016 decreased slightly relative to the previous year, continuing a decline that began in 2013. Among those T1 subjects who received WIC services in 2016, 18 percent were first-time recipients of WIC services. Many of these first-time recipients may have been induced to seek services after receiving notification from SSA of disability cessation following completion of a work Continuing Disability Review (CDR), an important milestone on the path to use of the benefit offset. In 2016, SSA also began sending notifications to the first beneficiaries to reach the end of their BOND Participation Period (BPP), the five-year opportunity to use the benefit offset, and those notices may have contributed to both first-time and follow-up use of WIC services in 2016.

### 2. Administrative Processes and Overpayments

Among T1 subjects for whom SSA first adjusted benefits under the offset from 2013 through 2016, the median duration from the first month for which their benefits were subject to an adjustment (the first month of “offset use”) to the month in which SSA made the first adjustment is almost two years (22 months). A primary reason for these lags has been insufficient resources relative to workload at the SSA

work unit responsible for processing work CDRs for T1 subjects. An increase in that unit's staffing resulted in a notable reduction in the T1 work CDR backlog in 2016. As a result, between December 2015 and December 2016, the percentage of BOND treatment group work CDR cases more than 270 days (nine months) old fell from 71 to 12 percent.

Almost all of the identified offset users experienced overpayments when they first entered the offset, largely due to delays in adjusting their benefits. According to administrative data extracted in October 2016, 87.4 percent of T1 subjects who used the offset at any time between May 2011 and December 2014 had overpayments that accrued during these 44 months. For those with an overpayment during this period, the mean overpayment amount was \$6,200.

The prevalence of overpayments was higher among T1 subjects than among control group (C1) subjects, but the mean overpayment amount was lower. Based on benefit adjustments made through October 2016, the benefit offset increased the percentage of all T1 subjects with overpayments from May 2011 through December 2014 by 0.43 percentage points relative to the 2.3 percent C1 mean, but reduced the average overpayment across all T1 subjects (including those with no overpayments) by \$88 from the C1 mean of \$260; both differences are statistically significant. When the total estimated reduction in overpayments is spread across the T1 subjects with overpayments only, the mean reduction over the 44 months is \$3,640, or \$83 per month.

### 3. Earnings and Benefit Impacts

Of the several earnings and benefit outcomes examined, the analysis plan for BOND (Bell et al. 2011) identifies two confirmatory outcomes as the most important in assessing the demonstration's overall impacts: annual earnings and total SSDI benefits. Statistical tests for the occurrence of these impacts use a multiple-comparisons procedure to compensate for what would otherwise be an elevated risk of false positive findings. For 2015, we found no confirmatory evidence of an impact on the average annual earnings of T1 subjects, but found strong evidence of a positive impact on SSDI benefits paid in 2015. Specifically, T1 subjects were paid \$145 dollars more in total SSDI benefits than C1 subjects in 2015, which is equivalent to a one percent increase in average benefits relative to current law. The magnitude of the point estimate for the earnings impact is quite small, and consistent with the impact estimates for earlier years. The point estimates for impacts on annual benefits paid increased from 2011 through 2013, but stayed roughly similar from 2013 to 2015.

Although the confirmatory analysis found no evidence that the offset affected average earnings in 2015, the exploratory analysis implies that this result masks offsetting effects on earnings for two T1 subgroups. On the one hand, it appears that T1 subjects who would have earned less than BYA under current law increased their earnings on average, because the percentage of T1 subjects who earned more than BYA in 2015 was 0.27 percentage points higher than the 2.97 percent of C1 subjects who earned more than BYA in that same year, a statistically significant difference. On the other hand, it appears that those who would have earned more than BYA under current law reduced their earnings under the offset, on average, because there were statistically significant reductions in the percentages of T1 beneficiaries with earnings above both twice BYA (-0.13 percentage points relative to the C1 mean of 1.44 percent) and three times BYA (-0.09 percentage points relative to the C1 mean of 0.80 percent). Each of these results is consistent with the theory presented in the *Evaluation Analysis Plan* (Bell et al. 2011). These simultaneous offsetting effects help explain the confirmatory finding of no statistically significant impact on earnings averaged across the entire sample.

## 1. Introduction

As part of the Ticket to Work and Work Incentives Improvement Act of 1999, Congress asked the Social Security Administration (SSA) to test alternative Social Security Disability Insurance (SSDI) work rules that are designed to increase the incentive for SSDI beneficiaries to work and reduce their reliance on SSDI benefits. In response, SSA has undertaken the Benefit Offset National Demonstration (BOND), a random assignment test of variants of SSDI program rules governing work and other supports. SSA, in conjunction with several contractors led by Abt Associates, developed the infrastructure and supports required to implement BOND.

The BOND project includes two stages. Stage 1 is designed to examine how a national benefit offset would affect earnings and program outcomes for the entire SSDI population. Stage 2 is designed to learn about impacts for those more likely to use a benefit offset—volunteers recruited from the SSDI-only population (SSDI beneficiaries who do not also receive Supplemental Security Income, or SSI)—and to determine the impacts of adding more intensive counseling about work and benefits to an offset.

This report, the *2017 Stage 1 Interim Process, Participation, and Impact Report*, documents results of the Stage 1 process and participation analyses into the sixth calendar year of implementation (2016). It also documents impacts on earnings and benefit outcomes during the fifth calendar year of implementation (2015) and impacts on overpayments—when SSA pays beneficiaries more than they were entitled and later reconciles the difference—through 2014.

Three *Stage 1 Snapshot Reports* (Stapleton et al. 2013; Stapleton et al. 2014; Wittenburg et al. 2015) have documented Stage 1 impacts on earnings and benefit outcomes during the first three calendar years (2011, 2012, and 2013) of implementation. The *2016 Stage 1 Interim Process, Participation, and Impact Report* (Hoffman et al. 2017) tracks Stage 1 impacts through 2014. The *Final Report* will integrate findings from both Stage 1 and Stage 2 through 2015 and present a cost-benefit analysis. We are producing a parallel series of reports for Stage 2: the first, *First- and Second-Year Snapshot of Earnings and Benefit Impacts for Stage 2* (Gubits et al. 2014), was released in 2014.

This chapter describes the specific benefit offset implemented by BOND and Stage 1 of the demonstration (Section 1.1). The chapter also reviews the objectives of the BOND evaluation and the research questions addressed by the process, participation, and impact analyses (Section 1.2). Section 1.2 also summarizes primary findings to date on the implementation and impacts of BOND as documented in previous reports. The chapter concludes by describing the organization of the remainder of the report (Section 1.3).

### 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 losing other, non-SSDI benefits.<sup>1</sup> Specifically, beneficiaries lose SSDI

---

<sup>1</sup> Other benefits include Medicare for those on the rolls for at least 24 months. These benefits are extended for a long period following suspension of SSDI benefits, but not indefinitely. Some SSDI beneficiaries also receive SSI, Medicaid, or other public or private benefits that may be reduced or eliminated as earnings increase.

benefits if their 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 1 impacts are analyzed in 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 predicts that the cash cliff discourages some beneficiaries from working at all and encourages those who work and could earn above the SGA level to nevertheless keep their earnings below that level.

BOND replaces the cash cliff with a “ramp” (benefit offset), with the policy objective of encouraging beneficiaries who can work above the SGA level to increase their earnings and reduce their reliance on benefits. More specifically, with the benefit offset, benefits decrease by \$1 for every additional \$2 in countable earnings above an annualized version of SGA once the beneficiary has exhausted the SSDI program’s TWP and GP. By protecting partial benefits for those who earn at this level, the benefit offset is expected to increase earnings for some beneficiaries who otherwise might not work at all or would earn less than the SGA amount. If the offset induces such individuals to earn above SGA, their benefits will be reduced. However, higher benefits will be paid to some beneficiaries who would have earned above the SGA amount and received no SSDI benefit payment. Further, for two reasons, such beneficiaries may choose to reduce their earnings somewhat; first, they will have higher incomes and thus less need for additional earnings, and, second, any reduction in the amount of earnings above SGA will produce an increase in SSDI benefits equivalent to half the earnings reduction. Thus, the direction of the average 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 engage in SGA under current law.

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 beneficiaries).<sup>2</sup> The benefit offset reduces benefits by \$1 for every \$2 in countable annual earnings in excess of the BYA after the GP ends. The change to an annual period can also help beneficiaries who have variable monthly earnings. SSA continues to pay benefits monthly under BOND, 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.

Beneficiaries eligible for the benefit offset may use it during the 60-month BOND Participation Period (BPP). The BPP begins the month after demonstration entry for beneficiaries who completed the TWP before that month or in the month after the beneficiary’s TWP ends, provided that the TWP ends by September 30, 2017. Those who do not complete the TWP by that date will lose their opportunity to use the offset. SSA will not permanently terminate benefits because of work during the BPP, even if benefits fall to zero because of earnings. At the end of the BPP, SSA applies the same rules that it would apply to

---

<sup>2</sup> Stage 1 impacts documented in this report are analyzed through calendar year 2015. In 2016, the BYA was \$13,560 for non-blind beneficiaries and remained the same for blind beneficiaries (\$21,840).

current-law beneficiaries who had completed the TWP, GP, and 36-month re-entitlement period of the Extended Period of Eligibility (EPE; Section 5.1 describes these periods). Thus, if earnings in a month after the BPP exceed the SGA threshold, SSA terminates beneficiaries' entitlement to SSDI benefits.

As noted, BOND includes two stages. Stage 1 tests the impact of the benefit offset on the overall SSDI population. Stage 2 examines the offset's impact on a group of individuals who are more likely to use the offset than the average SSDI beneficiary, that is, volunteers who were recruited from the SSDI-only population and were informed about the offset before enrollment and random assignment. Exhibit 1-1 illustrates the process by which the demonstration formed groups to test the offset.

This report concerns Stage 1, which aims to examine how a national benefit offset and changes to ancillary supports would affect earnings and program outcomes for the entire SSDI population. To that end, the demonstration randomly selected 10 large study sites to statistically represent the nation. These sites are Alabama, Arizona/Southeastern California, Colorado/Wyoming, DC Metro, Greater Detroit, Greater Houston, Northern New England, South Florida, Western New York, and Wisconsin. A computer routine randomly assigned beneficiaries in the sites to either a treatment group that receives the benefit offset (T1 subjects) or a control group that continues under standard rules (C1 subjects). By design, T1 and C1 subjects were to have access to counseling regarding work and benefits of roughly similar levels of intensity. C1 subjects were to have access to counseling under an existing program—Work Incentives Planning and Assistance (WIPA). T1 subjects were to have access to similar counseling services, customized to the special rules that apply to their benefits, called Work Incentives Counseling (WIC).

By virtue of random assignment, the T1 and C1 groups as a whole should be statistically equivalent, so that any statistically significant differences in outcomes between T1 and C1 subjects can be confidently attributed to the intervention—following the basic impact measurement strategy in a randomized experiment. The final evaluation sample—beneficiaries randomly assigned to Stage 1 of BOND—includes 79,436 T1 subjects and 901,709 C1 subjects.<sup>3</sup>

Stage 2 (which is not the focus of this report) also uses an experimental design. It aims to learn about the impacts of the benefit offset on beneficiaries who are more likely to use it—informed volunteers recruited from the SSDI-only population—and to determine the effects of delivering more intensive counseling services, called Enhanced Work Incentives Counseling (EWIC), relative to current law services 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). In total, the Stage 2 sample includes 12,744 beneficiaries. Concurrent beneficiaries—SSDI beneficiaries who also were receiving SSI at the time of random assignment—were excluded from Stage 2 because the interaction between the SSI work incentives and the benefit offset

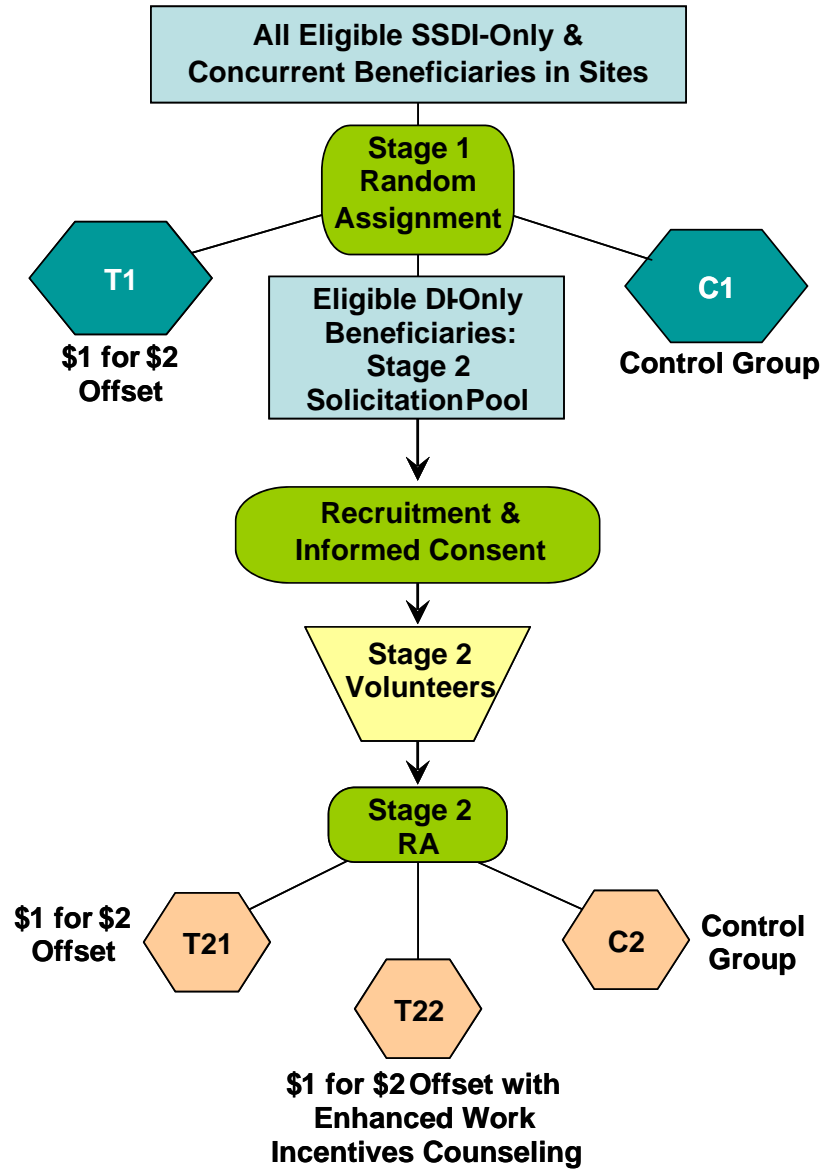
---

<sup>3</sup> The final Stage 1 evaluation sample excludes beneficiaries who were randomly assigned but later were identified as having died before random assignment. Compared to the evaluation sample, the final Stage 1 analysis sample used for the impact analysis further excludes pairs of related beneficiaries who receive disability benefits based on a common primary beneficiary's record if the two members of the pair were assigned to different demonstration groups (T1 versus C1 versus Stage 2 groups). See Section 2.2.3 for more details.

(which applies to SSDI benefits) substantially diminishes the value of the benefit offset to such beneficiaries.<sup>4</sup>

Exhibit 1-1. Overview of BOND Random Assignment Process

### BOND Sample Enrollment



DI = disability insurance; RA = random assignment.

<sup>4</sup> See the *Evaluation Analysis Plan* (Bell et al. 2011) for more details on the random assignment process and the reasons for excluding concurrent beneficiaries from Stage 2 but not from Stage 1.

This report examines interim results of the evaluation of Stage 1 of the demonstration. For the Stage 1 evaluation, we refer to the combination of the \$1 for \$2 offset, the annual measure of SGA, the associated administrative changes to the benefit adjustment process, and the availability of WIC services for benefits counseling as the benefit offset.

**1.2. The BOND Evaluation**

Abt Associates, in partnership with Mathematica Policy Research, is conducting a comprehensive evaluation of the BOND interventions, including studies of (1) demonstration implementation, (2) beneficiary participation, (3) net impacts, and (4) net social costs and benefits. The evaluation will include cross-cutting analyses that combine findings from these four components. Drawing on the various components of the evaluation, these analyses will aim to deepen our understanding of how the BOND interventions affected beneficiaries. Earlier reports provide initial findings from the process, participation, and impact analyses for the demonstration’s two stages, and future reports will present later findings (see Exhibit 1-2 for full list of reports).

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

Analysis	Stage 1 Reports	Stage 2 Reports
<b>Participation and Process Analysis</b>	<ul style="list-style-type: none"> <li>Stage 1 Early Assessment Report (Wittenburg et al. 2012)</li> <li>Process Study Report (Derr et al. 2015)</li> </ul>	<ul style="list-style-type: none"> <li>Stage 2 Early Assessment Report (Gubits et al. 2013)</li> <li>Process Study Report (Derr et al. 2015)</li> </ul>
<b>Impact Analysis</b>	<ul style="list-style-type: none"> <li>First-Year Snapshot of Earnings and Benefit Impacts for Stage 1 (Stapleton et al. 2013)</li> <li>Second-Year Snapshot of Earnings and Benefit Impacts for Stage 1 (Stapleton et al. 2014)</li> <li>Third-Year Snapshot of Earnings and Benefit Impacts for Stage 1 (Wittenburg et al. 2015)</li> </ul>	<ul style="list-style-type: none"> <li>First- and Second-Year Snapshot of Earnings and Benefit Impacts for Stage 2 (Gubits et al. 2014)</li> <li>Third-Year Snapshot of Earnings and Benefit Impacts for Stage 2 (forthcoming)</li> </ul>
<b>Integrated Participation and Process Analysis and Impact Analysis</b>	<ul style="list-style-type: none"> <li>2016 Stage 1 Interim Process, Participation, and Impact Report (Hoffmann et al. 2017)</li> <li>2017 Stage 1 Interim Process, Participation, and Impact Report (this report)</li> </ul>	<ul style="list-style-type: none"> <li>2015 Stage 2 Interim Process, Participation, and Impact Report (Gubits et al. 2017)</li> <li>2017 Stage 2 Interim Process, Participation, and Impact Report (forthcoming)</li> </ul>
	<ul style="list-style-type: none"> <li>Final Report (forthcoming)</li> </ul>	

This section describes the research questions addressed by the process, participation, and impact analyses and summarizes key findings documented in earlier reports.

### The BOND Evaluation Team

Abt Associates, in partnership with 25 other organizations, is implementing and evaluating 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. Neither these individuals nor any member of their team has a role in implementing or overseeing the BOND intervention they are studying. Separation of implementation and evaluation does not extend throughout the project, however. The Abt Project Director (Michelle Wood) has coordinated the implementation and evaluation efforts, including, respectively, management of the day-to-day operations of the project and oversight of 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.

#### 1.2.1. The Process Analysis

The overarching objective of the process analysis is to document the characteristics of the BOND intervention, creating a foundation for interpreting impacts. To that end, the process study evaluates the implementation of BOND (within and across the study sites over time) and assesses the fidelity of the implementation relative to the original design. The process study includes eight rounds of field work activities over the course of the demonstration and relies on several data sources, including feedback from beneficiaries. As described in the *Evaluation Analysis Plan* (Bell et al. 2011), the process analysis uses a mix of qualitative and quantitative data to address five broad research questions:<sup>5</sup>

1. How was the intervention implemented for Stage 1 and Stage 2? How did the implementation evolve over time?
2. Were the recruitment and enrollment processes for Stages 1 and 2 implemented as designed? If significant deviations occurred, why did they occur?
3. Were WIC and EWIC services implemented as designed? To what extent did EWIC services differ from WIC services?
4. Were the processes for reporting earnings, determining TWP completion, and making benefit adjustments for Stages 1 and 2 implemented as designed? How well did the processes perform?
5. What are the likely implications for demonstration outcomes? What are the lessons for national implementation of a benefit offset?

---

<sup>5</sup> The Evaluation Team has made slight modifications to these research questions compared to the version stated in the *Evaluation Analysis Plan*.



### *Summary of Findings to Date on the Implementation of BOND*

Three earlier reports detail the evaluation's early process analysis findings for Stage 1.

- The *Stage 1 Early Assessment Report* (Wittenburg et al. 2012) covered the period through November 2011, seven months after random assignment and enrollment of Stage 1 participants in April 2011.<sup>6</sup>
- The *Process Study Report* (Derr et al. 2015) reported on implementation through the third calendar year of the demonstration (2013), including changes that occurred since November 2011.
- The *2016 Stage 1 Interim Process, Participation, and Impact Report* documented process and participation findings through 2015.

Together, these three documents report the following key findings.

**BOND Infrastructure and Operations.** As reported in the *Stage 1 Early Assessment Report*, the quick start-up of this complex and multifaceted demonstration was a considerable challenge for the BOND Implementation Team (staff charged with setting up and operating the demonstration). However, sample selection and random assignment in spring 2011 produced treatment (T1) and control (C1) groups that were well matched at baseline. The *Process Study Report* discussed changes to BOND policies and procedures that had occurred since those earliest months including, most significantly, a shift in responsibilities for preparing information for work Continuing Disability Reviews (work CDRs, which are used to track completion of the TWP and subsequent earnings). The initial demonstration design called for BOND field staff to conduct work CDR preparation activities and submit needed information to SSA. In May 2012, the responsibility shifted to SSA staff.

Some aspects of the BOND infrastructure did not function as well as intended early in the demonstration. The BOND Evaluation Team documented issues associated with coordinating tasks, the competing demands on limited resources, and rapidly changing policies and procedures in the *Process Study Report*. The Evaluation Team concluded that BOND implementation had gradually improved since inception so that, as of fall 2013, the demonstration was largely functioning as designed.

**Counseling Available to the Control Group.** The *Process Study Report* documented an important change, partway through the demonstration, in how counseling services were provided to BOND control group subjects and all non-BOND beneficiaries. Nationally, WIPA funding expired on June 30, 2012, with no indication that it would be reinstated. In August 2013, Congress resumed WIPA funding, but these changes to the WIPA program created some disruptions in counseling services for C1 subjects. In BOND sites where demonstration agencies also served as WIPA providers, these changes to the WIPA program also created disruptions in BOND staffing. The *2016 Stage 1 Interim Process, Participation, and Impact Report* documented another change to WIPA: in August 2015, SSA awarded a new round of grants following a competitive application process with the goal of providing more targeted,

---

<sup>6</sup> Stage 1 random assignment occurred in late April 2011 and beneficiaries who had already completed the TWP and GP were eligible to use the BOND offset starting in May 2011.

comprehensive, and intensive services through remote delivery. Because the new grants were intended to provide services similar to the old grants, we have not investigated their effects.

**Outreach and Enrollment.** Evidence described in the *Stage 1 Early Assessment Report* indicated that, even though initial Stage 1 outreach efforts were executed as designed, some beneficiaries were confused about the demonstration. To increase awareness about the benefit offset and counseling services, the Implementation Team subsequently made additional outreach attempts to Stage 1 beneficiaries by letter and telephone, as described in the *Process Study Report*. Immediately following these efforts, noticeably more subjects contacted the demonstration and their assigned WIC counselor, and proactively started the benefit adjustment process.<sup>7</sup> This indicates that additional outreach increased T1 subjects' awareness of the demonstration's services and requirements. However, over two-thirds of T1 subjects did not respond to any outreach efforts or, because of outdated or inaccurate contact information, were not reached. The Evaluation Team could not determine the extent to which the limited response to outreach efforts reflected lack of interest in the benefit offset rather than a failure to reach the subjects who might find the offset of interest.

As described in the *2016 Stage 1 Interim Process, Participation, and Impact Report*, estimates based on the Stage 1 36-Month Survey of demonstration participants suggest that T1 subjects have a limited understanding of BOND. We found that 36 percent of T1 subjects had heard of BOND and an estimated 29 percent correctly understood that earnings above the SGA-level would only partially reduce their benefits. By comparison, 22 percent of the C1 respondents thought the same—incorrectly; hence, BOND may have correctly changed the views of only about 7 percent of T1 subjects on this point (that is, 29 percent minus 22 percent). Rather than limited exposure to, or understanding of, information about BOND, low understanding may be due to low salience of the information: 90 percent of T1 survey respondents reported that they thought they were unable to work for health reasons and, plausibly, may have ignored BOND messages. Thus BOND information might primarily be expected to change understanding for the 10 percent of beneficiaries who might work. However, T1 subjects who were employed the year before the demonstration were only slightly more likely to demonstrate an understanding of offset rules than subjects who were not employed in the previous year and this difference was not statistically significant.

**Pathway to the Offset.** As reported in the *Stage 1 Early Assessment Report*, through October 2011 SSA had adjusted the benefits of 21 T1 subjects, signifying that the subjects had entered the benefit offset. However, based on benefit adjustments made by SSA through May 2014, 695 beneficiaries (0.9 percent of T1 subjects) had used the offset by the end of 2011. There are two potential reasons explaining the difference between the 21 T1 subjects who received timely adjustments and the 674 whose adjustments were made later. First, early offset users may have entered the offset through a “back-door” path, meaning they entered the offset after SSA became aware of their substantial earnings from sources outside the demonstration, primarily IRS reports of earnings. Second, backlogs in processing work CDRs at SSA may have contributed to delays in first benefit adjustments.

---

<sup>7</sup> The number of completed T1 setups—defined as a beneficiary having received an explanation of the offset and WIC services from a member of the Implementation Team—increased by 19.6 percentage points after the 2012 outreach and 18.3 percentage points after the 2012–2014 outreach.

Across the *Process Study Report* and *2016 Stage 1 Interim Process, Participation, and Impact Report*, the Evaluation Team found that the number of subjects using the benefit offset was growing steadily over time. Based on benefit adjustments made through May 2014, 1.5 percent of T1 subjects were identified as offset users by the end of 2013. Based on benefit adjustments made through December 2015, 2.8 percent of T1 subjects were identified as offset users. Growth has continued since: as of December 2016, SSA had adjusted the benefits of 3.5 percent of T1 subjects under the offset. The percentage of T1 subjects whose 2016 benefits are adjusted under the offset will eventually be larger than 3.5 percent, perhaps substantially, because of retroactive adjustments made after 2015 as SSA completes a substantial work CDR backlog.

The Evaluation Team found that since the initial implementation of BOND, lengthy delays with benefit adjustments under the benefit offset have been common. Such lags are also common under current law and likely affect BOND control subjects. Most causes of lags in benefit adjustment are the same under the offset and current law, including beneficiaries' slow or late reporting of earnings and other requested information, and backlogs in SSA's processing of work CDRs. However, some lags appear to be unique to the demonstration, including (1) larger work CDR backlogs, (2) the need to inform treatment subjects about the offset, (3) start-up problems in the post-entitlement processes (such as calculating Annual Earnings Estimates) that are needed to facilitate benefit adjustments, and (4) delayed completion of adjustments following SSA review of IRS data on BOND treatment subjects' earnings. For all offset users with first adjustments in 2013 through 2015, the median time from first offset use to adjustment was 22 months, representing a substantial portion of the 60-month BOND Participation Period. Median time from first offset use to adjustment was not as long for beneficiaries whose initial adjustment was in response to proactive reporting (17 months) as for beneficiaries who entered the offset through the SSA-initiated automated reconciliation process (23 months).

In many cases, lags in benefits adjustments led to overpayments for beneficiaries. The *2016 Stage 1 Interim Process, Participation, and Impact Report* used administrative data through October 2015 to show that 83 percent of T1 offset users in 2011, 2012, and 2013 had work-related overpayments or incorrect payments. T1 subjects were 12 percent more likely to encounter overpayments than C1 subjects during the 2011–2013 period. Despite the higher prevalence of overpayments for T1 subjects, the average amount of overpayments to T1 subjects was 35 percent lower than for C1 subjects. The reason is that the benefit offset allows for partial benefit payment and hence increases the amount of benefits due compared to current law (under which beneficiaries who engage in SGA during the EPE are entitled to no benefit payment), making the overpayment in a typical overpayment month smaller.

Previous reports covered the period through December 2015. This report presents updated process analysis findings through 2016, the last of the six calendar years of implementation covered by the BOND evaluation reports. Findings reported in this document include new information from focus groups with WIC and EWIC supervisors and staff, and interviews with members of the Implementation Team staff and Office of Research, Demonstration, and Employment Support (ORDES) staff, collectively referred to as 2016 staff focus groups and interviews. This report also updates and expands on the overpayments analyses and includes a new topic: the end of the BOND Participation Period.

### 1.2.2. The Participation Analysis

The participation analysis documents the engagement of prospective BOND subjects in work activities throughout the demonstration.<sup>8</sup> The Evaluation Team expected that T1 subjects' use of BOND demonstration services would vary across beneficiary subgroups (for example, younger versus older beneficiaries). The Stage 1 participation analysis summarizes patterns of participation by subgroups and more broadly examines the work activity of T1 subjects, including the use of demonstration services. The participation analysis examines the following questions:

1. To what extent do treatment subjects work or use employment services and benefits counseling?
2. Who works, uses counseling services and other work incentives, and eventually uses the BOND benefit offset?
3. How does the demonstration affect the use of work incentive counseling and the services delivered by counselors?
4. What characteristics distinguish offset users from others?
5. How do work and use of work incentives vary across demonstration groups?
6. How do work and use of work incentives change with time?

#### *Summary of Findings to Date from the Participation Analysis*

The *Stage 1 Early Assessment Report*, *Process Study Report*, and *2016 Stage 1 Interim Process, Participation, and Impact Report* contain results from the participation analysis, specifically Stage 1 participation in WIC. Together, those three documents report the following key findings.

In the *Stage 1 Early Assessment Report*, the Evaluation Team found that 1,024 Stage 1 beneficiaries used WIC services as of October 2011, representing just over 1 percent of all T1 subjects and 21 percent of the 4,840 T1 subjects who had been in contact with the demonstration to that point. WIC service use was well below the designed capacity of the demonstration, which allowed for up to 30 percent of T1 subjects by September 2017. The *Process Study Report* documented that the number of beneficiaries using WIC services increased to 4,413 as of January 2014. This number includes both T1 and T21 subjects; the latter are enrolled in Stage 2 of the demonstration. Altogether, almost 1,000 more T1 subjects started using WIC services during the additional T1 outreach effort (the extra letters sent and telephone calls made to increase awareness of the benefit offset and counseling services between 2012 and early 2014).

In the *2016 Stage 1 Interim Process, Participation, and Impact Report*, the Evaluation Team confirmed that the number of active WIC cases within a calendar year had increased substantially following the outreach, more than doubling between 2011 and 2013 before it began to decline. The decline in the WIC caseload beginning in 2014 likely represents the end of the initial surge of beneficiaries responding to the BOND incentive and suggests that WIC uptake will remain well below the initially planned WIC capacity. The Evaluation Team also found that, among the T1 subjects served by a benefits counselor by December 2015, nearly 80 percent received WIC services beyond information and referral services.

---

<sup>8</sup> For Stage 2, an additional component of the participation analysis focuses on recruitment of volunteers into the demonstration and responses by various subgroups of beneficiaries to the demonstration offer.

This report presents updated findings about Stage 1 beneficiary engagement in benefits counseling, beneficiary engagement in work and related activities, and receipt of employment supports. It also examines benefit offset use over time and by beneficiary characteristics.

### 1.2.3. The Impact Analysis

The Stage 1 impact analysis addresses the following question:

1. What would be the impact of the benefit offset on outcomes for all SSDI beneficiaries nationally as compared to their outcomes under current benefit payment rules?

Key outcomes explored include two confirmatory outcomes (total earnings and SSDI benefits paid) and nine exploratory outcomes (each related to employment and benefits). Impacts may derive from a variety of sources. First, impacts may be related to the \$1 for \$2 offset, the annual accounting period, and the associated administrative changes. Specifically, the administrative procedures established to provide T1 subjects with information and to implement benefit adjustments under the offset likely affected the speed with which SSA made payment adjustments. Given how they are measured, these adjustments are especially important for the estimated impacts on benefits paid. Due to the time frame of this report, we could not include data that became available after the end of 2016. Therefore, this report estimates impacts on benefits paid *in* 2015. Because of retroactive benefit adjustments and resulting over- and underpayments, impacts on benefits paid *for* 2015 might differ substantially. The *Final Report* will include estimates of the impact of BOND on benefits paid *for* the years in the evaluation period, the more important measure from the perspective of program expenditures.<sup>9</sup>

Finally, T1 subjects have access to counseling services that are tailored to the benefit offset but are otherwise intended to be comparable to counseling services available to all beneficiaries under current law and hence offered to C1 subjects. It is possible, though not intended, that the implementation of the counseling services offered to T1 subjects differs from that offered to C1 subjects in ways that have an impact on earnings and benefits above and beyond the impact of the offset itself.

---

<sup>9</sup> Because we cannot directly measure benefits “paid for,” we will use a proxy measure of benefits due for the final report. Further explanation of benefits due is included in Section 2.2.2.

### *Summary of Findings to Date from the Impact Analysis*

The *Third-Year Snapshot of Earnings and Benefit Impacts for Stage 1* (Wittenburg et al. 2015) documented Stage 1 impacts on earnings and benefit outcomes during the third calendar year of implementation (2013). The impact estimates showed that the benefit offset, as administered under BOND, did not have a statistically significant impact on total earnings in 2013—similar to previously reported findings for 2011 and 2012.<sup>10</sup> In addition, the offset did not have a statistically significant impact on the proportion of T1 subjects earning above BYA.

The *2016 Stage 1 Interim Process, Participation, and Impact Report* documented Stage 1 impacts on earnings and benefit outcomes during 2014, the fourth calendar year of implementation. The Evaluation Team again found no evidence that the benefit offset had an impact on the total earnings of T1 subjects in 2014. It did find strong evidence that the offset had a positive impact on SSDI benefits paid in the same year—a mean increase of \$128, or \$11 per month. The 2015 earnings and benefits paid estimates are consistent with findings for 2011, 2012, 2013, and 2014 which were presented in earlier reports. That is, for those earlier years we also did not find significant impacts on mean earnings, but did find significant positive impacts on benefits paid. The estimated impact for benefits paid grew substantially from 2011 (a partial year) through 2013, but stayed roughly the same from 2013 to 2015.

As described in *2016 Stage 1 Interim Process, Participation, and Impact Report*, the Stage 1 36-Month Survey of demonstration participants documented little evidence that the offset had an effect on the reported use of employment supports or receipt of education or training. Differences between T1 and C1 subjects on several measures of service utilization—including beneficiaries' reports of whether they had received any type of employment support, schooling, or training, or whether they were enrolled in school or taking classes at the time of the survey—were not statistically significant.

In the current report, we present the impact findings for the same outcomes in 2015, the fifth calendar year of implementation. We also include additional analysis of overpayments. The *2016 Stage 1 Interim Process, Participation, and Impact Report* documented the prevalence and amount of overpayments to beneficiaries during the first three years of BOND. Although overpayments were more prevalent among T1 subjects than among C1 subjects, the average amount of overpayments to T1 subjects was lower than for C1 subjects.

---

<sup>10</sup> Findings for 2011 and 2012 first appear in the *First-Year Snapshot of Earnings and Benefit Impacts for Stage 1* (Stapleton et al. 2013) and *Second-Year Snapshot of Earnings and Benefit Impacts for Stage 1* (Stapleton et al. 2014), respectively. For 2013, the *Third-Year Snapshot of Earnings and Benefit Impacts for Stage 1* used a new method to compute standard errors in order to improve their stability. In that report, we also recalculated the 2011 and 2012 results using the new method and found that any differences obtained from applying the new method were minimal and did not substantively change the interpretation of findings from the earlier reports. See the *Third-Year Snapshot of Earnings and Benefit Impacts for Stage 1* for more information.

### 1.3. Organization of the Current Report

The remainder of this report is organized into eight chapters. Chapter 2 describes the data sources and analytic methods used in the report. Chapter 3 updates contextual information concerning the BOND study sites and disability service environment.

Chapter 4 describes benefits counseling in BOND and extends the process and participation analysis also described in previous reports, using new data from recent focus groups with WIC and EWIC supervisors and staff, interviews with members of the Implementation Team and ORDES staff, and updated data from the Beneficiary Tracking System (BTS). In particular, we explore changes to WIC counselor caseloads and the content and intensity of benefits counseling, particularly as they relate to BPP end dates.

Chapter 5 presents findings from the participation analysis, including analyses of updated BTS data and new data from 2016 staff focus groups and interviews. This chapter reviews how the benefit adjustment processes have functioned in BOND by discussing the milestones beneficiaries must achieve on the administrative path to benefits adjustment and the percentage of T1 subjects completing each milestone.

Chapter 6 updates the analysis of overpayments from earlier reports and includes new analyses exploring whether the prevalence or size of overpayments differ based on whether overpayments occur at initial entry to the offset or in later years of offset use. Appendix A presents sample sizes for the analyses reported in this chapter.

Chapter 7 presents the earnings and benefit impact estimates for 2015 and compares them to the findings from previous years. Appendix B presents impact estimates for 2015 for all of the beneficiary subgroup analyses described in this chapter.

Chapter 8 presents new information on the transition of treatment beneficiaries out of BOND after the BOND Participation Period ends, assesses whether this process could affect earnings and employment during the impact analysis period, and reviews subjects' reactions to being notified of the transition. This chapter is based on the 2016 staff focus groups and interviews and on data from BTS. Appendix C provides information about the processes and implementation activities supporting this transition.

Chapter 9 provides a summary of key findings and conclusions to date.

## 2. Data Sources and Methodology

The analyses in this report are based on data from several sources, including semi-structured interviews and focus groups with BOND staff and T1 subjects, a survey of T1 and C1 subjects, program implementation information from demonstration operations, and SSA administrative data. 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. Additional methodological detail appears in appendices as cited.

### 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.<sup>11</sup>

#### 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 collected data from beneficiary focus groups conducted during site visits to the BOND sites, beneficiary interviews conducted by telephone, focus group 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. 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. The current report uses information from eight rounds of data collection covering BOND implementation through 2016. This section provides an overview of the qualitative data collection activities from the most recent round of data collection.

In 2016, the study team conducted the eighth round of qualitative data collection, which consisted of two main activities: (1) telephone/online focus groups with WIC and EWIC supervisors and counselors during July and August 2016 and (2) 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 activities conducted for the eighth round of data collection.

**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

---

<sup>11</sup> 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 *2016 Stage 1 Interim Process, Participation, and Impact Report*.



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;<sup>12</sup> (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 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 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).

**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 the director and deputy director of implementation, the liaison to all BOND sites, and 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 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. We completed interviews with all identified individuals.

---

<sup>12</sup> 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.

**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 <sup>a</sup>
<b>Supervisors</b>					
1	July 25, 2016	WIC Centralized Group (supervisors, pilot)	Arizona/SE California, Colorado/Wyoming, DC Metro, Detroit, Northern New England, South Florida, Wisconsin	7 <sup>b</sup>	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
<b>Counselors</b>					
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
<b>Total</b>	—	<b>8 groups</b>	<b>All BOND sites<sup>c</sup></b>	<b>45<sup>d</sup></b>	<b>36</b>

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

<sup>b</sup> One of the 7 focus group participants was a project manager.

<sup>c</sup> Feedback from the Houston site was provided via email.

<sup>d</sup> 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
<b>Supervisors</b>		
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
<b>Counselors</b>		
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

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 1 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**

Below, we describe 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.<sup>13</sup>

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

<sup>13</sup> 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*.

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.

If we asked a question during all of the WIC/EWIC focus groups, we use counts and percentages to describe participants' responses. 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.

### 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 documentation of beneficiaries' contacts with the demonstration and use of BOND counselors. BODS also includes information obtained from SSA administrative data on whether SSA has determined that beneficiaries' disability ceased because they worked 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 through December 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.<sup>14</sup> For this report, we use DBAD data 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 counselors' caseloads, beneficiaries' receipt of BOND counseling, the percentage of T1 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.<sup>15</sup> In the remainder of this chapter, we use "overpayments" to refer to work-related overpayments and incorrect payments.<sup>16</sup> The statistics presented include overpayments and incorrect payments, and exclude overpayments for reasons unrelated to work.

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.<sup>17</sup> 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 used the DBAD files to develop a method to estimate overpayments that accrued to both treatment and control subjects while in BOND.

---

<sup>14</sup> 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.

<sup>15</sup> 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.

<sup>16</sup> 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.

<sup>17</sup> Recovery of Overpayments, Accounting, and Reporting does 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.

The sample for the overpayment analysis includes disabled-worker beneficiaries in the Stage 1 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 dually entitled and auxiliary beneficiaries. 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.

We identified overpayments during the first 44 months of BOND for T1 subjects: May 2011 through December 2014. Even though 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 BOND 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 basic computation of an overpayment is based on a measure called benefits due. Benefits due is the amount of SSDI benefits owed to a beneficiary based on activity in that month.<sup>18</sup> For example, if a beneficiary subject to current law engages in SGA after the TWP and GP, he is due \$0 in benefits for that month. SSA's system initially records benefits due at the time it pays the beneficiary for a month, based on current information about the beneficiary's status in the month. If SSA later makes a retroactive adjustment to the beneficiary's status for the same month, such as from a completed work CDR, it adjusts the benefits due amount accordingly. The new benefits due amount is reflected in more recent SSA administrative data. Our overpayment measure is the difference between the initial benefit due amount and the most recent updated amount, provided that the initial amount is positive; otherwise it is zero.

Appendix C of the *2016 Stage 1 Interim Process, Participation, and Impact Report* 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. In this section, we describe the administrative data and analytic methods used to estimate the impact of the benefit offset on outcomes.

---

<sup>18</sup> In this and earlier reports we have used benefits paid in a period as the benefits measures for purposes of estimating benefit impacts. Benefits paid is the amount of the check a beneficiary received in the month indicated. Benefits paid is equal to benefits due plus any adjustments made in that month to reconcile improper payments from previous periods, such as withholdings to repay prior overpayments or SSA lump-sum transfers to reconcile previous underpayment.

### 2.3.1. Data Sources for the Impact Analysis

For the impact analysis documented in this report, we used administrative data for 2015 earnings and benefits paid *in* calendar year 2015. Benefit outcomes are measured from SSA's Payment History Update System (PHUS) for SSDI and from the Supplemental Security Record (SSR) for SSI. We measured earnings from the SSA Master Earnings File (MEF), which contains longitudinal information on wages and self-employment income reported to the IRS.<sup>19</sup> SSA considered the MEF records for calendar year 2015 extracted for this report in November 2016 almost 100 percent complete. Finally, we used data from the DBAD files to estimate impacts on overpayments.

We initially specified the administrative outcomes for the impact analysis in Bell et al. (2011) and every evaluation report has used these specifications. This report uses the same measures, but clarifies that, in all reports, the administrative earnings measure includes only "Social Security earnings," which are earnings that are taxable for Social Security purposes.<sup>20</sup> About 6 percent of people in the U.S. work force hold jobs not covered by Social Security taxes. Furthermore, Social Security earnings are capped at a maximum taxable amount, \$118,500 for 2015. Of the two limitations, we do not expect the cap to be a problem for the analysis because very few study subjects have earnings at or above that amount. In 2015, 0.03 percent of Stage 1 subjects had earnings equal to the 2015 maximum taxable amount and 0.01 percent had earnings above that amount. In addition, beneficiaries who are 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 findings for earnings, employment, and the proportion with earnings above BYA have a small downward bias. In addition, the estimate of the impact of the offset on earnings, employment, and proportion working above BYA may have a small downward bias if some who are encouraged to work choose jobs not covered by Social Security. Measures of weekly earnings and employment taken from survey data are not subject to the same source of bias.

In addition, we used administrative data to develop covariates and subgroups used in the impact analysis. We took the baseline variables used as covariates from the MBR and SSR and took the variables used to form subgroups for the impact analysis from the MBR, SSR, publicly-available data on state availability of the Medicaid Buy-In, and the MEF.

### 2.3.2. Methods for the Impact Analysis

In this section, we describe how we analyze impacts, including the outcomes of interest, the expected effects of the offset, our impact estimation methodology, and our analysis sample. Appendices A and B present details on the estimation methodology.

---

<sup>19</sup> Because the data are collected by the IRS and are therefore subject to IRS access rules, cleared 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.

<sup>20</sup> Appendix A.3 of the *2016 Stage 1 Interim Process, Participation, and Impact Report* describes the earnings data sources in more detail.

### *Administrative Outcome Definitions and Theoretical Impacts*

Consistent with past Stage 1 snapshot reports, the current report presents impacts on nine outcomes measured from administrative data, including two confirmatory outcomes (2015 annual earnings and total SSDI benefits paid *in* 2015) and seven exploratory outcomes related to employment and benefits. It is important to note that the confirmatory outcome for benefits in the final report will differ from those reported here. In this document, we report impacts on benefits paid *in* each year in the evaluation period; the final report will report benefits paid *for* the years in the evaluation period. Benefits paid *for* a year will reflect all of the retroactive adjustments that SSA has made since the end of the year through the date on which we extract the data for the final report from SSA records.

The exploratory earning outcomes include indicators for 2015 earnings in excess of each of three annual earning thresholds defined by multiples of BYA (one, two, and three times BYA) and an indicator for any employment during 2015 (defined as positive earnings in 2015). The exploratory benefit outcomes include the number of months with SSDI payments, total SSI benefits paid, and the number of months with SSI payments—each in 2015. In addition, the report includes impact estimates for the prevalence and size of SSDI benefit overpayments among the subset of T1 subjects who are disabled-worker beneficiaries, as defined above.

Exhibit 2-2 lists the nine administrative outcomes analyzed in all BOND impact reports, defines each outcome, and indicates the predicted direction of impact, if any (positive, negative, or ambiguous), based on the conventional theory of labor economics as developed in the *Evaluation Analysis Plan* and summarized here. The empirical analyses in later chapters test for evidence for or against the theory and estimate the magnitude of the impact (and associated standard errors).

Below, we consider the direction of impact on the outcome measures expected from the benefit offset implemented by BOND. Our discussion initially ignores any impact of administrative factors that could influence the outcomes (Section 1.2.3). We then discuss administrative factors and their potential influence on impacts.

The goal of BOND is to test how replacing the SGA cash cliff with the \$1 for \$2 offset ramp (a \$1 reduction in benefits for every additional \$2 earned) affects return to work, earnings, and beneficiaries' reliance on SSDI benefits. The theoretical direction of impacts of the benefit offset on total earnings and benefits is ambiguous. As described in detail in the *Evaluation Analysis Plan*, the ambiguity arises because the incentives created by the benefit offset vary with the beneficiaries' earnings under current law. T1 subjects who would have had no earnings or earnings below BYA under current law are expected, on average, to increase their earnings under the benefit offset. Conversely, some T1 subjects who would have had earnings above BYA under current law are expected to lower their earnings under the benefit offset.<sup>21</sup> For a positive impact on total earnings to occur, the positive impact expected for those whose earnings would be less than BYA under current law would have to be larger than the expected negative impact on those who would earn more than BYA under current law.

---

<sup>21</sup> Empirically, evidence suggests 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.



**Exhibit 2-3. Definitions of Confirmatory and Exploratory Administrative Outcomes and Predicted Direction of Impacts, If Any**

	Definition	Predicted Direction
<b>Confirmatory Outcomes</b>		
Total earnings in 2015	2015 annual Social Security earnings for the beneficiary. This measure does not include earnings for dependent spouses, minor children, a Disabled Adult Child (DAC) or a Disabled Widow/Widower Beneficiary (DWB). More details about what is included in Social Security earnings are available in Appendix A.2 of the <i>2015 Stage 2 Interim Process, Participation, and Impact Report</i> .	?
Total SSDI benefits paid in 2015	Sum of SSDI benefit payments from January through December 2015. For SSDI workers, this measure includes benefits for dependent spouses and minor children, but does not include benefits for a DAC. <sup>a</sup> For a DAC or Disabled Widow/Widower Beneficiary (DWB), this measure includes the DAC's or DWB's own benefits.	?
<b>Exploratory outcomes</b>		
<b>Earnings Outcomes in Calendar 2015<sup>b</sup></b>		
Any employment in 2015	Indicator for 2015 Social Security earnings greater than \$0	+
Earnings above BYA	Indicator for 2015 Social Security earnings greater than or equal to \$13,080 (non-blind subjects) or \$21,840 (blind subjects)	+
Earnings above 2 times 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 times BYA	Indicator for 2015 Social Security earnings greater than or equal to \$39,240 (non-blind subjects) or \$65,520 (blind subjects)	?
<b>Benefit Outcomes for January–December 2015</b>		
Number of months with SSDI payments	Number of months with SSDI benefits paid above \$0	+
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 \$0	–

<sup>a</sup> For a description of family benefits, see <http://www.socialsecurity.gov/pubs/10024.html#a0=3>; accessed December 16, 2016.

<sup>b</sup> Earnings relative to BYA are based on earnings reported in the MEF.

Similarly, the predicted impact of the \$1 for \$2 benefit offset on SSDI benefits depends on the earnings of the beneficiaries under current law. For those who would have had no earnings or earnings below BYA under current law, the offset's predicted impact on benefits is negative, on the expectation that some beneficiaries will earn more than BYA under the offset and hence will receive partial benefits.

Conversely, for many of those who would have had earnings above BYA under current law, benefits under the offset are expected to be higher because beneficiaries will receive partial rather than no benefits, 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—but who move above BYA because of the offset incentive—must exceed the increase in benefits paid to those who would earn more than BYA under current law.

Theory predicts positive impacts of the offset for three of the exploratory outcomes: (1) the percentage of beneficiaries with employment, (2) the percentage of beneficiaries with earnings above BYA, and (3) months with SSDI payments. It also predicts negative impacts on the earnings of those who would have had earnings substantially above BYA under current law; we expect that such individuals would continue to earn above BYA but that they may reduce their earnings because they can maintain the same level of income with fewer hours of work under the offset relative to current law. These predicted reductions in earnings for some beneficiaries mean that theory does not predict an increase in mean earnings over all treatment subjects, despite the predictions of increases in the percentages employed and with earnings above BYA. Finally, theory predicts increases in months with SSDI payments because some beneficiaries who would have had their benefits suspended under current law will receive partial benefits under BOND, even without a reduction in earnings.

Theory predicts negative impacts of the offset on SSI benefits and months with SSI payments. Under current law, any beneficiary who concurrently receives SSDI and SSI (a concurrent beneficiary) and is engaged in SGA after completing the TWP and GP is entitled to, at most, only an SSI payment.<sup>22</sup> In contrast, a concurrent T1 subject with the same earnings would likely receive a partial SSI benefit, and the size of the T1 subject's SSI benefit would be reduced by the amount of the partial SSDI benefit or by the entire current-law SSI payment if the latter is smaller than the partial SSDI benefit. The offset might also have an impact on SSI payments to SSI 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, 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 and thus reduce SSI payments and months with benefits.<sup>23</sup>

For the two remaining exploratory outcomes—earnings above two times BYA and earnings above three times BYA—theory does not clearly predict the direction of impacts of the offset. For those treatment beneficiaries whose earnings would be less than BYA under current law, the offset is likely to have a positive average earnings effect, perhaps increasing the proportions with earnings above two or three times BYA. Conversely, for those who would have had earnings above BYA under current law, the benefit offset is likely to have a negative average earnings effect, perhaps decreasing the proportions with

---

<sup>22</sup> Under the SSI Earned Income Exclusion (EIE), monthly SSI benefits are reduced by \$1 for every \$2 of earnings above an earnings disregard that is as low as \$65. Whether a concurrent beneficiary with earnings above SGA is eligible for a federal SSI payment depends on whether the beneficiary's SSI countable income, including earnings not excluded under the EIE and any other countable income, exceeds the maximum federal SSI payment amount. SSI countable income rules exclude \$20 of SSDI benefits unless that exclusion is used against some other form of unearned income. Beyond any exclusion, and holding earnings constant, every \$1 of SSDI benefits reduces the SSI payment amount by \$1 until the SSI payment amount is zero. At any earnings amount above SGA, any SSDI payment under the offset displaces any SSI payment that is due, dollar for dollar. Under BOND, the benefit offset indirectly affects the SSI payment amounts through the SSDI benefit adjustment. For example, for a concurrent T1 subject with earnings above BYA and positive SSI benefit amounts, a \$2 increase in earnings would result in a \$1 increase in EIE (reducing SSI) and a \$1 decrease in SSDI (increasing SSI), which would leave SSI payments unchanged.

<sup>23</sup> See Rupp and Riley (2012).

earnings above two or three times BYA. Given that theory does not predict the magnitudes of these opposing expected effects, it is not possible to predict the overall direction of impact for either of these higher earnings thresholds.

We did not develop theoretical predictions for the impact of the benefit offset on the frequency and size of overpayments. Before the demonstration, there was no reason to expect that the incidence of overpayments *caused by delays* in adjustments after the beneficiary first completed the TWP and GP would be higher or lower under the benefit offset than under current law. Nonetheless, the switch from adjustment on the basis of monthly earnings under current law to adjustment on the basis of annual earnings under the offset might increase the incidence of overpayments. This is because late-year changes in earnings would retroactively change the benefit amount due for earlier months of the same year. The effect of the offset on the incidence of such overpayments also depends on how the administrative processes for the offset function relative to those under current law. The sign of the expected impact on the size of an overpayment is negative because, under current law, the size of the overpayment in a month with an overpayment is the full monthly benefit; under the offset, however, it may be less than or equal to the monthly benefit.

#### ***Administrative Features of the Offset That Could Influence Impacts on Administrative Outcomes***

The previous discussion abstracts from the administrative features designed and implemented to facilitate use of the benefit offset by T1 beneficiaries. As described in the *Evaluation Analysis Plan*, given that the processes necessarily differ from processes under current law, they are part of the benefit offset—the intervention being tested under BOND.

In the first years of BOND, the administrative features most likely to have affected outcomes concerned the administrative processes leading to the adjustment of benefits—the special processes implemented for T1 subjects and the current-law processes that apply to C1 subjects. For T1 subjects, the process started shortly after random assignment outcomes were determined in April 2011. May 2011 was the first month in which beneficiaries could potentially use the benefit offset. Some of those randomly assigned to use the offset informed the demonstration of their work activities, as recommended in demonstration outreach materials. Such beneficiaries eventually saw their benefits adjusted via an administrative process set up for that purpose. It is likely, however, that other T1 subjects who used the offset early in the demonstration did not contact the demonstration. If not, SSA would not have discovered their high earnings until its annual review of earnings reported to the IRS and could only then have initiated the process to adjust benefits.

The benefit measures for the current report are based on benefits paid *in* 2015 rather than on benefits paid *for* 2015, which will eventually include future retroactive adjustments to benefits paid in 2015. These two benefit measures will diverge according to the dollar value of retroactive adjustments made for 2015 benefits. Even though the dollar value of the adjustments is not yet known, we can say with certainty that there will be retroactive adjustments of some dollar amount for the treatment subjects who did not proactively inform SSA of earnings above BYA during 2015. The BOND administrative data as of December 2016 show that SSA did not adjust the benefits of 22 percent of T1 subjects who used the benefit offset by the end of 2015 (that is, those who had completed their TWP and GP and earned above BYA by the end of 2015) until the following year. In other words, some adjustments to benefits paid to T1 subjects for 2015 are not reflected in benefits paid *in* 2015, and there will be at least some discrepancy between benefits paid *in* 2015 and benefits paid *for* 2015.

The implications of lagged adjustment for impact magnitude depend on how the adjustment processes for the T1 group compare to the corresponding processes for C1 subjects. The most striking difference is that T1 subjects had to be notified about a change in the earnings rules before the benefit adjustment process could start, whereas C1 subjects were subject to rules that had been in place for many years. Further, T1 administrative processes had not previously been implemented on a large scale, resulting in start-up delays.<sup>24</sup>

One other administrative factor that seems likely to have a positive impact on benefits paid *for* 2015, and possibly on benefits paid *in* 2015, is the change from monthly to annual accounting. The aim of annual accounting was to simplify administration of the benefit offset and to simulate the expected future accounting procedures in the event that the offset becomes national policy. The move to an annual accounting period is also expected to assist beneficiaries with highly variable month-to-month earnings (for example, seasonal workers). Under monthly accounting, earnings above SGA in any month reduce benefits for that month, but, under annual accounting, the benefit reduction caused by the same earnings will be smaller or zero because earnings below the SGA amount in other months of the same year keep annual earnings closer to or below BYA. Holding earnings constant, this administrative change is expected to increase the benefits paid to some beneficiaries. Thus, some beneficiaries with variable earnings may have new opportunities to increase their earnings without any reduction in benefits.

#### ***Final Analysis Sample Size Used to Estimate Administrative Outcomes***

The final Stage 1 analysis sample contains a total of 968,713 subjects spread across the T1 (77,115) and C1 (891,598) groups.<sup>25</sup> The Stage 1 analysis sample is nationally representative of SSDI beneficiaries. As would be expected if random assignment were properly implemented, all differences in baseline characteristics between the two groups are small and appear to be attributable to chance. In the *Stage 1 Early Assessment Report*, an omnibus test for differences across all characteristics shows no statistically significant difference between the groups. Baseline equivalence increases our confidence that any impact estimate that differs from zero at a statistically significant level represents a real impact of the interventions rather than systematic preexisting differences between the two groups or their environments.

#### ***Impact Estimation Methodology for Administrative Outcomes***

The goal of Stage 1 of the demonstration is to make inferences about the impact of the benefit offset if it applied to all SSDI beneficiaries in the nation who met the BOND eligibility criteria as of May 2011. The statistical design of the demonstration supports the production of unbiased point estimates and their standard errors for a nationwide population. The standard errors reflect random variation associated with both the selection of the BOND sites and the assignment of subjects in those sites to the T1 and C1 groups.

---

<sup>24</sup> This issue is described in the *Process Study Report*.

<sup>25</sup> The final Stage 1 analysis sample used for the impact analysis excludes pairs of related beneficiaries who receive disability benefits based on a common primary beneficiary's record if the two members of the pair were randomly assigned to different Stage 1 experimental groups (T1 versus C1). See the *First-Year Snapshot of Earnings and Benefit Impacts for Stage 1* for details.

To estimate impacts, we compare mean outcomes on a given measure (for example, 2015 earnings) for the T1 group to the mean of the same outcome for the C1 group. The sample means are weighted for differences in (1) site-selection probabilities, and (2) sampling rates into T1 and C1 status across sampling strata.

The means are also adjusted for the effects of small random differences in baseline characteristics.<sup>26</sup> The adjustments for differences in baseline characteristics also reduce the standard errors of the impact estimates.

For each outcome, we test the null hypothesis of no impact. Each test uses a specified level of statistical significance. For example, a 10 percent significance level means that, if the null hypothesis is true, then there is only a 10 percent chance that the test will mistakenly reject it.

When discussing the impact estimates, we use particular language to signify differing levels of confidence that a non-zero impact has occurred. When the null hypothesis of no effect can be rejected with 99 percent confidence (that is, with 0.01 statistical significance), we state that the estimate *provides strong evidence* that the benefit offset had an effect on the tested outcome. When the null hypothesis of no effect can be rejected with 95 percent confidence (that is, with 0.05 statistical significance) but not 99 percent confidence, we state that the estimate *provides evidence* that the offset had an effect on the tested outcome. Finally, when the null hypothesis of no effect can be rejected with 90 percent confidence (that is, with 0.10 statistical significance) but not 95 percent confidence, we state that the estimate *provides some evidence* that the offset had an effect on the tested outcome.

All impact estimates are “intent to treat” estimates. They capture the mean impact of applying the BOND offset rules to the earnings of *all* T1 subjects, regardless of how many subjects work and use the offset. Hence, our average impact measures reflect no impacts on T1 subjects who do not respond to the offset and whose earnings or benefits are not affected by it. We chose to generate “intent to treat” estimates because of a strong policy interest in understanding the BOND offset’s effects on all SSDI beneficiaries as opposed to (for example) on only those beneficiaries who use the offset.

We make a multiple-comparison adjustment for the two confirmatory outcomes—outcomes selected on the basis of theory and policy interest alone (see the *Evaluation Analysis Plan*). The adjustment is needed because we are testing several outcomes, thereby making the probability of a Type I error (rejecting the null hypotheses if it is true) larger than the significance level for the individual tests. To compensate, we adjust the test statistics for each of the two confirmatory outcomes—2015 earnings and total SSDI benefits paid *in* 2015—so that the probability of rejecting the null hypothesis of no impact on either confirmatory outcome is equal to the specified significance level if the null hypothesis is true.<sup>27</sup>

---

<sup>26</sup> Appendices A and B provide a full description of the estimation method and the construction of analysis weights.

<sup>27</sup> Our approach adjusts the *p*-values for the confirmatory outcomes by using the Westfall-Young stepdown method. Appendix A presents details of the *p*-value adjustments for tests of impacts on the confirmatory outcomes. See Schochet (2009) for further discussion of the multiple-comparisons problem.

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

### *Impacts on Beneficiary Subgroups*

We also estimate impacts for seven pairs of beneficiary subgroups. For each subgroup pair, we examine the nine outcomes taken from administrative data. We treat all subgroup analyses, including the analyses of subgroup effects for impacts on earnings and SSDI benefits paid, as exploratory. The impact estimation method we use for each subgroup mirrors the impact estimation method we use for the entire sample. We use t-tests to examine whether impact differences between subgroups are statistically significant.

The first subgroup pair is defined by duration of SSDI benefit receipt at the point of solicitation into the demonstration. The duration subgroups are of interest. Earlier research (Liu and Stapleton 2011) and program rules suggest that subjects who have been on the rolls for a *short duration* (defined here as three years or less at baseline) may respond to the benefit offset differently from those who have been on the rolls for a *long duration* (more than three years). Specifically, we expect more short-duration subjects to work than long-duration subjects. However, we expect that it will take longer for short-duration subjects to see their benefits adjusted because, unlike long-duration subjects, they will have completed fewer TWP and GP months at the outset of the demonstration. Hence, if such impacts exist, we are more likely to observe them in later years of the demonstration.

The second subgroup pair divides the sample by SSI payment receipt status at baseline. Relative to SSDI beneficiaries who do not receive SSI payments, concurrent beneficiaries—those who receive SSI and SSDI benefits at the same time—have less income and fewer assets and are more likely to be Medicaid beneficiaries. These differences may create different barriers to employment for the two subgroups. In addition, the work incentives for SSI differ from the work incentives for SSDI, with SSI recipients experiencing a \$1 for \$2 payment offset for earnings above a \$65 monthly earnings disregard and a \$1 for \$1 payment reduction for unearned income above a monthly unearned income disregard. As described further in the *Evaluation Analysis Plan* (Section 2.1.2), the interaction of the two work incentives in the context of current law reduces the value of the SSDI benefit offset for concurrent subjects relative to SSDI-only beneficiaries with the same SSDI benefit amount. Hence, the expectation is that concurrent beneficiaries will be less responsive to the benefit offset than otherwise comparable SSDI-only beneficiaries.

Other subgroup pairs are defined by (1) employment status in 2010 before entry into the demonstration, (2) whether the participant lives in a state with a Medicaid Buy-In (MBI) program, and (3) age at baseline. We expect that subjects who are employed or who are younger at baseline will be more likely to use the benefit offset because they face higher opportunity costs of not working. For example, those who worked in 2010 may be able to increase earnings enough to take advantage of the offset more readily than beneficiaries who are not already working. Compared to older beneficiaries, younger beneficiaries may also gain more economically by changing fields through job training or other means because they have more years before retirement to gain earnings by investing in a new career.

Most states now offer an MBI program for people with disabilities who may 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 predicts that study subjects with access to an MBI program will be more likely to use the benefit offset than study subjects without MBI access, because they face a lower risk of losing health insurance when their earnings change.<sup>28</sup>

The remaining two subgroup pairs are defined by specific disabilities: a primary impairment of Major Affective Disorder and a primary impairment of Back Disorder, both at baseline. The incidence of these two primary impairments has grown significantly in recent years; therefore, it will be interesting to see whether the earnings and benefits of the two affected groups are more or less sensitive to the introduction of the benefit offset relative to beneficiaries with other impairments.

A finding that impacts differ across two subgroups does not necessarily imply that the variables used to define the two subgroups *caused* the difference. This point is especially important for the MBI subgroups, as access to an MBI program may be correlated with other features of the policy or economic environment that also affect impacts. If the impacts between two subgroups do not differ in a statistically significant manner, we consider findings for the full sample to be the best available evidence on each individual subgroup. This practice is adopted because the full sample yields more precise findings (that is, has smaller standard errors) than the smaller subgroup samples (Bloom and Michalopoulos 2013).

---

<sup>28</sup> We defined access to the Medicaid Buy-In based on state of residence just before random assignment. We categorized beneficiaries residing in Alabama, Colorado, Washington, DC, and Florida at that time as not having access to the Medicaid Buy-In. Beneficiaries in the remaining states did have Medicaid Buy-In access.

### 3. Background Characteristics of BOND Sites and Subjects

Stage 1 of BOND was designed to produce valid, nationally representative estimates of the impact of the benefit offset for all SSDI beneficiaries. Toward that goal, the 10 randomly selected BOND sites reflect national variation in the national environment. Understanding the background of the sites—and the research sample members living in them—provides useful context for interpreting the study findings while informing any future implementation of a national program. Although the evaluation does not estimate site-specific impacts, knowledge of site-level variation in background characteristics and changes in site environments during BOND also 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; (5) availability of employment services and other work-focused, disability-related resources; and (6) number and characteristics of BOND T1 subjects. We summarize most of these dimensions in Exhibits 3-1 and 3-2 and discussed them in more detail in the *Process Study Report* and the *Stage 2 Early Assessment Report*. Sections 3.1 to 3.6 of this chapter summarize this information and, where relevant, describes changes and new observations in 2015 and 2016.

#### 3.1. Geographic Characteristics

Sites vary in the number of states and communities included in their catchment areas, population density, and geographic dispersion of SSDI beneficiaries, 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, such as 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, 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

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 all workers find it more difficult to secure a job during periods of high unemployment, opportunities worsen 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 both treatment group and control group members; therefore, we cannot confidently predict direction of the effect of various 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



**Exhibit 3-1. Characteristics of BOND Sites**

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

Sources: Based on BOND Operations Data System, staff interviews, and additional data collection from BOND site visits. N/A = Not applicable.

<sup>1</sup> Population 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.

<sup>2</sup> Geographic 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*.

<sup>3</sup> Association of disability service providers.

**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
<b>Average Across 15 Included States<sup>1</sup></b>	--	<b>74.5</b>	<b>77.2</b>	<b>3.8</b>	<b>34.1</b>	<b>36.3</b>	<b>6.7</b>
<b>Entire United States<sup>2</sup></b>	--	<b>72.8</b>	<b>76.0</b>	<b>4.4</b>	<b>32.6</b>	<b>34.9</b>	<b>7.1</b>

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.

<sup>1</sup> Unweighted arithmetic average.

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

for the opposite relationship—that there are 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.

The unemployment rate—the number of individuals age 18 to 64 who are not working but are actively looking for work as a share of the labor force (the employed plus the unemployed)—is the conventional indicator of the strength of the local economy. However, for understanding labor market opportunities among 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—is likely to provide a more useful proxy than the unemployment rate (Burkhauser et al. 2003). This 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 more sensitive reflection of work engagement levels of the adult population, especially among people with disabilities.

At the start of BOND enrollment in 2011, the labor market was still very weak following the 2008 recession. 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.<sup>29</sup> 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.<sup>30</sup> 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).

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

---

<sup>29</sup> 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.

<sup>30</sup> 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.

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 provides benefits counseling to SSDI beneficiaries who are subject to current law, including the BOND control groups. The WIC services provided to the BOND treatment group 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. It is important to examine the SSDI counseling outside BOND to see if WIC services indeed resemble WIPA services, as any differences could have implications for demonstration impacts.

During the 2016 focus groups with BOND staff, several WIC counselors reflected on potential differences between WIC and WIPA services. 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.<sup>31</sup> This difference may be especially notable for beneficiaries who are not yet working; one participant mentioned that the WIPA program has limited resources for support to beneficiaries who are not working, whereas WIC counselors have relatively more contact with beneficiaries in this situation. 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 the same timely benefits counseling as WIPA counselors can provide. Finally, one participant observed that BOND subjects served by her organization are relatively more aware of WIC services than current-law beneficiaries typically are of WIPA services; the participant suggested this difference has implications for the overall use and success of WIC versus WIPA counseling. Overall, focus group participants reported differences in the level of support offered to beneficiaries by WIC and

---

<sup>31</sup> The WIC counselors who made these observations were from sites where a centralized team conducted post-entitlement work, as described in Section 4.4. These staff may have had more time to spend with beneficiaries than WIC counselors who continued to perform post-entitlement work.

WIPA services; however, participants' perspective on which type of service was more intensive varied by BOND site and the counselors' role in conducting post-entitlement work.

During the demonstration period, WIPA has experienced two important changes that may have contributed to potential differences between WIC and WIPA services.<sup>32</sup> The first change was the suspension of funding for WIPA when authority for the program ended in June 2012. Despite the suspension, most BOND sites maintained some level of counseling services for current-law beneficiaries in the demonstration control group (C1 subjects) until SSA reinstated the program in August 2013. The lapse of WIPA funding did not affect funding for WIC services to T1 subjects or the nature of those services; however, the changes in services available to WIPA grantees led to WIC (and EWIC) staffing changes because many BOND sites are also WIPA grantees (see the *Process Study Report*).

The second change to WIPA occurred in August 2015, when SSA awarded a new round of grants following a competitive application process. 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.<sup>33</sup> After consulting with the BOND Implementation Team and Evaluation Team, SSA decided not to change WIC services in response to these WIPA changes. Five of the 10 WIPA changes mirrored or codified practices that were already in place for administering WIC under BOND, such as encouraging use of remote service provision rather than in-person interactions. The remaining five changes were not expected to affect to an appreciable degree the outcomes for control group subjects studied in the evaluation because they were implemented four years into the six-and-a-half year evaluation follow-up period.

After the end of the BOND Participation Period, beneficiaries revert to current law rules and 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.

Section 6.2 of the *2016 Stage 1 Interim Process, Participation, and Impact Report* describes a range of beneficiary experiences receiving employment support services, and the extent to which those services were helpful. Among Stage 1 36-Month Survey respondents, 53.2 percent of treatment subjects reported receiving some type of employment support since the start of BOND, and 37.3 percent reported needing

---

<sup>32</sup> 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*.

<sup>33</sup> The announcement for Funding Opportunity Number WIPA-WIP-15-001 is available here: <https://www.ssa.gov/oag/grants/wipa-15-001/index.html>.

an employment support but not receiving one. There were no statistically significant differences in these measures between T1 and C1 subjects. During in-depth interviews with work-oriented T1 subjects in 2015, less than a third of interviewees (9 of 30) reported receiving employment services since becoming eligible for BOND. Among the nine beneficiaries who received services, five described the services as unhelpful and three beneficiaries said that the services they received were helpful. Four of the 21 respondents who did not receive services said that they did not need them.

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 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”.<sup>34</sup> 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 T1 and C1 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 beneficiaries to use the offset, but limited availability would presumably affect their earnings under current law as well. It is also possible that the offset induced some treatment subjects to perceive a need for employment services, but we cannot distinguish offset-induced needs from those that already existed. Even if we could, we would have no way of knowing the extent to which limited availability of desired services also limited subjects’ earnings or use of the offset. Hence, nothing we have found implies that access to services affected the size of the offset’s impacts, one way or the other.

Limited availability of employment support services might help explain the absence of a significant impact on use of employment services, but there are other important reasons to expect no detectable impact. First, some subjects may not need employment support services to work above BYA. Under

---

<sup>34</sup> 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.

current law, a large majority of SSDI beneficiaries who earn at the SGA level long enough to have their benefits suspended do so without using employment services under the Ticket to Work program.<sup>35</sup> Second, we expected that a large percentage of those induced to earn above BYA under the offset would already be working, and therefore less likely to need employment services than those who were not working. In fact, our impact estimates for 2014 indicate that about half of those induced to earn above BYA under the offset were already working when they were enrolled in BOND.<sup>36</sup> Both of these factors suggest that impacts of the offset on employment services would be smaller and harder to detect than impacts on other outcomes (such as employment and earnings above BYA) which, although significant, are already small—less than half a percentage point each in 2014.<sup>37</sup>

### 3.5. Sites' Arrangements for Providing BOND Benefits Counseling

To deliver BOND WIC and EWIC services to treatment subjects (Chapter 4), 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:

- 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

---

<sup>35</sup> Liu and Stapleton (2011) found that of the individuals who began receiving SSDI benefits in 1998 and 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.

<sup>36</sup> Hoffman et al. (2017) report that 14,694 T1 subjects were employed in 2010 and 62,421 were not employed. They also report point estimates of impacts on the percentage of each group with earnings above BYA in 2014 of 0.57 and 0.12 percentage points, respectively (Exhibit D-3). These estimates imply point estimates for the number induced to earn more than BYA from the two groups of 84 and 75, respectively. Although we find that those employed in 2010 account for about half 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 (57 and 31, respectively).

<sup>37</sup> Hoffman et al. (2017), in 2014 the impacts of the offset on T1 subject employment and on the percentage with earnings above BYA, while statistically significant, are both small—approximately 0.3 percentage points for employment and 0.2 percentage points for earnings above BYA (Exhibit 9.4).

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.

- 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 retained 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 estimates of treatment subjects' anticipated annual earnings, or AEEs.<sup>38</sup> 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.

In addition, two recent changes affected most or all BOND counseling providers. First, WIC providers have experienced annual reductions in FTEs for WIC counseling staff, most recently in December 2016. The Implementation Team had planned reductions over time in expectation of smaller caseloads of WIC (and EWIC) clients as the demonstration proceeded.<sup>39</sup> Second, to improve the quality of post-entitlement work, the Implementation Team shifted the majority of post-entitlement work to a centralized team in December 2013. Centralization of this work for WIC providers was implemented in Arizona/Southeastern California, Colorado/Wyoming, DC Metro, Greater Houston, Northern New England, South Florida, and Wisconsin in December 2013, in Alabama in January 2015, and in Detroit in January 2016.

Finally, as mentioned in Section 3.3, changes to the WIPA program led to changes in BOND staffing because many organizations provide both WIPA and BOND 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*). According to a member of the BOND Implementation Team, the later reinstatement of WIPA in August 2013 may have helped provider organizations adjust to upcoming

---

<sup>38</sup> In Section 4.4, we discuss post-entitlement work, which refers to the activities required to facilitate the BOND benefit adjustment process.

<sup>39</sup> As detailed in the Implementation Team's internal planning documents, the team anticipated smaller caseloads over time because of expectations that (1) BOND 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.



reductions in BOND FTE positions. WIPA funding allowed provider organizations to pay for staff time that was no longer reserved for BOND-related duties.

The August 2015 award of a new round of WIPA grants had a more limited effect on BOND counseling providers, resulting in staffing changes related to WIC in only one of the 10 sites. In that site, the sole WIC provider had been a WIPA provider but did not receive a new grant award. As a result, the one counselor providing WIC services left the organization, 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.

### 3.6. Number and Characteristics of BOND T1 Subjects

Across the sites, the number of BOND subjects in the Stage 1 treatment group varies (Exhibit 3-3). As reported in the *Process Study Report* and the *Stage 1 Early Assessment Report*, the Implementation Team randomly assigned 79,436 beneficiaries to the T1 group and mailed outreach materials to them in batches between May and October 2011.<sup>40</sup> By design, site sample sizes are proportional to the number of SSDI beneficiaries in the site. South Florida and Alabama accounted for the largest numbers of beneficiaries randomly assigned to the T1 group (12,232 and 11,254, respectively), and the District of Columbia (DC) Metro area accounted for the smallest number of beneficiaries randomly assigned to the T1 group (4,222).

**Exhibit 3-3. Number of T1 Subjects and Set-ups by Site Through December 31, 2016**

Site	Number of T1s	Number of Set-ups <sup>1</sup>	Percent of T1s with Set-ups
Alabama	11,244	2,927	26.0%
Arizona/SE California	7,802	2,222	28.5%
Colorado/Wyoming	5,545	1,769	31.9%
DC Metro	4,225	1,387	32.8%
Greater Detroit	7,931	2,275	28.7%
Greater Houston	6,933	1,892	27.3%
Northern New England	7,801	2,167	27.8%
South Florida	12,245	3,350	27.4%
Western New York	7,825	2,340	29.9%
Wisconsin	7,885	2,774	35.2%
<b>Total</b>	<b>79,436<sup>2</sup></b>	<b>23,103</b>	<b>29.1%</b>

Source: BOND Operations Data System (BODS) through December 31, 2016

<sup>1</sup> A set-up is completed in BODS after a member of the Implementation Team speaks with a subject and explains the benefit offset and WIC services.

<sup>2</sup> This excludes 555 beneficiaries who were initially assigned to the T1 group but were later discovered to have died before random assignment.

<sup>40</sup> Initially, the Implementation Team randomly assigned 79,991 subjects to the T1 group but later removed over 550 subjects after learning that they had died before random assignment.

As of December 31, 2016, records for 23,103 of these T1 subjects had been set up in BODS, meaning that members of the Implementation Team had spoken with these subjects and explained the benefit offset and WIC services to them. This represents a 2.3 percent increase in the total number of T1 subjects set up in BODS from a year earlier (December 31, 2015). South Florida and Alabama had the largest numbers of T1 record setups as of December 31, 2016—3,350 and 2,927, respectively—and the DC Metro area had the smallest number, at 1,387. Across all sites, the demonstration had set up the records of 29.1 percent of T1 subjects at that time, a 0.7 percentage point increase from December 31, 2015. Wisconsin had the highest percentage of subjects with record setups (35.2 percent), with the other sites ranging between 26.0 and 32.8 percent.

Previously, Exhibit 3-1 in the *Stage 1 Early Assessment Report* and Exhibit 2-2 in the *First-Year Snapshot of Earnings and Benefit Impacts for Stage 1* presented information on other demographic and impairment characteristics of Stage 1 beneficiaries at baseline, such as gender, age, primary impairment, and monthly benefit amount. Those tables showed that the T1 and C1 subjects were statistically equivalent with respect to those characteristics. In addition, we presented demographic data captured only in the Stage 1 36-month Survey in Exhibit 3-3 of the *2016 Stage 1 Interim Process, Participation, and Impact Report*. We found that, at the time of the survey, there were no statistically significant differences in two characteristics that were unlikely to have changed since baseline: race/ethnicity and language preference.

### 3.7. 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 BOND, which would take place in equally diverse environments. Indeed, the Implementation Team randomly selected the 10 BOND sites in order to produce nationally representative results.

Several changes in site environments during the demonstration period to date, along with cross-site differences, may help inform the results of the BOND impact evaluation. First, in most sites employment rates have improved substantially between 2011 and 2015, the year in which the demonstration started, reflecting the continuation of the economic recovery. Whether better job opportunities have a positive effect on the demonstration's employment and earnings impacts depends on whether treatment group subjects were able to take better advantage of these opportunities than control group subjects. Second, the availability and quality of employment support services for BOND beneficiaries has varied across sites. WIC and EWIC counselors have reported that, for some beneficiaries, access to employment support services has posed challenges to working and using the offset. 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 likely had a small impact on the availability of counseling services (including referrals made by counselors) for some control group subjects but not for treatment group subjects during that period.

## 4. BOND Benefits Counseling

Benefits counseling is a key component of BOND. The counseling developed for BOND is intended to help beneficiaries to understand and take advantage of the benefit offset. Counselors explain the effects of earnings on benefits under the offset and refer beneficiaries to employment support programs, such as State Vocational Rehabilitation Agencies (SVRAs) or Employment Networks (ENs). BOND includes two types of counseling:

1. Basic Work Incentives Counseling (WIC), which is by design comparable to the counseling available under current law.
2. Enhanced Work Incentives Counseling (EWIC), which adds more intensive services, including counselor outreach to the beneficiary, the development of a detailed employment support plan, and assistance in helping beneficiaries obtain the resources and support they need to find and maintain employment.<sup>41</sup>

This report focuses on Stage 1 subjects, who are eligible for WIC rather than EWIC services. However, WIC staff serve T1 subjects as well as Stage 2 subjects in the T21 treatment group. When we interviewed WIC counselors, we generally talked to them about all of their treatment clients, as they had little or no reason to distinguish between the T1s and T21s in their work. WICs' availability to serve T1s is influenced by their overall caseloads, inclusive of T21 subjects. As a result, WIC workload statistics reflect staff activities with both types of treatment subjects and are not separated by Stage 1 and Stage 2 subjects. In contrast, statistics on service receipt describe T1 subjects exclusively.

This chapter discusses the design of WIC services (Section 4.1), WIC counselor caseloads (Section 4.2), benefits counseling services received by T1 subjects (Section 4.3), and BOND post-entitlement services (Section 4.4), then ends with a Summary (Section 4.5).

### 4.1. Design of BOND Counseling for Stage 1 Subjects

The goal of WIC is to provide subjects in specified treatment groups, including T1, with counseling services that are comparable to services available to SSDI beneficiaries under the status quo, but tailored to the benefit offset. The intent of Stage 1 is to measure the impacts of the benefit offset when implemented with benefits counseling that is adapted for the offset benefit rules, but otherwise does not differ from counseling available to all SSDI beneficiaries.

Outside BOND, all SSDI beneficiaries (including C1 and C2 subjects) are eligible to receive benefits counseling from a WIPA provider. SSA funds 103 WIPA grantees to provide counseling to SSDI beneficiaries about how earnings will affect their SSDI, SSI, and other benefits. WIPA counselors also refer beneficiaries to employment support programs in their communities, such as SVRAs or ENs. The primary objective of WIPA is to equip beneficiaries to make informed choices about work and earnings given SSDI's benefit rules. The demonstration aims to have the WIC counselors provide counseling

---

<sup>41</sup> For additional details on the design of WIC and EWIC, see Section 5.1 of the *Stage 2 Early Assessment Report* and Section 5.2 of the *Final Design Report*.

services to T1 subjects that are comparable to WIPA, but are based on the offset rules; this goal seems conceptually simple, but is nonetheless challenging.

One important aspect of WIC services that differs from WIPA services concerns the counselors' role in delivering post-entitlement services (such as developing annual earnings estimates and documenting earnings deductions). Although WIPA counselors often help current-law beneficiaries interact with SSA with respect to similar matters, they do not have a comparable responsibility to collect and review information and complete forms. In addition to providing information, as a WIPA counselor would do, WIC staff collect work and earnings reports, assist T1 beneficiaries with completing work CDR forms, and occasionally assist T1 subjects in appealing work CDR decisions (see Section 5.3). Staff at a limited number of sites also provide other post-entitlement services to T1 subjects (see Section 3.5): collecting information from the beneficiary to develop an AEE, collecting and reviewing documentation for non-countable income (which SSA deducts from earnings to calculate benefits), and helping beneficiaries submit all of this information to SSA.

## 4.2. WIC Counselors' Caseloads

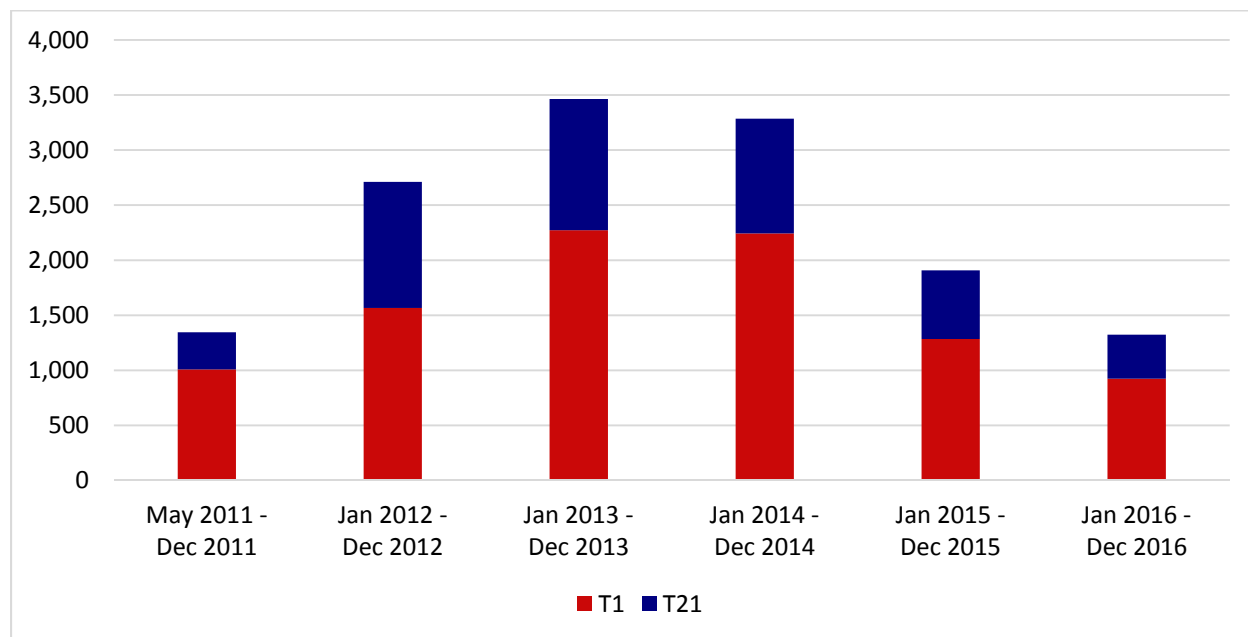
The design of WIC services has important implications for the evolution of WIC counselors' caseloads over the course of the demonstration. Subjects enter the WIC caseload when they first contact WIC staff for either information and referral (I&R) or counseling services—at any time from May 2011 onward for the T1 subjects or following enrollment into the T21 sample (which occurred between May 2011 and September 2012). After initial contact, beneficiaries remain on the official caseload record either for the remainder of the availability of WIC services (through September 2017) or through the last (60th) month of their BOND Participation Period, whichever occurs first. Subjects can contact WIC staff any time during this period. Therefore, the total WIC caseload increases over time as additional treatment subjects make initial contact with WIC providers.

Counselors' actual workloads depend on the number of "active cases" rather than on total caseload. In this section, we define a case as active during a specified period if the WIC counselor and the subject were in contact or the WIC counselor made a contact attempt. The Implementation Team expected the active WIC caseloads to eventually start declining. Thus, an active case could include as little as one contact or one attempted contact during the specified period and does not necessarily require regular ongoing counselor effort. Further, the effort required to support a WIC counselor's active cases is likely to vary over time and across sites.

Exhibit 4-1 shows the number of active WIC cases in each year of the demonstration through 2016. 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. The number of active T1 WIC cases followed a similar pattern to active cases overall, peaking at 2,273 across all BOND sites in 2013 and decreasing to 924 by the end of 2016. The implications of changes in the number of active cases for services delivered depend, at least in part, on how the number of FTE counselors adjusts with the number of active cases, which we will consider later in this section.

A variety of factors may have caused changes in the number of active cases over time. These factors include the flow of first-time cases into the total WIC caseload, changes in the need for WIC services among subjects already on the caseload due to changes in work activity or personal circumstances, and notices from SSA related to earnings and benefit adjustments. According to 2016 counselor focus groups and as reported in the *2016 Stage 1 Interim Process, Participation, and Impact Report*, some beneficiaries contact their counselors to help them interpret letters and notices from SSA because the language used in the communication is difficult to understand. Higher 2013 and 2014 caseload activity may in part have been caused by the timing of demonstration implementation activities rather than by changes in the subjects’ work and earnings circumstances or interest in the demonstration. Demonstration implementation activities which may have affected caseload activity include automated reconciliations for 2011 and 2012 (conducted in early 2013 and late 2013, respectively), for which SSA distributed notices about benefit adjustments to many T1 subjects. Although active WIC caseloads continued to decline in 2015 and 2016, the decline was slower than in the previous year. The more gradual decline may reflect SSA’s progress in processing a backlog of work CDRs, which led to identifying new cessation dates (see Section 5.3), and notifying some beneficiaries that their BPP end date was approaching (see Chapter 8).

**Exhibit 4-1. Active WIC Cases by Year**



Source: Beneficiary Tracking System.

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 starting in May 2011, as labeled.

Staffing levels at WIC agencies—that is, the number of FTE positions filled by WIC counselors—affect the agencies’ ability to fulfill the needs of the active caseload in each site. The ratio of active WIC clients to FTE slots—the average size of a counselor’s active caseload—is especially important. As reported in the *Stage 1 Early Assessment Report* and the *Process Study Report*, significant variations in counselor caseload size across sites have existed during the demonstration. Differences continued in the most

recently completed 12-month contract period for WIC counseling organizations (December 2015 through November 2016), as summarized in Exhibit 4-2. During that period, WIC staff served an average of 117 active beneficiaries per FTE across all sites (Exhibit 4-2), representing a decrease from an average of 150 active beneficiaries per FTE across all sites in the previous 12-month period. The average number of active beneficiaries per WIC FTE varied across sites, ranging from 52 subjects per FTE in the Alabama site to 209 subjects per FTE in the Wisconsin site. Some of this variation may reflect the Implementation Team’s decision to maintain minimum staffing levels at provider organizations serving sites with relatively small caseloads.

**Exhibit 4-2. WIC Caseloads per FTE in 2016**

	Active WIC Clients (T1 and T21)	FTE Staff	Active Clients per WIC FTE
Alabama	52	1.00	52
Arizona/SE California	202	1.50	135
Colorado/Wyoming	88	0.80	110
DC Metro	52	0.75	69
Greater Detroit	89	1.50	59
Greater Houston	84	1.00	84
Northern New England	218	1.50	145
South Florida	108	1.50	72
Western New York	305	1.50	203
Wisconsin	209	1.00	209
<b>Average</b>	<b>141</b>	<b>1.21</b>	<b>117</b>

Source: Beneficiary Tracking System.

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 between December 1, 2015, and November 30, 2016. Staff FTE allocations are based on funding for WIC counselors in the December 7, 2015, to December 6, 2016, WIC agency contract year and exclude supervisory time.

Data from focus groups with WIC staff and supervisors in 2016 (described in Chapter 2) offer insights into how these staffing changes may have affected service delivery. Across several focus groups, WIC counselors reported that, after planned reductions in FTEs, the number of WIC FTEs continued to be low relative to the volume and intensity of beneficiaries’ needs for WIC services. They described this as an ongoing issue. At face value, the BTS data show otherwise: a decrease in the average active caseload between 2015 and 2016.<sup>42</sup> However, in the WIC supervisor focus group and in a second focus group of WIC staff, one individual in each of four sites described feeling overworked relative to their expected level of effort on BOND, implying that their expected level of effort on BOND was insufficient for providing services to their caseloads. To manage this tension, a few WIC counselors in one focus group

<sup>42</sup> Overall, the number of active clients per WIC FTE is relatively similar to the number in 2014 (117 compared to 122; see Exhibit 3-4 of Gubits et al. 2017) and has dropped since 2015 (117 compared to 150; see Exhibit 4-2 of Hoffman et al. 2017). However, some individual sites such as Western New York have seen a substantial increase in the number of active clients since 2014.

reported prioritizing certain tasks, such as post-entitlement paperwork, over other tasks, such as updating beneficiaries' Benefits Summary and Analysis (BS&A) reports.

### 4.3. Benefits Counseling Services Received by T1 Subjects

The previous section described WIC caseloads, which are an indicator of counselors' availability to provide counseling services. This section, drawing on information from the BTS on types and dates of services delivered to BOND treatment subjects and focus groups with WIC staff and supervisors, describes beneficiaries' experiences receiving BOND counseling services over time and across sites.

Exhibit 4-3 displays the percentage of T1 subjects who received any benefits counseling in each of the six demonstration years to date as well as cumulatively, including those who received only I&R. By December 2016, five percent of T1 beneficiaries had received benefits counseling at some point since study enrollment. Across the years, service receipt rates rise and then decline, consistent with the numbers of active WIC cases in Exhibit 4-1.

T1 subjects' receipt of counseling under BOND appears to be more common than counseling receipt by other SSDI beneficiaries under WIPA (an estimated 1.9 percent of T1 subjects compared to fewer than 1.1 percent of SSDI beneficiaries who met the eligibility criteria for BOND but were not part of the treatment group).<sup>43</sup> However, the differences are modest, especially after considering several demonstration-related circumstances that likely increased T1s' receipt of counseling. These include active BOND outreach to inform T1 subjects of their new benefit rules and the disproportionately large number of BOND beneficiaries who had been on SSDI for less than three years,<sup>44</sup> among others.

Exhibit 4-3 also shows the percentage of T1 service recipients who received their first service during each time period. Of beneficiaries receiving services, the percentage who received services for the first time was highest in the early years of the demonstration and decreased during each subsequent year. This suggests that most beneficiaries who received services in later years of the demonstration had engaged with a WIC counselor previously. However, some T1s used a WIC provider for the first time in later years. Discussions with the BOND Implementation Team suggest that new service use in 2016 likely followed SSA's identification of new cessation dates, and notifications to beneficiaries transitioning out of BOND. Similarly, during focus groups in 2016, WIC counselors reported that some beneficiaries

---

<sup>43</sup> The 1.1 percent estimate is based on the count of all SSDI beneficiaries who received WIPA counseling in 2011, relative to the count of BOND-eligible non-treatment SSDI beneficiaries. This calculation assumes that all SSDI beneficiaries who received WIPA counseling in 2011 were part of this BOND-eligible non-treatment group. Thus, it is an upper estimate of WIPA counseling receipt among beneficiaries similar to BOND subjects. For a more detailed discussion of the differences in benefits counseling receipt between T1s and other SSDI beneficiaries, see Section 4.3 of the *2016 Stage 1 Interim Process, Participation, and Impact Report*. SSDI beneficiaries' receipt of counseling is estimated based on published tabulations of non-BOND data (Schimmel et al. 2013).

<sup>44</sup> Short-duration subjects were over-sampled for the T1 group. These beneficiaries were expected to use counseling services more frequently because earlier research has shown that beneficiaries are most likely to complete their TWP during the first five years after award (Liu and Stapleton 2011). The workload statistics presented here are not adjusted to account for the over-sampling of short-duration subjects.

engaged for the first time or re-engaged after multiple years without contact because they received a BPP end date notice or a letter about an overpayment, or they recently started work. In 2015, a quarter of all T1s who received services had not previously engaged with their WIC counselor; this proportion fell to 18 percent in 2016.

The highest rates of WIC use by T1 subjects took place in 2013 and 2014, and usage rates declined in 2015 and 2016 to about one percent. Changes in T1 subjects' receipt of benefits counseling over time are consistent with changes in WIC caseload activity described in Section 4.2. As discussed in that section, a variety of factors may influence the number of subjects seeking and receiving WIC services.

**Exhibit 4-3. Percent of T1 Subjects Who Received WIC Services, by Year**

Time Period	T1 Subjects Who Received Any Benefits Counseling in Time Period (%)	T1 Subjects Who Received First Services in Time Period (%)	T1 Service Recipients Who Received First Service in Time Period (%)
Full Demonstration Period to Date (May 2011–December 2016)	5.0	5.0	100.0
May 2011–December 2011	1.3	1.3	99.4
January 2012–December 2012	2.0	1.3	65.5
January 2013–December 2013	2.9	1.5	53.9
January 2014–December 2014	2.8	0.9	33.4
January 2015–December 2015	1.6	0.4	23.8
January 2016–December 2016	1.2	0.2	18.0

Source: Beneficiary Tracking System.

Note: T1 subjects who received counseling are defined as T1 beneficiaries for whom a counselor made a contact attempt or case note during the indicated time period.

Exhibit 4-4 describes the types of services WIC counselors provided to T1 subjects. Once T1 subjects contacted a WIC counselor, they were likely to receive counseling beyond brief, initial I&R services. This more extensive “full service” counseling includes services like completion of a BS&A report and referral to employment support. Among the 5 percent of T1 subjects who received benefits counseling through December 2016, 79 percent received more extensive benefits counseling than I&R. This rate is similar to the 80 percent of WIPA clients whom SSA expected to receive intensive counseling based on the standard in place until August 2015 (Section 3.3). In terms of full WIC services, WIC staff completed a BS&A for almost 40 percent of T1 subjects to whom they provided any services during the follow-up period. WIC staff also referred almost 30 percent of served T1 subjects for employment support services.

Exhibit 4-4 shows substantial variation across sites in receipt of the different WIC services measured; the patterns are more complex than can be explained simply by higher WIC participation rates in certain sites. For example, no site was consistently in either the top two or bottom two sites for all the WIC services considered. Service receipt may have been influenced by, among other factors, variation in the WIC services most often needed by the beneficiaries served in different sites, differential availability of appropriate referral options in different communities, and differences in provider organizations' orientation to delivering various types of services. There is no reason to think that this variation differs from the variation that would occur in a national program.



**Exhibit 4-4. Percent of T1 Subjects Who Received WIC Services, by Service Type**

BOND Site	T1 Subjects Who Received Any WIC Services, 2011–2016 (%)	Percent of WIC Recipients Using Specific Service Types			
		Received Only Information and Referral (%)	Received Additional WIC Services (%)	Received BS&A (%)	Received Referral to Employment Support Services (%)
	(1)	(2)	(3)	(4)	(5)
Alabama	3.1	21.2	78.8	28.4	27.8
Arizona/SE California	5.5	23.3	74.4	38.6	22.4
Colorado/Wyoming	4.7	7.7	92.3	53.3	43.2
DC Metro	6.5	34.9	64.4	44.7	13.5
Greater Detroit	4.3	10.2	89.8	46.4	8.5
Greater Houston	5.0	3.8	93.1	26.2	72.1
Northern New England	7.6	24.0	75.2	48.5	25.7
South Florida	4.2	30.4	69.6	17.4	32.9
Western New York	4.5	18.1	77.1	42.4	15.8
Wisconsin	7.0	17.5	82.0	53.2	16.8
<b>All Sites</b>	<b>5.0</b>	<b>19.9</b>	<b>79.0</b>	<b>39.8</b>	<b>27.2</b>

Source: Beneficiary Tracking System.

Note: Column (1) describes the percentage of all T1 subjects who received WIC services, defined as T1 beneficiaries for whom a counselor made a contact attempt or case note between May 2011 and December 2016. The rest of the table provides information on the services used by the T1 WIC recipients shown in column (1). Columns (2) through (5) show the percentages of T1 service recipients who received specific types of WIC services. Columns (2) and (3) are mutually exclusive and exhaustive categories. Columns (4) and (5) show the percentages of all T1 WIC recipients using two specific types of “additional WIC services” among the many services included in column (3).

In the 2016 focus groups, WIC counselors and their supervisors reported that the content and intensity of services that beneficiaries need from them are relatively unchanged from previous years of the demonstration, with the exception of the need for new counseling regarding BPP end dates (discussed further in Chapter 8). WIC counselors described these common service needs to be paperwork-heavy, regardless of whether the beneficiaries had been engaged with their counselor for a long time or were engaging for the first time. For example, WIC providers in several focus groups described spending much of their time collecting and handling documentation, such as receipts and pay stubs, interpreting SSA notices to beneficiaries, following up on work CDR issues, and preparing for end-of-year reconciliations. Other common service needs included explaining BOND rules, overall benefits counseling, and assisting beneficiaries with reporting requirements. Several WIC counselors reported that they provided guidance to beneficiaries about reporting requirements, helped them identify potential issues, and explained the link between timely reporting of earnings and payment problems.

In addition, as reported in the *2016 Stage 1 Interim Process, Participation, and Impact Report*, a small number of in-depth interviews with T1 subjects suggested that contact with a benefits counselor is associated with long-term offset use, but the direction of causality is unclear; counselors may motivate use of the benefit offset, or offset users may be motivated to have contacts with counselors.

#### 4.4. BOND Post-Entitlement Services Provided by WIC Staff

Post-entitlement services include collecting and documenting earnings estimates and delivering them to SSA via BODS.<sup>45</sup> SSA field office staff normally deliver these services under current law. For efficiency reasons, BOND initially tasked WIC and EWIC counselors with helping their treatment group clients complete and submit the information required for benefit adjustments.<sup>46</sup> However, as described in the *2016 Stage 1 Interim Process, Participation, and Impact Report* (Section 4.4), centralized staff from the BOND Implementation Team assumed responsibility for providing post-entitlement services in seven BOND sites in December 2013, and in an eighth site in January 2015. Before centralization, many WIC and EWIC counselors in those sites reported difficulty performing post-entitlement work, citing challenges in mastering and keeping abreast of procedural changes related to this work (Section 5.4.3 of the *Process Study Report*).

In 2015 focus group polling, counselors at non-centralized sites favored maintaining control over post-entitlement work, whereas counselors at centralized sites reported that they preferred centralization. WIC and EWIC counselors at non-centralized sites reported that conducting the work helped them understand post-entitlement processes and facilitated close relationships with beneficiaries. WIC and EWIC staff from centralized sites strongly favored centralization because it allowed them to devote more time to benefits counseling. However, some of those staff reported that conducting post-entitlement work helped them become better counselors, and others reported that centralization appeared to confuse beneficiaries about the separation of tasks between the centralized staff and the counselor. The Implementation Team took steps to promote communication between staff involved in post-entitlement activities and staff involved in work incentives counseling in the centralized sites (*2016 Stage 1 Interim Process, Participation, and Impact Report*). For example, WIC and EWIC counselors in all sites now have real-time access to individual BTS records and can see which activities have been completed. The Implementation Team also developed and distributed a manual describing the responsibilities of the two different sets of staff members and held calls to help clarify roles and discuss specific cases.

In the 2016 focus groups, several non-centralized WIC staff noted continued challenges related to the administrative aspects of their job. Their post-entitlement work responsibilities and related reporting tasks reduced the amount of time they could spend providing benefits counseling. They also reported that lack of access to or copies of letters and notifications that SSA sends to beneficiaries made it difficult to respond to beneficiaries' questions about these documents. In the same round of focus groups, several

---

<sup>45</sup> More specifically, BOND post-entitlement work includes (1) helping the beneficiary calculate an AEE and (2) documenting and substantiating evidence of non-countable income that should be deducted from earnings to calculate benefits. Non-countable income is used to appeal overpayment decisions from automated reconciliation for past years and is submitted ahead of automated reconciliation so that SSA can use it when conducting the automated reconciliation.

<sup>46</sup> The solicitation packet distributed to potential providers of WIC and EWIC services to BOND treatment subjects did not include post-entitlement work in the list of counselor responsibilities. However, the Implementation Team had always planned to have WIC and EWIC staff support post-entitlement work and included these activities in their initial training. The Implementation Team expected that counselors would have ongoing contact with the beneficiaries and were therefore well situated to assist beneficiaries with post-entitlement work.

centralized WIC staff reported that they believed they provide a higher level of attention and ongoing support to beneficiaries than WIPA counselors will be able to provide for beneficiaries after BOND ends.

Section 5.4 of this report provides further discussion of this centralization and its impact on the accuracy of beneficiaries' AEEs.

#### **4.5. Summary**

To receive WIC services, T1 subjects must proactively contact WIC staff. As of December 2016, approximately 5 percent of T1 subjects had received WIC services at some point during the demonstration. The Implementation Team initially allocated resources to provide WIC services to up to 30 percent of T1 subjects through September 2017. Although WIC services will be available for an additional 21 months beyond September 2017, the slowdown in WIC caseloads beginning in 2014 suggests that WIC uptake will remain well below the initially planned WIC capacity. Of the T1 subjects served by a benefits counselor by December 2016, nearly 80 percent received WIC services beyond I&R, as SSA had anticipated.

WIC service activity has fluctuated over time. Using annual periods, active WIC caseloads reached a peak in 2013 and have since declined. A similar pattern holds for T1 subjects' receipt of benefits counseling over time. Based on a comparison to external data for WIPA service receipt, it appears that T1 subjects received services at a moderately higher rate than did other SSDI beneficiaries.

Across sites, the delivery and receipt of benefits counseling have varied in terms of caseloads per FTE, rates of counseling activity, and types of services delivered. These variations may reflect site-specific differences in context, provider organizations, and beneficiaries' needs, as expected when implementing a large multistate program. The flow of new beneficiaries into WIC caseloads and the volume of beneficiaries' needs for WIC services did not decrease in proportion to reductions in counselor FTEs for the contract year from December 2015 through November 2016, resulting in staffing challenges in some instances. WIC counselors continue to provide beneficiaries with guidance on fulfilling reporting requirements, interpret SSA letters or notices, and offer benefits counseling. The content and intensity of services that beneficiaries need have changed little from previous years of the demonstration, except that some beneficiaries are now receiving counseling services related to their BPP end dates (see Chapter 8).

## 5. Offset Use and the Pathway to Benefit Offset Adjustment

### 5.1. 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 beneficiaries who have had their SSDI benefits adjusted according to offset rules at some point up to and including December 2016.

The discussion 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 T1 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 attempt 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 TWP ends and the GP months are used up, 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, engagement in SGA in any month results in benefit termination; otherwise the EPE continues. BOND treatment subjects enter the BOND Participation Period (BPP), under which the \$1 for \$2 benefit offset applies to annual earnings above the BOND Yearly Amount (BYA) for the next 60 months. We describe the benefit adjustment process for the BOND offset below.

#### 5.1.1. Benefit Adjustment Processes Developed for BOND

After completing the TWP and GP, BOND benefit offset rules differ from current law. 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 they report and have substantial earnings,

they enter the offset through the “front-door” process, but if they have substantial earnings and do not report them to the demonstration they will eventually enter through the “back door.”<sup>47</sup> 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 the offset (for example, provide an Annual Earnings Estimate [AEE]). The front-door administrative path to the first benefit adjustment under the offset includes four milestones:

1. *Sustained earnings sufficient for offset use*: To receive a benefit adjustment through the offset, T1 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.<sup>48</sup>
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 benefit adjustments are made retroactively, it typically means there has been an overpayment of benefits during the prior period of offset use.<sup>49</sup>

**Back-door entry** into the offset occurs when treatment beneficiaries earn more than BYA but do not report their earnings as intended. 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

---

<sup>47</sup> Some T1 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. Others may have reported earnings as intended, but SSA did not complete their work CDRs (Section 5.3) before they were identified as offset users by an automated reconciliation process (Section 5.5).

<sup>48</sup> Throughout this report, we define “offset use” as *having earnings that should lead to a benefit reduction under the offset, regardless of whether SSA has yet adjusted benefits according to the 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).

<sup>49</sup> Delays in adjustment may cause underpayments for treatment subjects who were in the EPE and had their benefits suspended before BOND random assignment.

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

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. Subjects who reported earnings as intended, but for whom SSA identifies a retroactive cessation date and adjusts past benefits before the subject submits an AEE, are counted as back-door entrants in our statistics. Conversely, in a small share of cases, SSA identifies treatment subjects with unreported earnings before the end-of-year reconciliation makes those beneficiaries back-door entrants—in which case the beneficiaries may submit an AEE within the same calendar year as the first month of offset use. These rare cases are counted as front-door entrants in our statistics.

To summarize, for SSA to adjust benefits under the offset rules (treatment group subjects) or suspend benefits per 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 the offset, and those who do not report but earn more than BYA eventually enter the offset via a “back-door” path. Under both the offset 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.

### 5.1.2. 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 T1 subjects through the associated milestones during the first six calendar years of the demonstration. Exhibit 5-1 shows the percentages of T1 subjects who had reached the milestones by December 2016.

As anticipated at the outset of the demonstration, only a small percentage of the T1 subjects have worked enough during the demonstration to potentially use the offset. As reported in *Stage 1 Interim Report* (Hoffman et al. 2017, Appendix E), only 22 percent of T1 respondents to the Stage 1 36-Month Survey reported any work during the first three years after random assignment, only 10 percent were working when they were interviewed, and only 2.8 percent had weekly wages at or above the BYA level. These low levels of employment and earnings are expected because SSA had determined that these beneficiaries were unable to engage in SGA for at least 12 months when they first entered SSDI; that is, they met SSDI's medical eligibility criterion. Historically, only a minority of beneficiaries have worked at all after entering SSDI, and only a small share of these have left SSDI because, despite their ongoing, significant medical condition, they were able to again in engage in SGA.<sup>50</sup> The benefit offset is designed to increase the number of SSDI beneficiaries who return to engagement in SGA, despite their continuing medical

---

<sup>50</sup> 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, often with the assistance of training, technology, or accommodations.

condition. Under current law, engaging in SGA would make such beneficiaries ineligible to receive an SSDI payment (after the TWP and GP), but under the offset they can keep a diminishing portion of their benefits as their earnings increase above the SGA level.

Consistent with the above, as of December 2016:

- 6.3 percent of T1 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 (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, using the available documented earnings information, and established a cessation month—a post-TWP month during which the beneficiaries had engaged in SGA.<sup>51</sup>
- 3.8 percent of T1 subjects had completed the third milestone; that is, they had successfully submitted an AEE to SSA.<sup>52</sup> Everyone in this group had completed the second milestone and may have completed the first (that is, they are included in the 6.3 percent with an SGA cessation date). Three quarters of this group also used the offset (that is, they are included in the 3.5 percent who had had their benefits adjusted).
- 3.5 percent of T1 subjects—2,734 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 6.3 percent with an SGA cessation date), and 80 percent completed the third milestone (submitted an AEE to SSA).

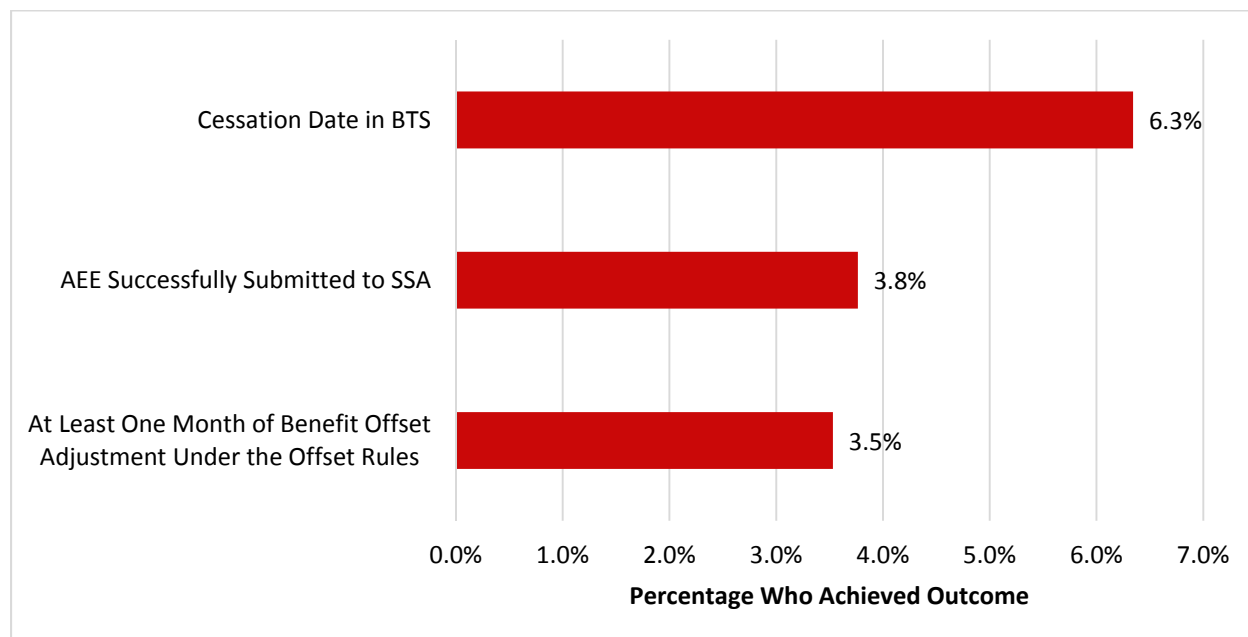
These proportions for the 2011 to 2016 time period may increase somewhat beyond what we report here as SSA completes documentation of T1 work activity for this period.

---

<sup>51</sup> This report uses a more comprehensive method for identifying cessation dates relative to the method used in Hoffman et al. (2017). Some BOND subjects have a cessation date associated with a previous entitlement period, yet we are only interested in cessation dates in the current entitlement period. In Hoffman et al. (2017), we focused only on the current entitlement period by limiting our analysis to cessation dates that came after the SSDI start date. However, we later discovered that this method incorrectly categorized some beneficiaries as not having a cessation date. The new method used in this report requires that the cessation date come after the entitlement date or the disability onset date, whichever is available. If we apply this year's method to the data described in Hoffman et al. 2017, we find 133 more cases with a cessation date, which would change the percentage with a cessation date in that report from 5.1 to 5.2 percent.

<sup>52</sup> 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).

**Exhibit 5-1. Percentage of T1 Subjects with Documented Steps Toward Benefit Adjustment (through December 2016)**



Source: Analysis of BTS records.

Note: According to an analysis of BTS records, 189 beneficiaries successfully submitted an AEE and/or had an adjustment of benefits under the offset rules but did not have a recorded cessation date. 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 0.2 percentage points of the overall 6.3 percent reported.

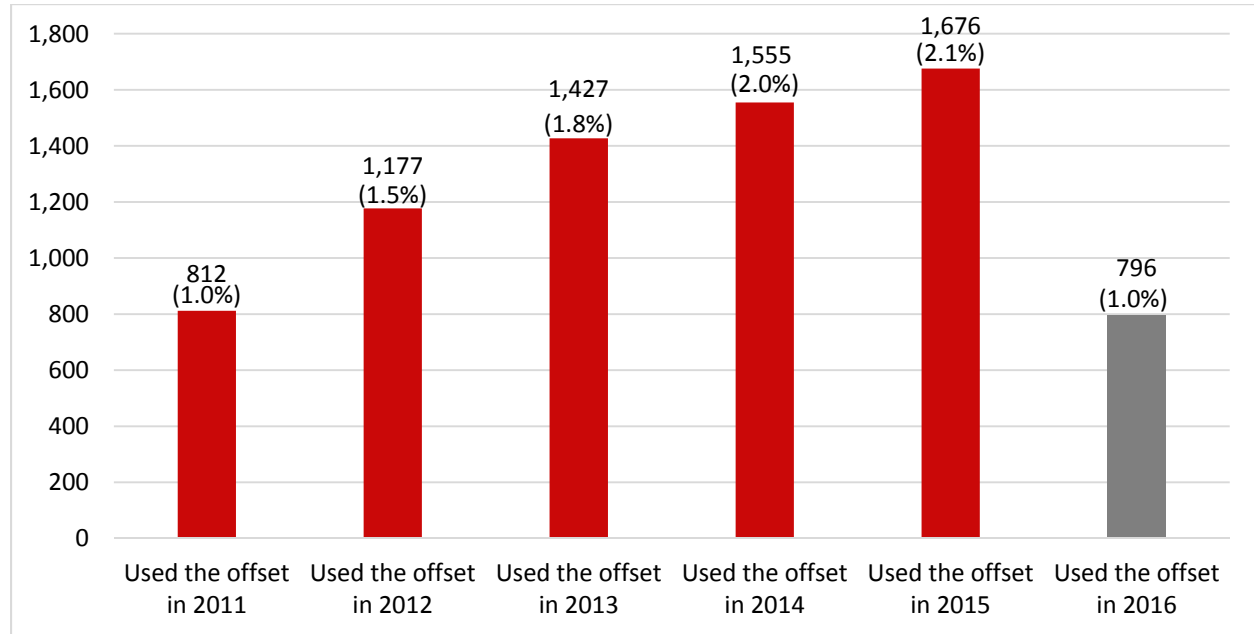
Based on December 2016 BTS data, the number of T1 subjects who had a benefit offset adjustment during a given year grew in each of the first four calendar years of the demonstration, reaching 1,676 T1 subjects in 2015—2.1 percent of T1 subjects (Exhibit 5-2). This share was similar in 2014. Through December 2016, the percentage with adjustments in 2016 was 1.0 percent. For each year, we expect that the number of beneficiaries with offset adjustments will continue to increase as SSA retroactively identifies offset users. For example, as reported in Section 5.8, most of the 539 offset users first identified during 2016 were found to have used the offset before 2016. The count of 2016 offset users—796 T1 subjects according to December 2016 data—will rise the most, largely because SSA has yet to conduct the 2016 automated reconciliation (scheduled to occur in August 2017).<sup>53</sup>

<sup>53</sup> Hoffman, et al. 2017 (see Exhibit 7-2) reported 772 offset users in 2015 based on data available about benefit adjustments made through December 2015. More recent data from December 2016 show that the number of offset users in 2015 has almost doubled (an increase of 666 beneficiaries, 86 percent) from what was known previously. Similarly, the number of users in 2013 is 40 (3.0 percent) larger than the number previously reported. These increases reflect offset use identified retroactively via ORDES’ recent progress in completing a backlog of work CDRs, and also reflect the discovery of new 2015 cases during end-of-year reconciliation for that year (conducted in August 2016).



As of December 2016, at least 50 percent of offset users entered the offset through the back door.<sup>54</sup> This proportion will likely increase for the period from 2011 through the end of 2016 as SSA continues to retroactively identify T1 subjects with sufficient earnings to use the offset.

**Exhibit 5-2. Counts of Offset Users by Year, Based on December 2016 Data**



Source: Analysis of BTS records.

Notes: The automated reconciliation of 2016 earnings has not yet occurred and we show the 2016 counts in gray to distinguish these counts from the previous years' counts, which include offset users identified through automated reconciliation. For each year, the number of beneficiaries with offset adjustments may increase as SSA retroactively identifies offset users, and we expect the increase for 2016 to be quite large as SSA completes the backlog of work CDRs in 2017. BTS information on years of offset use are missing for 56 T1 offset users.

As documented in Section 5.5, many entrants 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. Although delays are typically shorter for those who submit an AEE—mostly those who enter via the front door—than for those who do not, both routes are subject to delays. For all offset users with first adjustments in 2013 through 2016, the median time from first offset use to first benefit adjustment was 22 months, or just less than two years. These long lags are important for two reasons: (1) they mean that the evaluation does not immediately have the full picture of the 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 beneficiaries who use it may do so for nearly two years before they see how it affects their monthly benefits.

<sup>54</sup> This number is based on the number of offset entrants without an AEE before their first benefit adjustment under the offset, all of whom are back door entrants. As noted earlier, a small share of back door entrants are identified early enough to be given the opportunity to file an AEE; those who do are not counted in this estimate.

### 5.1.3. 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 the offset rules: (1) engagement in sustained earnings, (2) work CDR completion, (3) AEE submission, and (4) first benefit adjustment under the 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 sites and beneficiary types. 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 T1 subjects in late 2015.

## 5.2. Activities Related to Maintaining 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 only 6.3 percent of Stage 1 subjects have a cessation date by the end of 2016, the fifth year of the demonstration.

There are several reasons why the percentage with a cessation date is not larger. First, for many treatment subjects, the lack of a cessation date is likely due to their personal circumstances. According to the Stage 1 36-Month Survey, nearly 90 percent of T1 subjects cited physical or mental health conditions as barriers to work (Hoffman et al. 2017). Similarly, during in-depth interviews, 7 of the 10 work-oriented T1 subjects with a cessation date who had not had a benefit offset adjustment named physical or mental health issues as the main factor determining whether and how much they worked. Beneficiaries may not attempt employment sufficient to result in a cessation because of health or other concerns.

Some treatment subjects may not have engaged in sustained SGA because they do not understand how the offset works. 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 the new work incentive. As reported in Hoffman et al. (2017), Stage 1 36-Month Survey findings suggest that less than one-third (29 percent) of T1 subjects understand that the benefit offset allows them to keep some of their SSDI benefits if they engage in SGA after the TWP and GP, and many of these may have been guesses: 22 percent of C1 subjects provided the same answer—incorrect in their case. Interviews with 30 work-oriented beneficiaries (defined as having a

cessation date) revealed that most respondents 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, but one-quarter had no understanding at all and only a small number had an understanding that was substantially complete. The large share of beneficiaries with an incomplete understanding of the offset may be less likely to take advantage of it.<sup>55</sup> During 2016 focus groups with WICs and EWICs, counselors in multiple groups underscored the complexity of the benefit offset rules and said they observed that many beneficiaries had difficulty understanding them. In their view, the complexity made it more challenging for beneficiaries to comprehend what they could gain by using the offset.

Another potential reason some treatment subjects may not have engaged in sustained SGA is that they were unable to obtain employment support services. The qualitative evidence indicates that some treatment subjects have not been able to obtain desired employment services (Section 3.4). Benefit counselors also reported that, in some cases, employment services can help beneficiaries begin, maintain, or increase work. However, there is no way to quantify the extent to which increased use of employment services might lead to an increase in beneficiaries achieving cessation dates.

A final reason that the percentage with a cessation date is not larger concerns pending work CDRs. Specifically, SSA delays in work CDR processing will result in delays in identifying beneficiaries as having a cessation date. Presumably, the number of treatment subjects with cessation dates before December 2016 will increase somewhat as pending work CDRs are completed. However, as of mid-2017, we do not expect the increase to be very substantial (see Section 5.3).

### 5.3. Activities Related to Work CDR Completion

The second step toward adjustment of benefits under offset rules is completion of a work CDR. SSA conducts a work CDR to evaluate a beneficiary's work history and earnings 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 the offset because of earnings. 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

---

<sup>55</sup> As described in the *Process Study Report*, the Implementation Team notified T1 subjects of their involvement in BOND via a letter in 2011. SSA then sent a letter to T1 subjects, informing them about the offset and services available through BOND, including how to contact the demonstration. In 2012 and again in 2013, the Implementation Team conducted follow-up outreach to T1 subjects not yet engaged with the demonstration. At any point, T1 subjects who contacted the demonstration in response to outreach or for any other reason received an explanation of the BOND reporting requirements and the available WIC services. As of December 31, 2016, 29 percent of T1s had been set up in BODS, meaning that members of the Implementation Team had spoken with these subjects and explained the benefit offset and WIC services to them.

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 described in this section and in previous reports (Gubits et al. 2013; Derr et al. 2015), the work CDR process involves various SSA and BOND staff. To clarify the discussion, it is helpful to recognize that SSA staff involved in BOND operations are in several different components of SSA. First, the ORDES BOND work unit provides operational support for BOND. This involves collecting work CDR documentation from beneficiaries, assigning work CDR cases to other SSA components for processing, and directly processing the balance of work CDR cases. Second, staff at local SSA field offices are available to assist BOND treatment subjects with activities such as collecting work reports, assisting with work CDR paperwork, and processing select work CDRs. Staff at SSA processing centers also process work CDRs for some treatment subjects. In addition, BOND staff—specifically WIC staff and members of the BOND Implementation Team—are available to collect beneficiaries' work reports and ask the ORDES BOND work unit to initiate a work CDR. As described below, the alignment of these responsibilities has evolved over the course of the demonstration.

### 5.3.1. Identifying Beneficiaries in Need of a Work CDR

The first step in the work CDR process is for SSA to identify beneficiaries who need a work CDR. The BOND Implementation Team notifies SSA about beneficiaries whom it believes require work CDRs based on earnings that beneficiaries report to the team. SSA can also identify beneficiaries who require work CDRs using information from IRS earnings data without input from the BOND Implementation Team.

The process for identifying beneficiaries in need of a work CDR differs depending on whether beneficiaries report their earnings or fail to do so. SSA requires all SSDI beneficiaries to report earnings. Control group subjects are required to report directly to SSA, while BOND treatment group subjects may report earnings directly to SSA or to BOND staff. Treatment subjects who report earnings are front-door entrants to the benefit offset.

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.

### 5.3.2. Developing a Beneficiary's Work History

Once SSA determines that a work CDR is needed, SSA staff send the beneficiary administrative forms to document past work activity. In many cases, beneficiaries need assistance in completing these forms. Both BOND staff and SSA field office staff are available to provide treatment subjects with 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 collecting work history information from beneficiaries 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 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.

### 5.3.3. SSA Processing of Work CDRs

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 performed substantial gainful activity, and (3) prepare relevant forms and notices. WIC and EWIC staff cite delays in work CDR processing as a key barrier to timely first benefit adjustment under the offset for treatment group subjects. During focus groups with WICs and EWICs in 2016, participants in every focus group mentioned delayed work CDR processing as a major challenge to implementing BOND.

Since the start of the demonstration, SSA has had a significant backlog of treatment group subjects needing a work CDR performed.<sup>56</sup> 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 communication 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

---

<sup>56</sup> 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).

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 was able to increase 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 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.<sup>57</sup> 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. However, the remaining backlog for treatment subjects contributed to the long delays in the benefit adjustment process documented below (Section 5.6).

Delays in work CDR completion have implications for benefit adjustment. If a beneficiary reaches cessation 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 with the second month after the cessation month). If SSA completes the adjustment after this three-month period and the beneficiary continues to engage in SGA, overpayments are likely (see Chapter 6). For subjects with exceptionally long delays, another possible consequence is late notification of the end of the BPP (Chapter 8).

#### **5.4. 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 SSA minimize over- and underpayments to beneficiaries. When SSA completes a work CDR and

---

<sup>57</sup> 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.

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.<sup>58</sup> 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 subsequent AEEs by mail; those who do not return the AEE by mail are called by the team in January. 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 processes for identifying beneficiaries in need of an initial AEE and for completing AEEs have evolved in two main ways over the course of the demonstration. First, early in the demonstration, BOND site office staff had insufficient information to identify all beneficiaries in need of an initial AEE. However, since the Implementation Team began monthly reviews of BTS data in early 2013 this process has run smoothly (Derr et al. 2015).

Second, as discussed in Section 4.4, early in the demonstration, staff in several sites struggled to accurately complete AEEs and other post-entitlement work<sup>59</sup> while fulfilling benefits counseling responsibilities. To address this issue, in December 2013 the Implementation Team created the Centralized Post-Entitlement (CPE) Team, which has since processed AEEs for the majority of the 10 BOND sites (Derr et al. 2015).

Centralizing post-entitlement work led to an improvement in the quality of AEEs and other post-entitlement work. Members of the BOND Implementation Team explained that many of the CPE team members have experience working at SSA and apply this background to their current work. Furthermore, while some WIC and EWIC staff had expressed disinterest in this work, this sentiment appears to be rare among the CPE team staff. In fall 2014, a large majority (86 percent) of WIC and EWIC staff focus group participants in centralized sites favored centralization of AEEs and other post-entitlement work. BOND staff perceived that beneficiaries received higher quality support as a result and the staff submitted fewer records with errors. Indeed, in late 2012 and early 2013, about 30 percent of submitted AEEs contained errors, and in 2014—following centralization—this fell to one percent (Derr et al. 2015). In addition, work unit staff reported a decline in over- and underpayments resulting from inaccurate AEEs.

Centralization also created new challenges. First, WIC, EWIC, and CPE team staff indicated that some beneficiaries in sites with centralized post-entitlement work were initially confused about the roles of counselors and CPE staff and to whom to direct questions. To resolve the confusion, Implementation Team leadership instructed WIC and EWIC staff to answer post-entitlement questions and then refer beneficiaries to a CPE team member for further assistance. Second, in centralized sites, some WIC and

---

<sup>58</sup> AEEs are used for prospective adjustments and thus back-door offset entrants do not have the opportunity to submit an AEE for their first year (or years) of offset use for years that have already passed. These beneficiaries must submit an AEE for the current calendar year and, once notified of this requirement, are subject to benefit suspension until they submit an AEE.

<sup>59</sup> Other post-entitlement work includes documenting and substantiating evidence of non-countable income that should be deducted from earnings to calculate benefits.

EWIC staff reported that they are inadequately informed about the status of the post-entitlement work, and therefore poorly positioned to answer beneficiaries' questions or anticipate delays or other issues. Each centralized site has a designated CPE team member to handle post-entitlement work, so staff know to whom to direct inquiries, but in 2014 focus groups some counseling staff described being less informed than when they had direct responsibility for the work.

## **5.5. Activities Related to Benefit Adjustment Under the Offset Rules**

Initial benefit adjustment is the final milestone of the benefit offset adjustment process. SSA developed BSAS, a computer program that interfaces with SSA's data systems, to adjust SSDI benefits for treatment subjects after the beneficiary submits an AEE. SSA also uses BSAS to conduct automated reconciliation with IRS data. BSAS functions as intended for the cases with an AEE but automated reconciliation functionality has been problematic, requiring SSA staff to conduct manual review and adjustments.

### **5.5.1. Implementation of the Benefit Adjustment Process**

The process used to adjust benefits under offset rules differs according to whether or not the beneficiary submits an AEE. Front-door offset users submit AEEs ahead of their initial offset adjustment. Depending on the timing of work CDR completion relative to the date the beneficiary's earnings first meet the threshold for offset use, these adjustments may take place during the initial calendar year of offset use or during a subsequent calendar year.<sup>60</sup> In addition, both front-door and back-door offset users generally submit AEEs to facilitate adjustment for years of offset use following their initial adjustment. In all of these cases for which the AEE predicts earnings above BYA, BSAS uses the information on the AEE to make contemporaneous adjustments to benefits. In addition, BSAS makes adjustments in response to revised AEEs submitted within the calendar year.

After the end of each calendar year, SSA also uses BSAS to compare expected earnings to earnings reported in IRS records and makes additional retroactive benefit adjustments for the prior year in the event of a substantial difference. The purpose of these reconciliations is to issue the correct benefit amount for the previous calendar year. SSA only processes automated reconciliation for beneficiaries with a work CDR determination indicating disability cessation because only those beneficiaries are potentially eligible for adjustment of benefits under the offset. This group includes both back-door offset users who have not previously had a benefit offset adjustment and beneficiaries whose benefits were adjusted for the year in consideration. SSA uses manual reconciliation to adjust benefits in earlier years for which automated reconciliation has already taken place. For example, if a beneficiary had a work CDR completed in December 2016 that established a cessation date in 2015 (see Section 5.3.3), SSA would run a manual reconciliation because the 2015 automated reconciliation already had been processed.

### **5.5.2. Performance of BSAS**

BSAS performs well for most contemporaneous adjustments based on AEEs, with one exception. At the start of the demonstration, AEE-based offset adjustments took no longer than three days. A BSAS

---

<sup>60</sup> Note that the initial benefit adjustment may not be for the first year of offset use, but instead for a later year of offset use. When this is the case, a reconciliation is required to determine the benefit adjustment amount for each earlier year of offset use.



correction in December 2012 successfully addressed the underlying issues causing those relatively minor delays (Gubits et al. 2013). According to ORDES and BOND staff, BSAS currently functions well for many adjustments based on AEEs. The exception is AEEs for former offset users whose earnings have dropped below BYA. BSAS is unable to process these cases, and instead ORDES staff must process them manually. The Implementation Team has observed delays with this manual process, leading to delays in beneficiaries' return to full benefits.

For retroactive adjustments made through automated reconciliation, BSAS did not work well during the first three years of the demonstration. One issue was related to the timeliness of automated reconciliation. We have previously reported that issues with BSAS functionality were responsible for long delays in the automated reconciliation processes for 2011 and 2012 benefits, and these issues persisted for the 2013 benefit adjustment process (Derr et al. 2015). Automated reconciliation for a given year is scheduled for August of the following year, but SSA delayed the 2011 automated reconciliation by five or six months (conducted in January and February 2013) and 2012 automated reconciliation by one or two months (conducted in four batches in September and October 2013). SSA conducted 2013 automated reconciliation in late April through May 2015—eight months after the scheduled date of August 2014.

The direct result of such delays is an extended wait for benefit reconciliation, which affects both beneficiaries with a benefit offset adjustment in the previous year and first-time offset users. For the latter group, the result is an extended period of time in which beneficiaries may accumulate over- and underpayments and perhaps not understand how their earnings are affecting their benefits. These delays have presumably been more common for back-door entrants than for front-door entrants, because back-door entrants typically enter through the automated reconciliation process that was the source of many of the adjustment delays.

Going forward, the timeliness of automated reconciliation appears to have been resolved. SSA ran automated reconciliation for 2014 on schedule in August and September 2015 and adhered to the same schedule in 2016 for automated reconciliation for 2015 earnings.

However, partly due to the delays in initiating automated reconciliation in early years of implementation, BSAS is still not fully automated for many cases. During the automated reconciliation run in August 2016 (for 2015 earnings), BSAS could not fully process the vast majority of cases (about 3,000 of the approximately 3,700 cases; 78 percent). The same was true for the majority of cases processed during the 2015 automated reconciliation. These cases required manual review before completion. The primary source of the issue was the downstream effect of delayed automated reconciliations for earnings in 2011, 2012, and 2013; ORDES staff expect this issue to be resolved in the August 2017 run (for 2016 earnings).<sup>61</sup> The effect of the manual review is to slightly delay sending overpayment notices to beneficiaries. Before 2016, ORDES staff members' availability to manually process cases was limited. 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.

---

<sup>61</sup> 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. Automated reconciliation has been run on time in recent years, but there was no COLA in 2015. Resolution is expected in August 2017 when automated reconciliation is run following the 2016 COLA applied in December 2016.

## 5.6. 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 5-3 compares cumulative statistics on T1 subjects with a first month of offset use to cumulative statistics on T1 subjects for whom SSA had adjusted benefits, based on SSA administrative data and BTS records.<sup>62</sup> The upper line in the exhibit shows the cumulative percentage of T1 subjects known to have first begun a period of offset use (that is, those who earned above BYA 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.

The lower line in the exhibit shows the cumulative percentage of T1 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.<sup>63</sup> The main reason the two series differ is that SSA's initial adjustment of benefits for a beneficiary generally occurs many months after the first month of offset use. Median duration between these two months is 22 months; we present additional duration statistics below.<sup>64</sup>

---

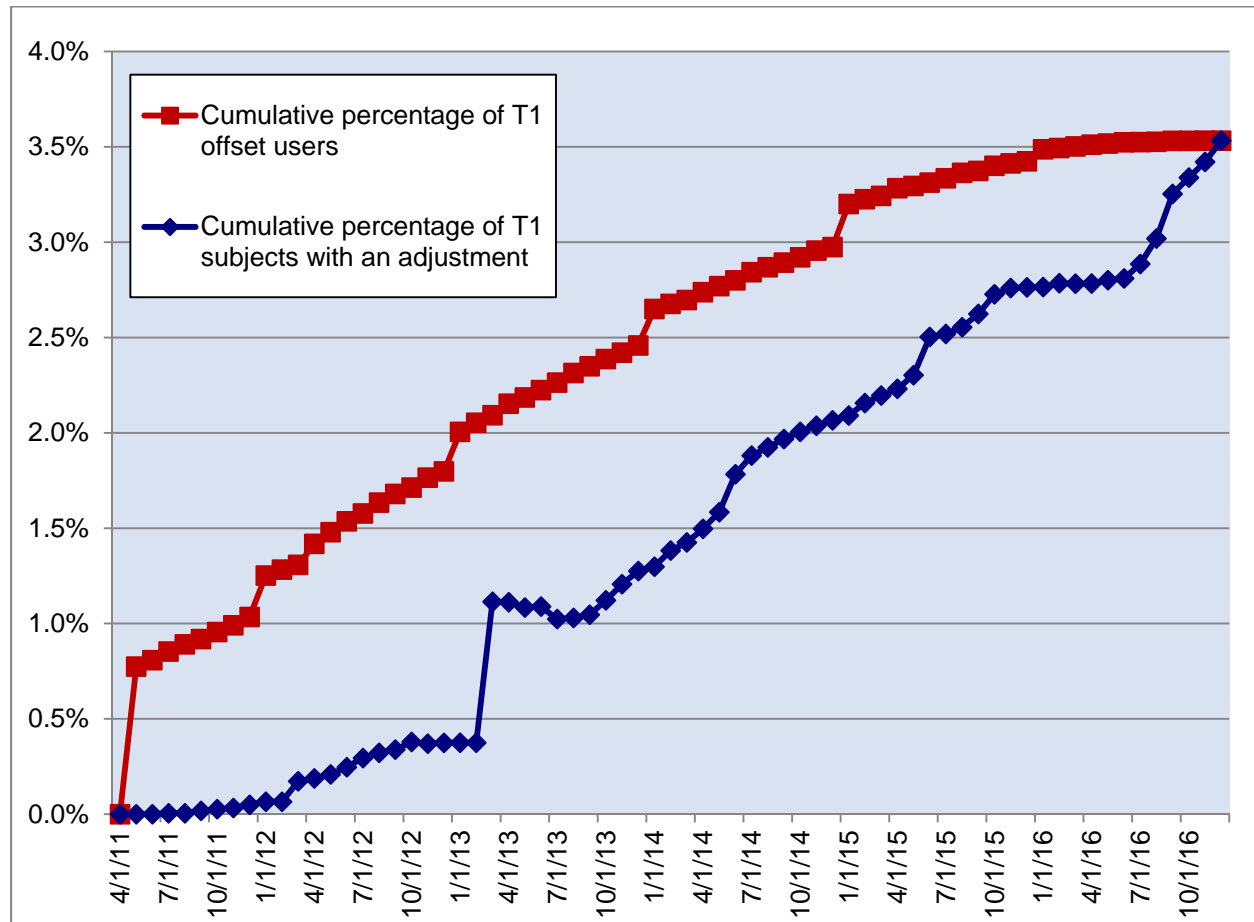
<sup>62</sup> The data on cumulative offset use are based on a monthly extract from SSA's MBR as well as calculation and verification of first offset month by SSA staff. The data on cumulative percentage with adjustments in 2011 and 2012 are from manual updates made by SSA staff to BTS and were verified by SSA staff. The data on cumulative adjustments in 2013, 2014, 2015, and 2016 are from a combination of BTS, BSAS, and MBR data. Each January, there was a jump in identified offset use (upper line) for all subjects. This likely reflects the interaction between SSA work incentive rules and use of calendar year earnings (when SSA does not have detailed monthly information from beneficiaries) in reconciliation. Specifically, if a beneficiary has earnings above BYA, SSA can count the first nine months of the calendar year as the TWP and the remaining months as the GP, and then adjust benefits starting the following January.

<sup>63</sup> 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.

<sup>64</sup> 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 the 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 T1 offset users in 2016 or earlier, so the cumulative percentage of T1 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.

**Exhibit 5-3. Cumulative T1 Offset Users and Cumulative T1 Subjects with an Offset Adjustment, Based on December 2016 Data**



Source: Monthly extracts from SSA’s MBR.

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 the 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 the 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 number of T1 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 5-3 to the corresponding upper line shows that the duration from first use to first adjustment was substantial for many T1 offset users. For example, in February 2013, 1,586 beneficiaries (2.1 percent) had used the offset but SSA had only adjusted the benefits of 298 beneficiaries (0.4 percent). In the next month, March 2013, the number of offset users grew marginally to 1,662 beneficiaries (2.1 percent) while the number of beneficiaries with an adjustment jumped to 885 (1.1 percent) because SSA made many retroactive

adjustments in that month, as it completed 2011 automated reconciliation. The number of first adjustments has been rising sharply since June 2016, as a result of ORDES' progress in reducing the work CDR backlog along with the December 2016 adjustments resulting from automated reconciliation for 2015.

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 2,257 cessation months that SSA recorded from March 2014 through September 2016 were recorded more than three months after the cessation month.

For first adjustments made between February 25, 2013, and December 31, 2016, Exhibit 5-4 provides statistics on the duration between the first month of offset use and SSA's first adjustment of benefits.<sup>65</sup> We do not have comparable BTS statistics for C1 subjects (duration from first month of SGA-level earnings after the GP during the EPE until benefits are actually suspended). The unobserved durations for C1 subjects may be as long as or longer than those shown for T1 subjects, because two of the administrative issues that are the source of major delays for T1 subjects—reporting delays and work CDR backlogs—also apply to current-law beneficiaries.

As seen in the exhibit, almost two-thirds of first adjustments occur between 12 and 30 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 22 months.

To better understand the reason for this 22-month delay, we also present processing times in Exhibit 5-4 separately by whether offset entry occurred after submission of an AEE or via the reconciliation process. Submission of a qualifying AEE is a proxy for front-door entry, and reconciliation is a proxy for back-door entry.<sup>66</sup> As discussed previously, the first pathway is expected to take less time than the second because front-door entrants report earnings themselves and are often proactively engaged in the process, and because back-door entries were delayed due to previously noted delays in the automated reconciliation process. About half of first adjustments during this period were made by each method.

---

<sup>65</sup> This is an update to Exhibit 7-4 in Hoffman et al. 2017. We did not include data for the 10 percent of adjustments 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 therefore should have been in benefit suspense when they were enrolled into BOND.

<sup>66</sup> 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.

**Exhibit 5-4. Duration from First Offset Use to First Benefit Adjustment**

Time to First Adjustment	All T1 Offset Users Through 2016		T1 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	252	10.00	218	17.58	34	2.65
6 to 12 months	239	9.48	214	17.26	25	1.95
12 to 18 months	320	12.69	212	17.10	108	8.43
18 to 24 months	917	36.37	290	23.39	627	48.95
24 to 30 months	404	16.03	174	14.03	230	17.95
30 to 36 months	191	7.58	70	5.65	121	9.45
More than 36 months	198	7.85	62	5.00	136	10.62
<b>Total</b>	<b>2,521</b>	<b>100.00</b>	<b>1,240</b>	<b>100.00</b>	<b>1,281</b>	<b>100.00</b>

Source: BTS.

Note: This table tabulates the time from first offset use to first benefit adjustment for the 2,521 offset users who had an initial benefit adjustment between February 25, 2013 and December 31, 2016.

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 (17 months) as it was for those for whom benefits were adjusted by reconciliation (23 months). SSA adjusted the benefits of 18 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 3 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 5 percent of entrants via an AEE and 11 percent of entrants via reconciliation.

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 limited to the 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, if a beneficiary uses the offset upon entry in the demonstration, but did not experience a benefit adjustment until 22 months later, the beneficiary would not fully experience the income consequences of his or her earnings until almost halfway through the BPP.

Delays in delivering the incentive via the adjustment process are 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 the effects of overpayment recovery on their subsequent benefit checks.

In addition, delays in receiving a benefit adjustment may lead to accumulation of overpayments, and the overpayments themselves may have impacts on subsequent earnings that are difficult to predict, especially if unexpected. Evidence on the prevalence and size of overpayments appears in Chapter 6.

## 5.7. Variation in Steps to Offset Adjustment Across Sites and Beneficiaries

Thus far in this chapter, we provided information on beneficiaries' attainment of milestones on the way to offset use for all T1 subjects. In this section, we describe variation in milestone achievement by site and by beneficiary characteristics.

### 5.7.1. Variation in Milestones Attainment Across Sites

If the extent to which beneficiaries attain milestones on the path to the offset is influenced by the way BOND is implemented, or by variation in the external environment such as the labor market conditions beneficiaries face, we would expect variation across sites in milestone attainment. As we have documented elsewhere, there is substantial variation in the strength of the local labor market across sites (Section 3.2). Implementation also varies across sites, as we have also documented (Derr et al. 2015). The background characteristics of T1 subjects are also likely to vary, another factor that could lead to differential milestone attainment across sites. Geographic variation found among the 10 nationally representative demonstration sites is indicative of variation among the approximately 50 areas defined by SSA's Area Offices<sup>67</sup> under a national benefit offset, whatever the cause.

Offset use varies substantially among sites (see the third column of Exhibit 5-5). As of December 2016, the percentage of T1 subjects identified as offset users was highest in the DC Metro area site, at 6.4 percent, a value 2.7 times as large as in Alabama, the site where the percentage of identified users is lowest, at 2.4 percent. Cross-site variation is also present in the percentages of T1 subjects with cessation dates in BTS as of December 2016 (first column of the exhibit) and those with successfully submitted AEEs (second column). With only two exceptions, the ranking of sites by percentage with an offset adjustment is identical to the ranking of sites by percentage with a cessation date, indicating that cessation is an essential precursor to the subsequent events—AEE submissions and offset adjustments. Although the number of offset adjustments per case with a cessation date varies somewhat across sites (between 0.49 and 0.62), the primary source of variation in offset use appears to be variation in the percentage of T1 subjects in a given site with a cessation date.

At this point in the demonstration it seems likely that cross-site variation in cessation rates is primarily due to differences in T1 subjects' background characteristics from site to site or variation in site-level environmental factors external to BOND, such as local labor market conditions. Site-level variation in implementation of processes to identify substantial earnings and conduct work CDRs might have contributed to variation in recognition of SGA-level earnings early in the demonstration. However, these processes were later centralized, reducing such variation. It is not possible to isolate the individual influence of each factor, given the number of factors that might cause site-level variation and the relatively small number of sites in the study. Yet, the existence of geographic variability due to a variety of factors is useful context for understanding the impact estimates provided in Chapter 9.

---

<sup>67</sup> The coverage areas of SSA's area offices generally correspond to states.

**Exhibit 5-5. Percentage of T1 Subjects Achieving Steps towards Benefit Adjustment Under the Offset by Site, through December 2016**

	Cessation Date in BTS (%)	AEE Successfully Submitted to SSA (%)	At Least One Month of Benefit Adjustment Under the Offset Rules (%)	Proportion of Cessations with a Benefit Adjustment Under the Offset Rules
Alabama	4.17	2.36	2.21	0.53
Arizona/SE California	6.65	3.76	3.40	0.51
Colorado/Wyoming	7.14	4.11	4.11	0.58
DC Metro	9.63	6.39	5.99	0.62
Greater Detroit	5.54	3.23	3.10	0.56
Greater Houston	9.00	5.45	5.18	0.58
Northern New England	7.41	4.64	4.49	0.61
South Florida	5.44	2.84	2.67	0.49
Western New York	6.10	3.77	3.62	0.59
Wisconsin	5.88	3.75	3.12	0.53
<b>Total</b>	<b>6.34</b>	<b>3.77</b>	<b>3.53</b>	<b>0.56</b>

Source: Analysis of BTS records.

### 5.7.2. Variation in Milestone Attainment by Beneficiary Characteristics

Separate from site-level variations in implementation, progress along the pathway to benefit offset adjustment varies with beneficiaries' baseline characteristics. Exhibit 5-6 compares baseline characteristics of three groups of T1 beneficiaries based on achievement of the different offset milestones through December 2016. The groups are: (1) beneficiaries who had neither a disability cessation date nor a benefit offset adjustment (non-offset users without a cessation date), (2) non-offset users with a cessation date, and (3) offset users—those who had a benefit adjustment in at least one month through December 2016. We found statistically significant differences across the three groups with respect to age, primary impairment, and all program-related characteristics, all measured at baseline. The one characteristic for which there is no statistically significant difference across groups is gender. We summarize the nature of the statistically significant differences below.

Beneficiaries with an offset adjustment were more likely than the two non-user groups to be young when they enrolled (20–29 or 30–39 years old at baseline); to have a primary impairment of neoplasms (for example, cancer), genitourinary system disorders, or injuries; to be a short-duration beneficiary; to be entitled to benefits on their own work history (rather than a DAC or DWB); and to be the direct recipient of benefit payments (rather than receiving benefits through a representative payee).

The two groups of beneficiaries with cessation dates (one group had used the offset and the other had not) were more similar to each other than to those without cessation dates in terms of age, primary impairment, being the direct recipient of benefits, and concurrent receipt of SSDI and SSI benefits. About 86 percent of non-users with a cessation date and beneficiaries with an offset adjustment received only SSDI benefits (rather than concurrent SSDI and SSI benefits) compared to 83 percent of non-users without a cessation date.

Surprisingly, with regard to several other characteristics, beneficiaries with an offset adjustment were more similar to non-users without a cessation date than to non-users with a cessation date. First, about half of non-users without a cessation date and 56 percent of those with an offset adjustment were short-duration SSDI beneficiaries, while roughly one-third of non-users with a cessation date were short-duration beneficiaries. Finally, non-users with a cessation date had the lowest Averaged Indexed Monthly Earnings (AIME) and monthly SSDI benefit amounts of the three groups.

In a multivariate regression analysis, many of these beneficiary characteristics are predictive of being an offset user. We estimated a linear probability model for offset use from the beginning of the demonstration through December 2016, with explanatory variables for gender, age category, primary impairment, and duration of SSDI receipt at BOND entry, plus a continuous variable for duration of SSDI receipt (Exhibit 5-7). Age is a statistically significant predictor of benefit adjustment under the offset. For example, beneficiaries ages 20–29 were 10.2 percentage points more likely to use the offset relative to beneficiaries ages 55 and older, holding other characteristics constant. Similarly, a primary impairment of genitourinary system disorder was associated with a higher likelihood of offset use relative to impairments in the “other” category, while mental disorders, back or musculoskeletal disorders, nervous system disorders, circulatory system disorders, respiratory disorders, and severe visual impairments were significantly associated with a lower likelihood of offset use relative to “other” impairments. Disabled adult child beneficiaries, disabled widow beneficiaries, beneficiaries with representative payees, and concurrent SSDI and SSI recipients were also less likely to have a benefit adjustment than beneficiaries without those characteristics, all other things equal.



**Exhibit 5-6. Treatment Subject Characteristics by Steps Toward Benefit Offset Adjustment (through December 2016)**

Baseline Characteristic	Non-Offset User, No Cessation Date (1)	Non-Offset User, with Cessation Date (2)	Benefit Offset Adjustment by December 2016 (3)	P-value
<b>Number of Beneficiaries</b>	<b>74,397</b>	<b>2,234</b>	<b>2,805</b>	
<b>Gender</b>				
Male (%)	51.7	50.9	51.1	0.643
Female (%)	48.3	49.1	48.9	
<b>Age</b>				
20–29 years (%)	7.1	11.0	18.9	0.000***
30–39 years (%)	12.5	22.7	23.5	
40–44 years (%)	10.4	14.5	14.3	
45–49 years (%)	16.3	17.1	14.7	
50–54 years (%)	23.5	18.4	15.5	
Over age 55 (%)	30.2	16.3	13.0	
Mean age (years)	47.7	43.7	41.3	0.000***
<b>Primary Impairment</b>				
Neoplasms (%)	3.2	2.4	5.6	0.000***
Mental Disorders (%)	29.5	40.3	35.5	
Back or Other Musculoskeletal (%)	24.9	17.2	18.2	
Nervous System Disorders (%)	7.2	5.6	5.6	
Circulatory System Disorders (%)	6.7	3.5	4.5	
Genitourinary System Disorders (%)	1.8	2.3	3.7	
Injuries (%)	4.2	5.1	5.3	
Respiratory (%)	2.2	1.4	1.3	
Severe Visual Impairments (%)	1.9	1.6	1.9	
Digestive System (%)	1.8	1.4	1.9	
Other Impairments (%)	16.5	19.1	16.6	
<b>Length of SSDI Receipt</b>				
Short duration (36 months or less) (%)	50.3	30.4	55.9	0.000***
Number of years received SSDI	6.5	8.4	4.7	0.000***
<b>Benefit Amount and Status</b>				
Monthly SSDI benefits (\$)	1,010.9	981.0	1,029.8	0.004***
AIME (May 2011) (\$)	1,708.7	1,507.9	1,840.4	0.000***
Disabled adult child (DAC) (%)	11.2	6.5	5.5	0.000***
Disabled widow beneficiary (DWB) (%)	1.9	0.7	0.4	0.000***
Dually entitled disabled adult child (%)	1.9	3.0	2.2	0.038**
Dually entitled disabled widow beneficiary (%)	0.9	0.6	0.3	0.000***
Payee is other than self (%)	17.1	14.5	11.2	0.000***
SSDI-only	82.8	86.4	85.8	0.000***
Concurrent	17.2	13.6	14.2	0.000***

Source: Analysis of BTS records and baseline administrative SSA records.

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 an omnibus statistical test of difference between groups across all characteristics is 3,442.87 with a p-value of 0.000\*\*\*.

\*\*\*/\*\*/\* indicate statistical significance at the 0.01/0.05/0.10 levels.

**Exhibit 5-7. Predictors of Benefit Adjustment Under the Offset Rules through December 2016**

Predictor of Benefit Offset Adjustment	Coefficient (1)	Standard Error (2)	P-value
<b>Gender</b>			
Male	-0.33	0.10	0.012**
<b>Age</b>			
20–29 years	10.16	0.76	0.000***
30–39 years	5.98	0.59	0.000***
40–44 years	3.90	0.38	0.000***
45–49 years	2.07	0.25	0.000***
50–54 years	1.01	0.24	0.002***
Over age 55	0.0	--	--
<b>Primary Impairment</b>			
Neoplasms	1.26	0.86	0.177
Mental Disorders	-0.74	0.26	0.020**
Back or Other Musculoskeletal	-1.55	0.22	0.000***
Nervous System Disorders	-2.08	0.35	0.000***
Circulatory System Disorders	-1.54	0.37	0.002***
Genitourinary System Disorders	1.78	0.72	0.035**
Injuries	-0.36	0.33	0.299
Respiratory	-1.73	0.42	0.002***
Severe Visual Impairments	-1.12	0.53	0.064*
Digestive System	-0.78	0.47	0.131
Other Impairments	0.0	--	--
<b>Length of SSDI Receipt</b>			
Short duration (36 months or less)	-0.19	0.21	0.380
Number of years received SSDI	0.01	0.01	0.235
<b>Benefit Amount and Status</b>			
Monthly SSDI benefits (\$1,000)	0.20	0.24	0.421
AIME (May 2011) (\$1,000)	0.37	0.13	0.020**
Disabled adult child (DAC)	-4.03	0.47	0.000***
Disabled widow beneficiary (DWB)	-0.80	0.39	0.068*
Payee is other than self	-1.98	0.28	0.000***
SSDI-only	1.27	0.31	0.003***

Source: Analysis of BTS records and baseline administrative SSA records.

Notes: The model was estimated using a linear regression model without weights, with standard errors that are robust to heteroskedasticity and to clustering by site. The outcome variable is an indicator of whether the recipient has at least one month of offset use through December 2016. Adjusted R-squared: 0.02, Model F-statistic is 16.63, p-value 0.000\*\*\*.

Sample size: 79,436.

\*\*\*/\*\*/\* indicate statistical significance at the 0.01/0.05/0.10 levels.

## 5.8. Duration of Offset Use

After first using the benefit offset, beneficiaries may continue to earn above BYA and continue to use the offset, or they may return to full benefits if their earnings fall below BYA. Beneficiaries may stop using the offset because a worsening medical condition or other change in their circumstances prevents them from continuing to earn more than BYA, or simply because they 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 2,332 users who are known to have started using the offset in 2014 or earlier, based on all adjustments made through December 2016; we excluded 473 known users whose first offset was after 2014 or, in 9 cases, for whom information is incomplete. We observe use by all of the users in this sample from three to six years, depending on when their first use occurred.

A substantial majority (64.0 percent) of these 2,323 offset users continued to use the offset for at least two consecutive years, and nearly half (46.9 percent) used it for at least three consecutive years (Exhibit 5-8). Information on longer use of the offset by these users is incomplete, because for those who first used the offset in 2014 we only have data for three years. The bars in Exhibit 5-8 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, 31.1 percent of these users have used the offset for four consecutive calendar years, 18.2 percent for five years, and 5.6 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 (intermittent users). This includes 15.1 percent who used it for at least two calendar years, 9.3 percent for at least three years, 5.0 percent for at least four years and 1.3 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. It is important to keep in mind, however, that a substantial number of the users in this sample had already been using the offset for two or more calendar years before SSA first adjusted their benefits under the offset (Exhibit 5-4).<sup>68</sup> Hence, use for two or even three years does not imply that the subject made a conscious decision to continue using the offset after the first year.

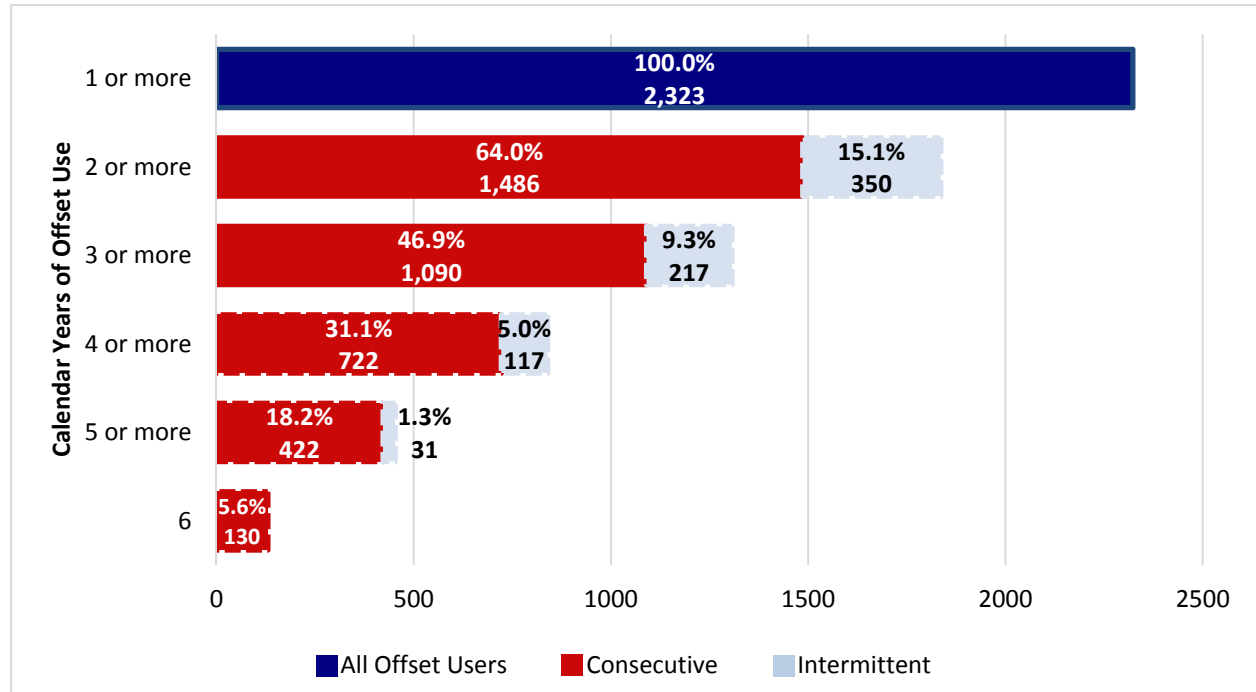
In-depth telephone interviews conducted in late 2015 with 20 T1 subjects who had used the offset suggested various reasons why some beneficiaries use the offset for short periods (in only one calendar year), while others use it for longer periods (for three or more consecutive years; for more detail, see Hoffman et al. 2017). Short-term offset users most frequently named physical or mental health issues as the main factor that determined whether and how much they worked and earned (7 of 10). Long-term offset users were more likely to identify a work facilitator, such as work accommodations, or personal motivation to work and earn more as the main determinant of how much they worked and earned. This suggests that use of the offset for long periods requires a favorable combination of stable medical

---

<sup>68</sup> The distribution of duration from first offset use to first adjustment for those users in Exhibit 5.8 is likely somewhat different from the distribution depicted in Exhibit 5.4, although qualitatively similar. The reason is that the samples of users underlying the two exhibits are different, reflecting their different purposes. Exhibit 5-8 describes subjects whose first year of offset use was 2011 through 2014, while Exhibit 5-4 describes subjects whose first year of offset use was 2011 through 2016.

conditions, accommodations, and/or motivation. It is important to recognize, however, that the samples for these interviews are limited by their nature<sup>69</sup> and, even if they were not, we could not infer causality from such responses.

**Exhibit 5-8. Calendar Years of Offset Use for Treatment Subjects with First Use Observed in 2014 or Earlier, as of December 2016**



Source: Analysis of BTS records.

Note: The 2,323 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 9 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. 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 off 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.

<sup>69</sup> The sample sizes are small and the respondents cannot be considered representative of all T1 subjects within these two subgroups.

## 5.9. 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 the offset. To date, about half of the T1 offset users have entered through the front door. The other users have entered through the back door, because they did not report earnings in a timely manner. Instead, SSA discovered their earnings, usually from IRS records, and—with a few exceptions—completed the work CDR and first benefit adjustment without obtaining a completed AEE.

As of December 2016, SSA had adjusted the benefits of 3.5 percent of T1 subjects. The percentage of identified T1 subjects known to have used the offset by the end of 2016 will increase as SSA completes processing of the work CDR backlog.

An additional 2.8 percent of T1 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.

The low percentage of offset users recognized to date is likely a function of several factors:

1. Many beneficiaries may be unable, uninterested, or unprepared to engage in sustained SGA-level work. SSA determined that they 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.
2. Some beneficiaries who are interested, but unprepared, to use the offset may have become aware of the opportunity to use the offset only after follow-up outreach, and others may never have become aware of the opportunity (Section 5.2).
3. After becoming aware of the offset opportunity, some beneficiaries 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, there is often a lengthy delay before SSA actually makes that adjustment.

Based on analysis of the delays from the first month of offset use to SSA's first adjustment of benefits, we know that for 472 of the 539 T1 subjects (88 percent), whose first adjustments occurred in 2016, SSA retroactively identified earlier years of offset use before 2016. As SSA processes the substantial 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. For all offset users with first adjustments in 2013 through 2016, the median duration was 22 months, or just slightly less than two years.

We have identified three main sources of the often long delays from the start of offset use to the first benefit adjustment. First, many beneficiaries fail to report earnings, which delays the start of the benefit

adjustment process and is one reason that durations are longer for those who enter the offset via the reconciliation process. Second, once SSA recognizes the need for a work CDR, lags in the processing of work CDRs delay determining when the beneficiary first used the offset. Historically, these lags have primarily been the result of insufficient resources at the BOND work unit to process the work CDR cases timely. Twelve percent of BOND treatment subjects in the most recent ORDES work CDR queue had encountered CDR processing times longer than 270 days. Finally, BSAS deficiencies 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 for the half of first adjustments that were made without the completion of an AEE (23 months) to the median for the half of adjustments that occurred after completion of an AEE (17 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 this topic 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 7) 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.

## 6. Overpayments

Several challenges have hindered timely and accurate benefit offset adjustment for BOND treatment subjects (Section 5.5). 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 adjustment under the offset, presents estimates of BOND's impact on overpayments among T1 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

### 6.1. 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 only on work-related overpayments, which are the most prevalent type of overpayment (SSA Office of the Inspector General 2015) and the only type of overpayment directly affected by BOND.<sup>70</sup>

Work-related overpayments may occur for several reasons, all of which relate to the timeliness and accuracy of benefit adjustment as income changes. Among the issues that may trigger an overpayment are beneficiaries' failure to report earnings in a timely manner, revised AEEs, inaccurate AEEs,<sup>71</sup> delays in SSA processing of work CDRs, and BSAS errors resulting in delays in adjusting benefits (see Section 5.5). After beneficiaries have used their three GP months, both treatment and control subjects may accrue work-related overpayments while in the BPP and EPE, respectively. Some circumstances that generate overpayments are unique to treatment subjects. Specifically, AEEs and BSAS are not relevant to control subjects and hence do not contribute to overpayments for those beneficiaries.

Overpayments fall into two categories. The first is *overpayments* (with no modifier) identified after the current annual accounting period ends. When SSA identifies this type of overpayment, it requires beneficiaries to repay the owed amount either by check or through withheld future benefits. Beneficiaries have the right to appeal the overpayment, and SSA may agree to set up a repayment plan to mitigate financial hardship. Of all the overpayment debt identified 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).

The second type of overpayment that may occur for treatment subjects (but may not occur for control subjects) is *incorrect payments*, 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

---

<sup>70</sup> Other reasons for overpayments include 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.

<sup>71</sup> To have an accurate AEE, beneficiaries must accurately predict not only earnings but also non-countable income, such as paid time off and impairment-related work expenses.

of the calendar year, whichever comes first.<sup>72</sup> Beneficiaries with incorrect payments do not have the right to appeal the overpayment (Derr et al. 2015). In contrast, control subjects cannot accrue incorrect payments. Control beneficiaries are subject to current law, under which SSA uses a monthly accounting period to adjust benefits and identifies overpayments after the end of that period. There is no opportunity to identify overpayments within the monthly accounting period followed under current law.

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 earn more than they initially predicted and submit a revised AEE for a larger amount in the same 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. We do not have information on the recovery rate for incorrect payments, which may differ from the rate for overpayments because the recovery process differs and incorrect payments only occur for treatment beneficiaries.

In the remainder of this chapter, we use overpayments to refer to both types of work-related overpayments: overpayments and incorrect payments.

## 6.2. Prevalence of Overpayments

In this section, we use administrative data to describe the prevalence and size of overpayments made to T1 beneficiaries. We supplement these findings with qualitative data from focus groups with BOND staff and in-depth interviews with beneficiaries.

We use SSA administrative data to provide statistics on the prevalence and size of overpayments among T1 beneficiaries through December 2014 and also formally test the impact of the benefit offset on the prevalence and size of overpayments during this same period. Given that SSA often identifies and reports overpayments many months after they occur, we end the analysis in 2014. This allows for a 22-month lag in identifying overpayments. Because the median duration from first month of offset use to SSA's first adjustment of benefits is 22 months (see Chapter 5), this lag will miss about half of all overpayments for 2014, particularly overpayments that continue to accrue for a substantial period after 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. We first used the administrative data to estimate overpayments through 2013 in the *2016 Stage 1 Interim Process, Participation, and Impact Report* (Hoffman et al. 2017). The results in this report extend the analysis through 2014 and update the 2011, 2012, and 2013 results; a comparison of the updated 2011, 2012, and 2013 results with the previous analysis provides an indication of the size of the bias in the new estimates.

---

<sup>72</sup> 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.



Our sample includes only BOND disabled-worker beneficiaries who were entitled to SSDI solely based on their own earnings histories and only for those with data for each month of the calendar year because it was not possible to produce accurate overpayment estimates for others.<sup>73</sup> For this reason, the impact estimates for overpayments are based on a subset of the samples for which we report impacts on earnings and benefits in Chapter 7.<sup>74</sup> More information on the 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 the qualitative data, we summarize 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 T1 beneficiaries conducted in 2015.<sup>75</sup>

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.

### 6.2.1. 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 are very likely to experience overpayments when they first enter the offset, and offset users we have interviewed have indicated the same (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. Exhibit 6-1 presents the unadjusted prevalence of overpayments for T1 subjects; statistics adjusted for comparability between T1 and C1 subjects are presented in the impact analysis section of this chapter. According to data

---

<sup>73</sup> See Appendix A of this report for more information on the missing data and the sample sizes for the overpayment analysis.

<sup>74</sup> The unweighted samples for the overpayment analysis include about 85 percent of subjects in the T1 sample for the impact on earnings and benefits (N=77,115) and 80 percent of subjects in the C1 sample for the impact on earnings and benefits (N=891,598). The difference between these percentages reflects differences in the selection of the sample used to estimate earnings and benefit impacts and the sample used to estimate overpayment impacts, which is a subset of the former group. For example, the sample used to estimate the impact of BOND on overpayments excluded beneficiaries with auxiliary entitlement. Because there was a higher prevalence of auxiliary beneficiaries assigned to C1 relative to T1, a relatively larger proportion of C1 subjects were omitted from the overpayment analysis relative to T1 subjects. We correct for sampling differences in the analysis of impacts by using weights based on the probability that a beneficiary is selected for inclusion in a group.

<sup>75</sup> 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 4.4). 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.

extracted in October 2016, a large majority of T1 subjects who used the offset at any time between May 2011 and December 2014 had overpayments that accrued during that period (87.4 percent). This figure represents about 2.8 percent of all T1 subjects.<sup>76</sup>

The prevalence of overpayments varied across the demonstration's first four years. Overpayments occurred for 63 percent of T1 offset users in 2011, which was the lowest in all four years. Overpayment prevalence increased to 73 percent in 2012, then gradually declined to 66 percent in 2014. These rates will rise as SSA retroactively identifies more overpaid beneficiaries, especially for the most recent years.

There are several possible explanations for the relatively low percentage of T1 offset users with an overpayment in the first year of the demonstration compared to later years. The most obvious is that we analyzed 8 months of overpayments in 2011 (May—the first month in which T1 subjects could use the offset—through December 2011) versus 12 months in 2012, 2013, and 2014. Another possible explanation is that T1 beneficiaries in EPE suspense before random assignment would have had underpayments rather than overpayments following any delay in benefit adjustment at the start of the demonstration.<sup>77</sup> It is also possible that work CDRs were processed more quickly early in the demonstration, before responsibility for the work CDR process shifted from BOND implementation staff to ORDES staff within SSA and before the backlog of pending work CDRs grew. The prevalence of overpayments among all T1 subjects increased from 2011 through 2014, despite the decline in prevalence among offset users from 2012 to 2014, because more T1 subjects were at risk of overpayments due to the increasing number of offset users in each successive year.

For those with an overpayment, the mean cumulative amount of the overpayment ranged from approximately \$2,800 in 2011 to about \$4,000 in 2012, with a mean of \$6,200 for all users with an overpayment in any month of the entire 44-month analysis period (column 4 of Exhibit 6-1). The average overpayment amount among those who were overpaid decreased from 2012 to 2014. This decrease primarily reflects that recent offset users have had less time for their overpayments to accrue and be identified. 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 T1 subjects is determined by the combination of the pattern in prevalence and the pattern in the mean overpayment amount to those with overpayments.

---

<sup>76</sup> During the same period, 3.2 percent of T1 subjects in our sample are known to have used the offset.

<sup>77</sup> Underpayments occur when beneficiaries receive less in benefits than they were entitled to receive (Section 8.4). Under current law, beneficiaries in the EPE who engage in SGA are not entitled to receive cash DI benefits, while treatment subjects with the same earnings may be entitled to a partial benefit under the benefit offset. Treatment subjects who were in EPE suspense before BOND and are entitled to a partial benefit while in BOND are underpaid if their benefits are not adjusted timely under the offset rules.

**Exhibit 6-1. Unadjusted Prevalence of Overpayments in 2011, 2012, 2013, or 2014**

Period	T1 Subjects with Overpayment (%)	Mean Overpayment in Period for All T1 Subjects	T1 Offset Users with Overpayment (%)	Mean Overpayment in Period for T1 Subjects with Overpayment in Period
May–December 2011	0.77	\$21	63.0	\$2,750
January–December 2012	1.23	\$49	72.6	\$3,986
January–December 2013	1.41	\$51	70.7	\$3,644
January–December 2014	1.53	\$49	65.7	\$3,226
May 2011–December 2014	2.77	\$171	87.4	\$6,171

Source: DBAD extracts from May 2011 to December 2014 and October 2016.

Note: Values are not regression-adjusted. We estimate overpayments starting in May 2011, the first month following BOND random assignment and the first month T1 subjects could use the offset. 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.

Unweighted sample sizes for all T1 subjects: 2011 = 65,090; 2012 = 65,193; 2013 = 65,194; 2014 = 65,201.

Unweighted sample sizes for T1 offset users: 2011 = 729; 2012 = 1,087; 2013 = 1,325; 2014 = 1,532.

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

Whereas Section 6.2.1 describes the prevalence of overpayments among all T1 subjects during the first four years of BOND, this section compares the prevalence and size of overpayments for first-time offset users to those of beneficiaries with previous benefit adjustments under BOND.

To understand overpayments relative to their potential causes, it is useful to differentiate between overpayments for first-time offset users and overpayments for beneficiaries with previous benefit adjustments. Only first-time users must complete a work CDR before SSA can issue an adjusted benefit amount under the offset. For this group, delays in the work CDR process are a major cause of overpayments. In all focus groups with WIC and EWIC staff in 2016, participants attributed the bulk of overpayments for first-time offset users to delays in SSA's processing of work CDRs. In contrast, after SSA has first adjusted benefits under the offset, SSA does not need to process a new work CDR to make offset-based benefit payments. Hence, work CDR lags no longer contribute to the prevalence and size of overpayments. Instead, counselors and post-entitlement team members explained that later overpayments may result from untimely earnings reporting, difficulty estimating income, and inaccurate AEEs. They added the caveat that while these issues also affect first-time benefit adjustments but are less important than lags in processing work CDRs.

Overpayments were smaller and less frequent after the initial benefit adjustment, according to WIC and EWIC counselors in 2016 focus groups. Most counselors (79 percent; 15 of 19 poll respondents) who participated in the online poll reported that the majority of offset users in their caseloads experienced an

incorrect payment or overpayment when they first entered the offset.<sup>78</sup> 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.

The SSA administrative data provide additional evidence that the prevalence and size of overpayments decreased after the first offset adjustment. Exhibit 6-2 shows that, among T1 subjects who used the offset both before and after the first offset adjustment, the percentage with an overpayment in any month decreased from 81 percent in the period before the first offset adjustment to 47 percent in the period after the first offset adjustment. We also see that among the same sample of T1 subjects, the percentage of offset months with an overpayment decreased from 67 percent in the period before to 37 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, likely because benefits had been reduced after the first offset adjustment but not enough relative to earnings (for example, due to higher actual earnings than the amount estimated in the AEE).

**Exhibit 6-2. Overpayments to T1 Offset Users in 2011, 2012, 2013, and 2014, Before and After First Offset Adjustment**

Outcome	T1 Offset Users with Overpayment in Any Month (%)	Mean Number of Months in Offset	Mean Percentage of Months in Offset with Overpayment (%)	Mean Overpayment per Month for T1 Offset Users with Overpayment in Period
Period before first offset adjustment <sup>1</sup>	81.08	17.73	66.65	\$506.19
Period after first offset adjustment	46.57	11.44	37.21	\$305.43

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

Note: We estimate overpayments starting in May 2011, the first month following BOND random assignment and the first month T1 subjects could use the offset. The period before the first offset adjustment is defined as the time between the beginning of the demonstration (May 2011) 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.

<sup>1</sup> Includes the first month of offset adjustment.

Unweighted sample size: T1 offset users = 904, including 772 with an overpayment in at least one month. Sample is limited to T1 subjects who used the offset both before and after their initial benefit adjustment.

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 beneficiaries' failure to report changes in earnings, or late reporting of these changes, contributed to overpayments for this group. 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

<sup>78</sup> BOND staff reported a similar incidence of overpayments during discussions in 2014, when 77 percent of poll respondents reported that overpayments always or often occur among offset-eligible beneficiaries.

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.<sup>79</sup> Such reports need to be interpreted with care; beneficiaries who spoke with their counselors about reporting their earnings may have been more confused than other T1s.

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, counselors in four focus groups 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.<sup>80</sup> Two counselors said that they had worked with overpaid beneficiaries who had 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 issues among all overpaid T1 subjects.

### **6.3. Comparison of T1 and C1 Experiences: Estimated Impacts of BOND on Overpayments**

BOND's experimental design supports a rigorous (but exploratory) analysis of the impact of the benefit offset on the rate and size of overpayments among all T1 subjects relative to what C1 subjects experienced under the current-law rules and procedures in place during the demonstration. This analysis reveals that the prevalence of overpayments for all T1 subjects was 0.43 percentage points higher than for all C1 subjects, a difference which is 18.4 percent of the control group percentage (Exhibit 6-3). Each of the yearly estimates provides evidence that the benefit offset had an effect on overpayments, albeit negative in 2011 and positive in 2012, 2013 and 2014; the evidence for 2011, 2013, and 2014 meets the criterion for "strong evidence" ( $p < 0.01$ ). The negative impact in 2011 may reflect that, after BOND

---

<sup>79</sup> 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 6.1. However, an increase in earnings is likely to lead to an overpayment whether or not it is reported. Higher-than-estimated earnings discovered in the following calendar year would be treated as an overpayment. Reporting lower earnings than estimated would not lead to an incorrect payment.

<sup>80</sup> 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 training centralized post-entitlement staff to minimize overpayments by slightly overestimating beneficiaries' income and slightly underreporting deductions.

began, responsibility for the work CDR process shifted from BOND implementation staff to ORDES staff within SSA. This shift may have slowed down the processing of work CDRs for T1s as the backlog of cases grew. The impact is largest in 2014: 0.49 percentage points, which is a 47.6 percent increase relative to the C1 mean.

**Exhibit 6-3. Estimated Impacts on Overpayments in 2011, 2012, 2013, and 2014**

Outcome	T1 Mean	C1 Mean	Impact Estimate
<b>Percentage of Beneficiaries with Overpayment<sup>a</sup></b>			
Overpaid in any month in 2011 (%)	0.77	0.92	-0.15*** (0.04)
Overpaid in any month in 2012 (%)	1.23	1.08	0.16** (0.05)
Overpaid in any month in 2013 (%)	1.41	1.04	0.37*** (0.05)
Overpaid in any month in 2014 (%)	1.53	1.03	0.49*** (0.09)
Overpaid in any month in 2011, 2012, 2013, or 2014 (%)	2.77	2.34	0.43*** (0.08)
<b>Mean Overpayment Amount for All Beneficiaries<sup>a</sup></b>			
Mean 2011 overpayment	\$21	\$49	-\$28*** (\$3)
Mean 2012 overpayment	\$49	\$71	-\$22*** (\$3)
Mean 2013 overpayment	\$51	\$69	-\$18*** (\$3)
Mean 2014 overpayment	\$49	\$69	-\$20*** (\$4)
Mean combined 2011, 2012, 2013, and 2014 overpayment	\$171	\$260	-\$88*** (\$9)

Source: DBAD extracts from May 2011 to December 2014 and October 2016 and baseline SSA administrative data.

Note: We estimate overpayments starting in May 2011, the first month following BOND random assignment and the first month T1 subjects could use the offset. 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.

<sup>a</sup> All comparisons are inclusive of all T1 subjects and all C1 subjects, including those without overpayments.

Unweighted sample sizes: T1 (2011) = 65,090, T1 (2012) = 65,193, T1 (2013) = 65,194, T1 (2014) = 65,201, C1 (2011) = 716,968, C1 (2012) = 717,427, C1 (2013) = 717,416, C1 (2014) = 717,389.

\*/\*\*/\*\* 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. Based on a comparison of the estimates for 2011 through 2013 in this report to the corresponding estimates in the *2016 Stage 1 Interim Process, Participation, and Impact Report*, it appears that future estimates of the impacts on prevalence for 2014 will increase modestly relative to those presented here. We expect larger, but still fairly modest, relative increases in the magnitude of the negative impact estimates for mean overpayment amounts in future estimates as well.<sup>81</sup>

Several factors may have increased the prevalence of overpayments under the offset relative to current law. The first factor is the delays in processing benefit adjustments under the offset because of resource constraints and problems with the adjustment process (Chapter 5). The second factor is that switching from a monthly accounting period under current law to an annual accounting period under the benefit offset might have increased the incidence of overpayments—particularly small overpayments—because of discrepancies between predicted annual earnings (on AEEs) and actual earnings. Finally, T1 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. The second and third factors both relate to the annual accounting period under BOND and thus do not apply to C1 subjects.

Although T1 subjects were more likely than C1 subjects to have an overpayment, we find strong evidence that mean overpayment amounts for all T1 subjects were lower than for C1 subjects in each of the first four years of the demonstration (Exhibit 6-3). The \$88 reduction in mean overpayments for all T1 subjects relative to all C1 subjects (where both groups include those without an overpayment) over the entire period represents 33.8 percent of the C1 mean. Two factors determine the direction and size of the impact: the relative prevalence of overpayments and the relative size of overpayments among those overpaid. Given that T1 subjects were more likely to have overpayments than C1 subjects, it is clear that the reason BOND had a negative impact on mean overpayment amounts among all T1 subjects is that the overpayment amounts of the T1 subjects with overpayments were substantially smaller than mean overpayments for C1 subjects with overpayments. This is to be expected because, holding earnings and the size of the full benefit amount constant, the monthly T1 overpayment amount is reduced by the benefit offset; it can be no larger (and is typically much smaller) than the monthly C1 overpayment amount.

The effect of assignment to the BOND treatment group on the mean size of overpayments is presumably much larger for T1 subjects with an overpayment than for all T1 subjects because most T1 subjects (97.2 percent in the overpayment sample) did not have an overpayment during the analysis period (the demonstration's first four years). We cannot calculate that value, but we can approximate it by assuming

---

<sup>81</sup> To illustrate, the estimate of the impact on overpayment prevalence in 2013—the most recent year included in the earlier report, and the year for which later revisions are largest—increased from 0.35 in the earlier report to 0.37 here (a change of about 6 percent), and the estimated negative impact on mean overpayments increased from \$15 to \$18, a 20 percent increase. Mean prevalence increased for both T1 and C1 subjects relative to the earlier report, but the increase was somewhat larger for T1 subjects (1.34 percent to 1.41 percent versus 0.99 percent to 1.04 percent for C1 subjects). The mean overpayment amount in 2013 did not change for T1 subjects, but the mean for C1 subjects increased by \$2. These small differences between the current and previous analyses indicate that the bias from excluding overpayments that are retroactively identified after the analysis period is relatively small.

that all C1 subjects in the overpayment sample with an overpayment would have had an overpayment if they had been assigned to the treatment group.<sup>82</sup> Under that assumption, the annual mean impact for T1 subjects with an overpayment equals the annual mean impact for all T1 subjects divided by the percentage of T1 subjects with an overpayment in the same year.<sup>83</sup> This calculation yields impacts on mean overpayments among those with an overpayment of -\$3,640, -\$1,790, -\$1,280, and -\$1,300 in 2011, 2012, 2013, and 2014 respectively. Computationally, the decline in the estimates over the first four years reflects the consistent increase in the prevalence of overpayments among T1 subjects (the denominator of the calculation) combined with the relatively constant value of the mean impact for all T1s (the numerator of the calculation). In other words, the mean impact is spread over more T1 subjects.

#### 6.4. 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, and 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, as described in Section 5.2.

Beneficiaries reported a wider range of reactions to overpayments during in-depth interviews in 2015.<sup>84</sup> Several beneficiaries described neutral responses to overpayments, noting that overpayments did not 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, 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. In 2015 interviews with 20 T1 offset users, 15 reported overpayments. Of these, two reported overpayments that predated BOND, and one did not provide information about the timing of the overpayment. In addition, 3

---

<sup>82</sup> The assumption required to produce these estimates may not be exactly correct—perhaps some C1 subjects would have avoided overpayments altogether if they had been assigned to T1—but the assumption seems unlikely to be so substantially violated as to make the order of magnitude of the estimates misleading.

<sup>83</sup> For example, the estimated effect of the offset on the mean overpayment amount among T1 subjects with overpayments across all four years can be calculated as  $-\$88$  (the mean impact for all T1 subjects over the four years) divided by  $.0277$  (the prevalence of overpayments among all T1 subjects), to yield  $-\$3,180$ . Because the assumption that C1 subjects who were overpaid also would have been overpaid had they been assigned to the BOND T1 group might not be exactly correct, this should be considered an upper bound for the point estimate of the mean reduction in the size of overpayments for those who would have an overpayment.

<sup>84</sup> For additional detail about beneficiaries' reactions to overpayments, refer to the *2016 Stage 1 Interim Process, Participation, and Impact Report*.



of the 10 work-oriented non-user T1 subjects interviewed also 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 he has encouraged beneficiaries to "stick it out" when they wanted to quit their jobs following overpayments. 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 BOND. 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, counselors in two focus groups 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 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.

## 6.5. 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. Refer to the *Process Study Report* (Derr et al. 2015) for additional discussion of underpayments.

The exact rate of work-related underpayments among BOND subjects is unknown due to the difficulty in distinguishing between work-related underpayments and underpayments for other reasons in administrative data. 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; nearly all WIC and EWIC counselors (18 of 20 counselors) who participated in an online poll in 2016 estimated that underpayments were rare. Similarly, only 2 of the 20 T1 offset users interviewed in 2015 reported having an underpayment and the same 2 offset users also reported having an overpayment. It is important to note that the in-depth interviews with T1 subjects were not intended to produce findings that are representative of all T1 subjects and should be interpreted with caution.

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 T1 beneficiaries. First,

centralized post-entitlement staff noted that, although beneficiaries are notified of underpayments, the underpayments are often used to offset unresolved overpayments. Thus, the large majority of offset users who initially experience overpayments may not be aware of any partially offsetting 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 and centralized post-entitlement staff. Thus, it is possible that the actual rates of underpayments are higher than counselors and beneficiaries reported during focus groups and interviews.

## 6.6. Summary

Overpayments are prevalent among T1 offset users, particularly when SSA first adjusts benefits under the offset. According to October 2016 SSA administrative data, a large majority of T1 offset users (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. A substantial share of these overpayments will not be recovered within 10 years unless the recovery exceeds SSA's experience for 2004 overpayments: 53 percent recovered, 26 percent outstanding and 21 percent waived or canceled as of 2014 (SSA Office of the Inspector General, 2015).

The prevalence and size of overpayments tended to decrease after the initial offset adjustment. During the period before the first offset adjustment, 81 percent of T1 subjects who used the offset both before and after their first offset adjustment had an overpayment and the average monthly amount of those overpayments was \$506. In comparison, 47 percent of those same T1 offset users had an overpayment in the period after the initial adjustment and the average monthly amount was \$305. In 2016, 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.

We find strong evidence that the percent of treatment subjects with an overpayment increased over the first four years of the demonstration but their overpayment amounts were smaller as compared to their counterparts in the control group. During the demonstration's first four years, the likelihood of an overpayment was 18 percent higher for T1 subjects than over the C1 mean. Over the same period, T1 subjects accrued \$88 less in mean overpayments relative to C1 subjects, a difference that is 34 percent of the C1 mean. When the reduction in overpayments is spread over the 2.8 percent of T1 subjects with overpayments, the mean reduction over the four-year period is estimated to be \$3,180. 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 T1 subjects, because it appears that the percentage of subjects with long-pending work CDRs is greater for T1s than C1s (Section 5.3). 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 T1 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, which 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.

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

This chapter presents estimates of the impact of the BOND benefit offset on the annual earnings and disability benefits of SSDI beneficiaries in 2015, the fifth year after random assignment that occurred in May 2011. Specifically, we examine the extent to which the benefit offset—which includes standard work incentives counseling and administrative processes that apply to treatment subjects—led to different outcomes for T1 subjects compared to C1 subjects. For the C1 group, benefits were subject to current law as administered during the period and SSA provided benefits counseling under the WIPA program.

This chapter presents impacts on outcomes measured with SSA administrative data. Chapter 2 provides definitions of the outcome variables, theoretical predictions about impacts, administrative features of the offset that may influence impacts, and the impact estimation methodology. We organize this chapter into four sections. Section 7.1 provides confirmatory impact evidence on annual earnings and total SSDI benefits paid in 2015. Section 7.2 presents exploratory evidence regarding other earnings- and benefit-related outcomes and Section 7.3 highlights variation in earnings and benefit impacts by beneficiary background characteristics. Section 7.4 summarizes the chapter’s findings.

This chapter distinguishes between confirmatory hypothesis tests and exploratory hypothesis tests. Statistically significant findings from our predesignated *confirmatory* analyses meet a higher standard of evidence which minimizes the possibility of “false positive” findings (that is, finding impacts where the true impact is zero) that would otherwise result from conducting multiple comparisons between the treatment and control groups in generating impact estimates. These tests are based on *p*-values that have been adjusted for multiple comparisons.<sup>85</sup> In contrast, statistically significant findings from exploratory hypothesis tests offer suggestive evidence of other impacts that the benefit offset may have achieved. We make no multiple comparison adjustment to the tests for exploratory outcomes. Thus, we advise readers to give less evidentiary weight to any individually significant result from an exploratory test than they would to an equally significant result from a confirmatory test. Confirmatory tests are limited to results on total earnings and total SSDI benefits paid in 2015 because the impacts of the benefit offset on these two outcomes are of paramount interest to policymakers.

There is an important distinction between SSDI benefits paid *for* 2015 and SSDI benefits paid *in* 2015. Unlike benefits paid in the period, SSDI benefits paid for the period will incorporate retroactive adjustments made after the end of the year. The exploratory findings of impacts on overpayments through 2014 (Chapter 6) suggest that impacts on SSDI benefits paid for 2015, when eventually measured, will differ modestly from impacts on benefits paid in 2015. Specifically, Exhibit 6-3 shows that mean overpayments to T1 subjects have been lower than mean overpayments to C1 subjects in every year through 2014. This suggests that the decline from mean benefits paid to C1 subjects *in* 2015 to mean benefits paid to C1 subjects *for* 2015 may be greater than the corresponding decline for T1 subjects.<sup>86</sup> The

---

<sup>85</sup> See *Third-Year Snapshot of Earnings and Benefit Impacts for Stage 1* for more details about the multiple-comparisons adjustment procedure.

<sup>86</sup> For example, the estimated impact of the benefit offset on benefits paid in 2014 was an increase of \$132 for T1 subjects relative to C1 subjects (Hoffman et al 2017). The estimated impact of the offset on overpayment

final evaluation report will focus on benefits paid *for* each year over the five years since random assignment, and compare them to the already available estimated impacts on benefits paid *in* each year. There will be no corresponding revisions to the earnings estimates, as reported earnings amounts are not subject to systematic revisions.

The impact estimates are generalizable to the national population of SSDI beneficiaries. To achieve this generalizability, we use (1) weights that account for the random selection of study sites with varying selection probabilities and (2) appropriate standard error calculations.<sup>87</sup> When discussing the impact estimates presented in this chapter, we use particular language to signify different levels of confidence that a non-zero impact has occurred, as defined in Chapter 2. We classify results with .10, .05, or .01 levels of statistical significance as providing some evidence, providing evidence, or providing strong evidence that the benefit offset had an effect on the tested outcome, respectively.

In brief, the impact estimates provide no evidence of an impact on 2015 total earnings and strong evidence of a positive impact on total SSDI benefits paid in 2015 (the two confirmatory outcomes). For the exploratory outcomes, we found some evidence of a positive impact on employment, evidence of a negative impact on earnings above two or three times BYA, and strong evidence of a positive impact on earnings above BYA and the number of months with SSDI payments during 2015. The analysis of subgroup impacts by beneficiary background characteristics provides at least some evidence of effect variation by duration of earlier benefit receipt, baseline SSI status, 2010 employment status, beneficiary age, and type of disability (back disorders versus other diagnoses). Specifically, the impacts on SSDI benefits paid were more positive for long-duration beneficiaries than for short-duration beneficiaries, and the impacts on employment were larger for beneficiaries who did not receive SSI at baseline than for those who did. The impacts on the percentage who earned more than BYA, total SSDI benefits paid, and number of months of receiving SSDI benefits were more positive for those employed in 2010 than for those not employed, whereas impacts on the percentages who earned more than two or three times BYA were both more negative. The impacts on total SSDI benefits paid and the number of months of receiving SSDI payments were larger for beneficiaries under age 50 than beneficiaries age 50 or older. Finally, the impacts on total SSDI benefits paid were smaller for those with back disorders than for those with other primary diagnoses. Results for all subgroups are included in Appendix B. All statistically significant impacts are in the direction predicted by theory, in cases where theory offers a clear prediction (Chapter 2).

---

amounts during that same time period was a decrease of \$20 for T1 subjects relative to C1 subjects. This would increase the impact of the benefit offset from \$132 to \$152, which is a 15 percent increase. However, the magnitude of the change between the impact on benefits paid in 2014 and benefits paid for 2014 is likely to fall short of \$20 because additional retroactive adjustments to 2014 benefits seem likely to reduce the impact on overpayments, and because not all overpayments are recovered (see Section 6.1).

<sup>87</sup> A consequence of the weighting and adjusted standard error calculations for generalizability is that the power of the statistical tests is lower than it would be for tests of impact estimates that reflect impacts only in the Stage 1 sample itself without the adjustments for generalizability.

### 7.1. Confirmatory Impacts on 2015 Earnings and SSDI Benefits

This section presents impact estimates for the beneficiary outcomes of greatest interest for the demonstration (*Final Design Report* and *Evaluation Analysis Plan*): total earnings and total SSDI benefits paid in 2015, which is the year with the most recently available data.<sup>88</sup> For both outcomes, the sign of the theoretical prediction for impacts is ambiguous. We also present and discuss annual trends in these outcomes since Stage 1 random assignment in May 2011.

We found no confirmatory evidence of an impact on the total earnings of treatment subjects during the period from January through December 2015 (first row of Exhibit 7-1). The point estimate for this impact is \$12 (less than one percent of the mean value for C1 subjects) and has a *p*-value of 0.640, which is well above the standard for statistical significance (*p* < 0.10).<sup>89</sup>

**Exhibit 7-1. Estimated Impacts on 2015 Total Earnings and Total SSDI Benefits Paid**

Outcome	T1 Mean	C1 Mean	Impact Estimate
Total earnings (January–December 2015)	\$1,505	\$1,493	\$12 <sup>a</sup> (\$26)
Total SSDI benefits paid (January–December 2015)	\$11,146	\$11,001	\$145 <sup>b####</sup> (\$23)

Source: SSA administrative records for calendar year 2015 and baseline SSA administrative data.

Notes: See Chapter 2 for variable definitions. All earnings outcomes are based on a measure of earnings subject to Social Security taxes (see Chapter 2 for further detail). Weights ensure that the BOND subjects who met analysis criteria are representative of the national beneficiary population in the month of random assignment. Standard errors appear in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics. Dollar values are not adjusted for inflation.

Unweighted sample sizes: T1 = 77,115; C2 = 891,598.

##### 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 (resulting from a research design involving 10 study sites).

<sup>a</sup> The impact estimate for total earnings has a *p*-value after multiple-comparison adjustments of 0.640 and hence does not provide confirmatory evidence of an impact.

<sup>b</sup> The impact estimate for total SSDI benefits paid has a *p*-value after multiple-comparison adjustments of 0.000 and hence provides confirmatory evidence of an impact.

<sup>88</sup> These two outcomes were identified in the *Evaluation Analysis Plan* for confirmatory analysis before the research team had access to outcome data for study subjects. Pre-specifying outcomes for confirmatory analysis before gaining access to outcome data is standard scientific practice and avoids the possibility that researchers will select data that best support a particular type of policy conclusion. (See the discussion of confirmatory outcomes in Section 6.1 of the *Evaluation Analysis Plan*.)

<sup>89</sup> The analysis does not find evidence of an impact on total earnings in 2015 even before the multiple-comparisons adjustment is made to the *p*-value.

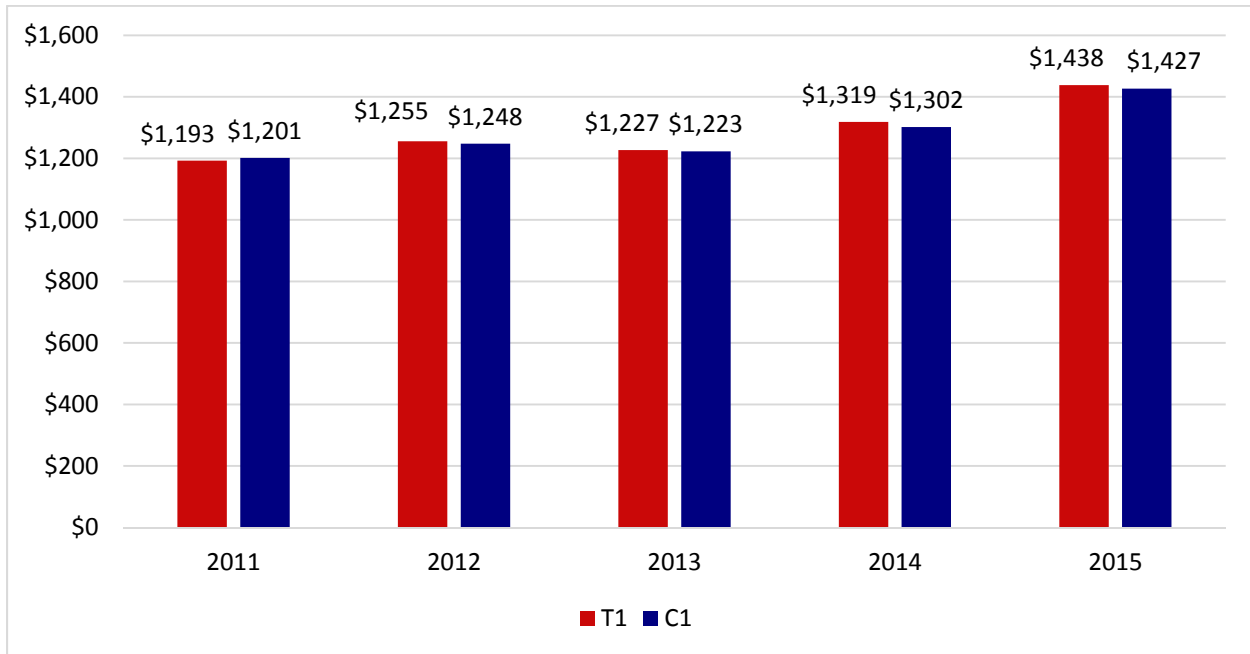
The estimate of the benefit offset's impact on 2015 earnings mirrors the impact findings for earnings from previous years. Exhibit 7-2 reports the annual impacts estimated from 2011 to 2015. To make the estimates comparable across years, we adjusted the dollar values to be equivalent to 2011 dollars. Point estimates in each year are positive, but none is significant. Over the five-year demonstration period, point estimates for average annual earnings have increased for each of the Stage 1 random assignment groups considered separately—from \$1,193 to \$1,438 for T1 subjects (a 21 percent increase) and from \$1,201 to \$1,427 for C1 subjects (a 19 percent increase).<sup>90</sup> For both groups, the increase in earnings might be partially due to economic growth during the period (see Chapter 2).

The estimates provide strong confirmatory evidence of a positive impact on total SSDI benefits paid in 2015 (January to December; second row of Exhibit 7-1). The point estimate is \$145, which is equivalent to one percent of benefits paid to C1 subjects. This finding is consistent with the evidence on SSDI benefits from earlier years. Strong evidence that the benefit offset increases SSDI benefits paid has appeared in all five follow-up years examined to date. Given that the 2011 estimate pertains to only eight months, it is helpful to make a rough (ignoring any seasonality) conversion of annual impact measures to monthly values, dividing by the number of months in the year (Exhibit 7-3). We adjusted these dollar values for inflation to be equivalent to 2011 dollars. After 2011, average monthly SSDI mean benefits paid in each year declined for both T1 and C1 beneficiaries, reflecting the cumulative effects of benefit reductions, suspensions, and terminations. Reasons for reductions, suspensions, and terminations include mortality, medical improvement, and increases in work activity. Over the period, the decline for both groups is on the order of 5 percent of the 2011 monthly value.

---

<sup>90</sup> Although we have not conducted a formal test, it seems likely that these increases in annual earnings in the treatment and control groups over time are statistically significant, given the size of the standard errors for differences in earnings between T1 and C1 within a year and the panel nature of the data, which is likely to reduce standard errors for within-group differences in earnings across years.

**Exhibit 7-2. Trends in Annual Earnings in the First Five Years of BOND**



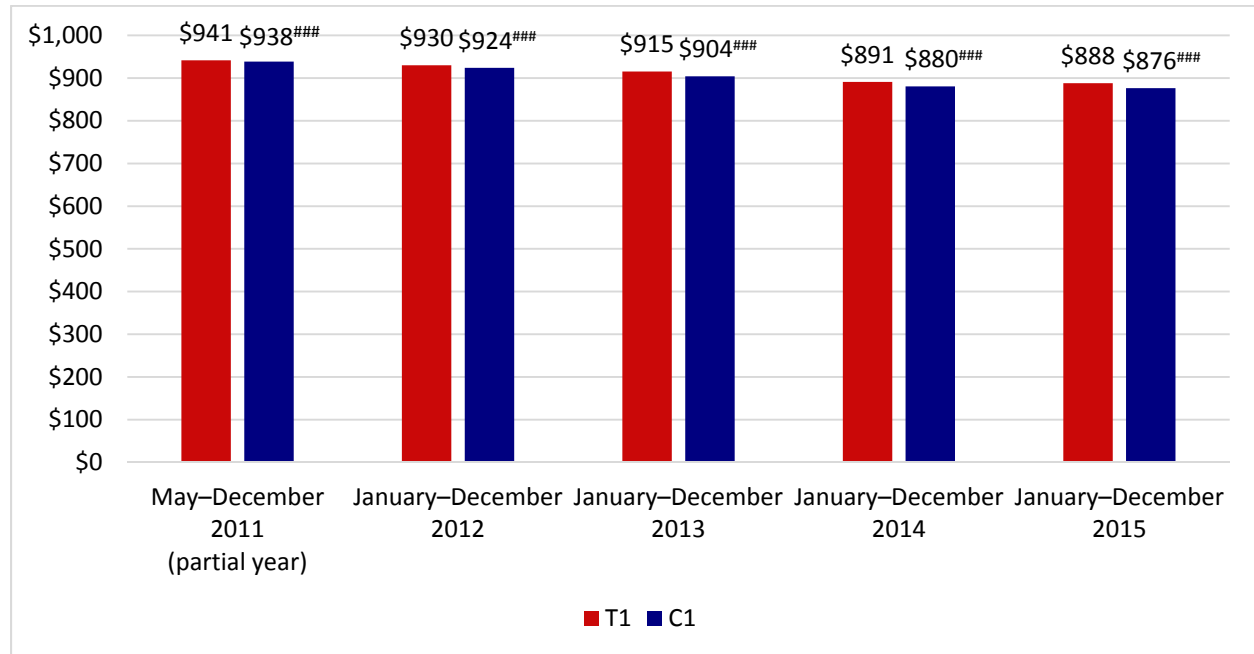
Source: SSA administrative records for calendar year 2015 and baseline SSA administrative data (used as covariates in impact analysis regression equations) and statistics from the *First-Year, Second-Year, and Third-Year Snapshot Reports*, as well as the *2016 Stage 1 Interim Report*.

Notes: All earnings outcomes are based on a measure of earnings subject to Social Security taxes; see Chapter 2 for further detail. Weights ensure that the BOND subjects who met analysis criteria are representative of the national beneficiary population in the month of random assignment. Means are regression-adjusted for baseline characteristics. 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.

##### 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 (resulting from a research design involving 10 study sites). For each year, the difference between C1 and T1 means was not statistically significant based on a confirmatory standard of evidence and a two-tailed t-test with 9 degrees of freedom.



**Exhibit 7-3. Trends in Monthly SSDI Benefits Paid in the First Five Years of BOND**



Source: SSA administrative records for calendar year 2015 and baseline SSA administrative data (used as covariates in impact analysis regression equations) and statistics from the *First-Year*, *Second-Year*, and *Third-Year Snapshot Reports*, as well as the *2016 Stage 1 Interim Report*.

Notes: See Chapter 2 for variable definitions. Weights ensure that the BOND subjects who met analysis criteria are representative of the national beneficiary population in the month of random assignment. Means are regression-adjusted for baseline characteristics. 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.

##### 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 (resulting from a research design involving 10 study sites). For each year, the difference between C1 and T1 means was statistically significant based on a confirmatory standard of evidence and a two-tailed t-test with 9 degrees of freedom.

The point estimates for impacts on benefits paid increased from 2011 through 2013, but were roughly similar from 2013 to 2015. On a monthly basis, the benefit impact estimates for 2011 through 2015 are \$3.00, \$5.71, \$11.11, \$10.47, and \$11.55, respectively, all adjusted to be equivalent to 2011 dollars. The point estimates for 2013 through 2015 are substantively larger than the point estimate for 2011.<sup>91</sup>

<sup>91</sup> We have not formally tested whether the differences between the estimate for 2011 and those for estimates for 2013 through 2015 are statistically significant, but it seems likely that they are. To illustrate, for 2015, the point estimate of the standard error of the estimated impact on mean monthly benefits paid is \$1.92 ( $\$23/12 = \$1.92$ ; see Exhibit 7-1 for the standard error of the annual impact in 2015). The corresponding value for 2011 is \$1.25 ( $\$10/8$ ), based on Exhibit 3-1 of the *First-Year Snapshot Report*. If the samples for the two years were independent, the standard error for the difference between the 2015 and 2011 estimates would be 2.29 [ $= (1.92^2 + 1.25^2)^{1/2}$ ], and the t-statistic for the test of the null hypothesis of no difference would be 3.73 [ $= (11.55 - 3.00)/2.29$ ], which has a *p*-value of less than 0.01. The fact that these are panel data, rather than independent

## 7.2. Exploratory Impacts on Other Earnings and Benefit Outcomes

We used administrative data to estimate impacts on additional earnings and benefit outcomes in 2015: any employment during the year; annual earnings above BYA, above two times BYA, and above three times BYA; number of months of SSDI receipt; and total dollar amount and number of months of SSI payments. This section reports impact estimates for these seven additional outcomes.

Consistent with the *Evaluation Analysis Plan*, we consider all the analyses in this section to be exploratory and therefore do not make any correction for multiple comparisons. As a result, any statistically significant findings are suggestive of areas in which the benefit offset may have had an effect, but we are not as confident of the significant impacts found for these variables as we are for the confirmatory impact findings presented above. Even if the offset had no impact on any of the measures examined in this section, given that we conducted many hypothesis tests without adjusting for multiple comparisons, there is a greater probability that some exploratory impact estimates were statistically significant solely by chance (relative to the confirmatory results).

### 7.2.1. Estimated Impacts on Earnings-Related Outcomes

Even though the confirmatory analysis does not provide evidence of an impact on 2015 earnings averaged across all T1 subjects, we found substantial exploratory evidence of impacts on four other measures of employment and earnings (panel one of Exhibit 7-4), all in directions that are consistent with the theoretical predictions developed in Chapter 2. There is some exploratory evidence that the offset increased the 2015 employment rate among T1 subjects, with a point estimate that is about 2 percent of the C1 mean. There is strong exploratory evidence that the offset increased the share of beneficiaries who earned above BYA in 2015, with a point estimate that is 9 percent of the control group mean. There is also exploratory evidence that the offset reduced the share of beneficiaries who earned more than two or three times BYA.

These findings are consistent with those for previous years. The impact estimate for each of the exploratory earnings-related outcomes in 2015 has the same sign as the corresponding estimate in 2014. In terms of statistical significance, the evidence is slightly stronger in 2015 (compare Hoffman et al. 2017, Exhibit 9-4).<sup>92</sup>

The exploratory earnings outcome findings suggest a partial explanation for why the estimated impact on total earnings is not statistically significant: positive impacts on earnings for those at the low end of the earnings distribution under current law were at least partially offset by negative impacts for those at the high end of the current-law earnings distribution. About 0.27 percent more beneficiaries—equivalent to 208 T1 subjects—had earnings above BYA under the offset relative to what would have been expected under current law. At the same time, 0.13 percent fewer—equivalent to 100 T1 subjects—had earnings

---

samples, reduces the true standard error for the cross-year differences in impacts relative to what it would be if the samples were independent, as assumed in the above calculation.

<sup>92</sup> In 2014, there was evidence of an impact of BOND on earnings above BYA and some evidence of an impact on employment and earnings above three times BYA; in contrast, in 2015, there was strong evidence of an impact of BOND on earnings above BYA, evidence of an impact on earnings above two or three times BYA, and some evidence of an impact on employment.

above two times BYA under the offset relative to what would have been expected under current law and 0.09 percent fewer—equivalent to 69 T1 subjects—had earnings above three times BYA. The resulting net impact on total earnings, if any, is not large enough to be distinguished from sampling error.

#### Exhibit 7-4. Estimated Impacts on 2015 Employment and Benefit Receipt

Outcome	T1 Mean	C1 Mean	Impact Estimate
<b>Employment (January–December 2015)</b>			
Employment during year (%)	13.25	12.99	0.26* (0.13)
Earnings above BYA (%)	3.23	2.97	0.27*** (0.07)
Earnings above 2x BYA (%)	1.31	1.44	-0.13** (0.05)
Earnings above 3x BYA (%)	0.71	0.80	-0.09** (0.04)
<b>Benefit Receipt (January–December 2015)</b>			
Number of months with SSDI payments	10.25	10.12	0.13*** (0.02)
Total SSI benefits paid	\$381	\$385	-\$4 (\$7)
Number of months with SSI payments	1.68	1.69	-0.01 (0.01)

Source: SSA administrative records for calendar year 2015 and baseline SSA administrative data (used as covariates in impact analysis regression equations).

Notes: See Chapter 2 for variable definitions. All earnings outcomes are based on a measure of earnings subject to Social Security taxes (see Chapter 2 for further detail). Weights ensure that the BOND subjects who met analysis criteria are representative of the national beneficiary population in the month of random assignment. Standard errors appear in parentheses. Means and impact estimates are regression-adjusted for baseline characteristics. Dollar values are not adjusted for inflation.

Unweighted sample sizes: T1 = 77,115; C2 = 891,598.

\*/\*\*/\*\* 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 (resulting from a research design involving 10 study sites) and with no multiple-comparisons adjustment.

#### 7.2.2. Estimated Impacts on Benefit-Related Outcomes

The impact estimates provide strong exploratory evidence of an impact of the benefit offset on the number of months in 2015 with SSDI payments. The effect is small in magnitude—an increase of 0.13 months over the 12 months in the year, or just over one percent of the control group value (10.1 months). The direction of this finding is consistent with theory, which predicts that some treatment subjects who would have received no benefits under current law because their earnings are above the SGA amount in some months will instead receive partial benefits under the offset while either maintaining or reducing their earnings. The point estimate for 2015 is similar to the corresponding estimate for 2014 (0.10 percentage points), which was also strongly significant (Hoffman et al. 2017, Exhibit 9-4).

As in earlier years, there is no evidence of impacts on total SSI benefits paid in 2015 or on the number of months with SSI payments.

### 7.3. Impact Variation by Beneficiary Background Characteristics

For various reasons, the benefit offset may affect outcomes for certain subgroups of SSDI beneficiaries differently than for others. To explore such differences, we compared earnings and benefit receipt impacts between various subgroups of Stage 1 subjects defined by beneficiary background characteristics. Each of our subgroup analyses separated demonstration participants into one of two categories based on a given background characteristic, and in each case we tested for differences in impacts between the two groups. We conducted such analyses for all nine earnings and benefit outcomes presented in Exhibit 7-1 and Exhibit 7-4. Below, we list the seven pairs of beneficiary subgroups we examined.<sup>93</sup>

**Exhibit 7-5. Beneficiary Characteristics for Subgroup Impacts on 2015 Employment, Earnings, and Benefit Receipt**

• Short-duration beneficiaries (those receiving benefits for 36 or fewer months when they entered BOND)	versus	• Longer-duration beneficiaries (those receiving benefits for 37 or more months when they entered BOND)
• Concurrent beneficiaries (those receiving both SSI and SSDI benefits when they entered BOND)	versus	• SSDI-only beneficiaries
• Beneficiaries employed in 2010	versus	• Beneficiaries not employed in 2010
• Beneficiaries with access to Medicaid buy-in programs	versus	• Beneficiaries without access to Medicaid buy-in programs
• Younger beneficiaries (under age 50 when they entered BOND)	versus	• Older beneficiaries (age 50 and older)
• Beneficiaries with a primary impairment of major affective disorder	versus	• Beneficiaries with all other primary impairments
• Beneficiaries with a primary impairment of back disorder	versus	• Beneficiaries with all other primary impairments

We focused on whether impacts differ according to a given background characteristic rather than whether non-zero impacts occurred within any particular subgroup defined by the background characteristic. Following Bloom and Michalopoulos (2013), if we found no significant differences between subgroups, we considered findings for the full sample to be the best available evidence on each individual subgroup. Our ability to detect differences in the size of impacts between each pair of subgroups is necessarily limited by the sizes of the subgroup samples.

The subgroup analysis is considered exploratory. Hence, as with the other exploratory results presented above, any statistically significant findings are suggestive of further effects of the benefit offset. Even if the offset had no impact on any of the measures examined here, we would expect some of the impact estimates to be statistically significant solely by chance, given that we conducted many cross-group tests

<sup>93</sup> The subgroups examined in this section were chosen before the demonstration began. Section 6.3.3 of the *Evaluation Analysis Plan* describes the motivation for examining each subgroup. Section 2.3.2 of the current report presents some predictions about how impacts might differ between subgroups.

and did not correct impact estimate  $p$ -values for multiple comparisons. The appendix includes estimated impact differences for all nine outcomes for each of the seven subgroup pairs. Hence, there are 63 tests that could potentially produce multiple statistically significant findings that are spurious and arise simply by chance in the absence of true differences in impacts between subgroups. Of the 63 tests performed, our analysis yielded 10 statistically significant differences in impact magnitude between subgroups. We present the full set of subgroup impact estimates in Appendix B and summarize the most important ones here.

Of the 10 statistically significant differences in impacts detected, two are significant at the  $p < .10$  level, two at the  $p < .05$  level, and six at the  $p < .01$  level. Given the relatively small number of significant differences, it is certainly possible that some represent false signals. Those that are consistent with predictions made in the *Evaluation Analysis Plan*, as discussed below, are harder to dismiss as false signals. We summarize the findings in Exhibit 7-6.

**Exhibit 7-6. Summary of Differences in Subgroup Impacts for 2015**

Appendix Exhibit Number	Subgroup Pair	Earnings and Employment	Benefits
B-1	Short-duration beneficiaries versus long-duration beneficiaries	No significant differences in impacts	Total SSDI benefits paid increased more for long-duration beneficiaries
B-2	Concurrent beneficiaries versus SSDI-only beneficiaries	Percentage employed increased more for SSDI-only beneficiaries	No significant differences in impacts
B-3	Beneficiaries employed in 2010 versus beneficiaries not employed in 2010	Percentage earning more than BYA increased more for those employed in 2010 Percentages earning more than two times BYA and more than three times BYA decreased more for those employed in 2010	Total SSDI benefits paid and months receiving SSDI benefits both increased more for beneficiaries employed in 2010
B-4	Beneficiaries with access to Medicaid buy-in programs versus beneficiaries without access	No significant differences in impacts	No significant differences in impacts
B-5	Beneficiaries under age 50 versus beneficiaries age 50 or older	No significant differences in impacts	Total SSDI benefits paid and number of months with SSDI payments both increased more for beneficiaries under age 50
B-6	Beneficiaries with a primary impairment of major affective disorder versus beneficiaries with all other primary impairments	No significant differences in impacts	No significant differences in impacts
B-7	Beneficiaries with a primary impairment of back disorder versus beneficiaries with all other primary impairments	No significant differences in impacts	Total SSDI benefits paid increased less for those with a back disorder

The *Evaluation Analysis Plan* made some predictions about the direction of differential subgroup impacts. The results by 2010 employment status, SSI status, and age were consistent with those predictions. Some predicted differences have not emerged thus far, however, and in one case the results contradicted them. Specifically, we expected impacts for short-duration beneficiaries to be larger than those for long-duration beneficiaries, but for these two groups the only statistically significant impact difference found, for benefits paid in 2015, was larger for long-duration beneficiaries.

Appendix B provides the estimated impacts of the benefit offset for the full set of individual subgroups (including those discussed above). Some of these estimates are statistically significant at the  $p < 0.10$  level, mostly echoing impacts in certain subpopulations found to be statistically significant for the entire T1 group.<sup>94</sup> Given the reasons cited above for expecting variation in impacts across subgroups, and given our large sample sizes, it is plausible that statistically significant impacts will arise for subgroups even if they did not occur for the full sample.<sup>95</sup> In addition, given the large number of subgroup-specific impacts that we examined, it is likely that some subgroup-specific impact estimates will be statistically significant even when the corresponding full-sample estimates were not significant. We are unable to determine whether those subgroup-specific estimates represent noteworthy *new* information beyond what we learned when examining the sample as a whole or whether the estimates are simply the result of chance; hence, we do not highlight any of those estimates here.

#### 7.4. Summary

The impact estimates provide no confirmatory evidence that the BOND benefit offset increased the average earnings of beneficiaries in 2015. Exploratory findings provide some evidence of a positive impact on the share of beneficiaries with employment that year and strong evidence of a positive impact on the proportion of beneficiaries who earned more than BYA. Exploratory findings also show evidence of a negative impact on the number of beneficiaries who earned more than two or three times BYA. It appears that impacts on earnings for all beneficiaries were too small to detect because of two counteracting impacts: (1) the fraction of beneficiaries earning more than BYA increased by a quarter of a percentage point and (2) the fraction of beneficiaries earning more than twice BYA dropped by an eighth of a percentage point.

Consistent with findings in the analyses of earlier years, we found strong confirmatory evidence of positive impacts on average benefits paid in 2015. The point estimate, \$145, is about one percent of the control group mean. This increase in benefit paid is to be expected in the absence of a behavioral response in earnings. The exploratory analysis of benefits also found strong evidence of a positive impact on the number of months in 2015 with SSDI payments.

---

<sup>94</sup> Of the 126 subgroup-specific impacts in Appendix B, 56 (44 percent) are statistically significant at the  $p < .10$  level. Of these 56, 42 (or 75 percent) are impacts that are observed in the full Stage 1 analysis sample results. The 14 subgroup-specific impacts that were not observed in the full Stage 1 analysis sample results were all positive impacts on the number of months with SSDI payments.

<sup>95</sup> It is also possible—and not uncommon—to have statistically significant pooled impacts and no statistically significant impact in any subgroup. The smaller sample sizes in the subgroups make this especially likely to occur.

In this chapter, we estimated impacts using benefits paid *in* 2015 as an outcome measure. In the future, we will estimate impacts on benefits paid *for* 2015 instead—the difference being retroactive adjustments made after 2015. Findings from the overpayment analysis in Chapter 6 suggest that impacts on benefits paid *for* 2015 will differ from the impacts on benefits paid *in* 2015, but the sign of the difference is unknown. On the one hand, mean overpayment amounts to T1 subjects have been lower than mean overpayment amounts to C1 subjects in every year through 2014 (Exhibit 6-3). If that trend continues, the decline from mean benefits paid to C1 subjects *in* 2015 to mean benefits paid to C1 subjects *for* 2015 may be greater than the decline from mean benefits paid to T1 subjects *in* 2015 to mean benefits paid to T1 subjects *for* 2015. On the other hand, ORDES had many long-pending T1 cases in its work CDR backlog at the beginning of 2016, whereas the number of C1 cases with long-pending work CDRs may have been much smaller (see Chapter 5). Completion of these long-pending work CDRs could result in a larger decline in mean benefits paid to T1 subjects for 2015 than to C1 subjects, which would decrease the impact on benefits. Other retroactive adjustments to benefit payments may also differ between the two groups (for example, adjustments for underpayments), making it harder to predict the direction in which the estimated benefit impact will change.

## 8. The End of the BOND Participation Period

### 8.1. Introduction

BOND is a time-limited demonstration in which treatment group subjects who complete their Trial Work Period (TWP) enter a 60-month BOND Participation Period (BPP). During the BPP, if a subject's earnings exceed the BOND Yearly Amount (BYA)—an annualized version of SSA's monthly Substantial Gainful Activity (SGA) threshold—then his or her benefits are reduced under the \$1 for \$2 benefit offset, instead of being suspended entirely.<sup>96</sup> This arrangement ends in the 61<sup>st</sup> month, when BOND treatment subjects transition back to current-law SSDI rules.<sup>97</sup> Before the first cohort of T1 subjects reached their BPP end dates in April 2016, SSA and the BOND Implementation Team developed and implemented several new processes to notify and educate subjects about the transition back to current-law rules—before they make that transition.

The duration of the BPP and treatment beneficiaries' awareness of that duration may affect beneficiaries' behavior. As discussed in detail in Chapter 2.1.5 of the *Evaluation Analysis Plan* (Bell et al. 2011), there are two reasons to expect the 60-month limit on the BPP to reduce impacts relative what they would be under a longer limit or no limit at all. First, findings from the Negative Income Tax experiments suggest that impacts would be larger in the early years of the demonstration if the time limit were longer (Robins and West 1980). The theoretical explanation for this finding is that enrollees recognized the likely positive effects of current work on future work, and the longer the time limit, the greater the future payoff. The same reasoning seems applicable to the BOND benefit offset. Second, beneficiaries might worry that engaging in SGA during the demonstration would lead to benefit termination after the BPP ends, despite SSA's assurances and rules to the contrary. This latter effect seems likely to be strongest near the end of the time-limited period.

This chapter examines what happens as BPP end dates approach in order to: (1) assess whether implementing these processes could affect earnings and employment outcomes during the impact analysis period—that is, before the end of 2015; and (2) obtain insights about subjects' perceptions of the offset incentive based on how they react when they receive notification that it is ending (i.e., the BPP is ending), including their plans for work after the transition. Other topics of interest around the transition to current law are beyond the scope of this report: how well the administrative processes prepare beneficiaries for current-law rules and processes after the transition; and how the behavior of working beneficiaries changes after their BPP ends, rather than before. Additional information about expected response to the end of the BPP and about the processes to notify subjects about the transition back to current-law rules is provided in Appendix C.

---

<sup>96</sup> After a beneficiary completes the TWP, in order to use the benefit offset he or she must earn above the SGA threshold, which leads SSA to determine that his or her disability has ceased.

<sup>97</sup> 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.)



We draw on four main data sources for this chapter. First, we use documents and records created by SSA and the Implementation Team to implement BPP end date-related processes, as well as notes from SSA and Implementation Team meetings on their BPP end date activities. Second, we use information from interviews with members of ORDES and the Implementation Team, which included questions about BPP end date activities. Third, we use beneficiaries' responses from interviews conducted in 2015 with 30 work-oriented Stage 1 treatment subjects. Finally, we use information collected during 2016 focus groups with WICs and EWICs about the end of subjects' BPPs. All data sources provide information on the period up to (but not after) the end of the BPP for beneficiaries whose BPPs ended in 2016.

## 8.2. Potential Effects of BPP Transition Processes on BOND Outcomes

This section briefly considers the expected effects of reaching the end of BPP. After the BPP ends, SSA reviews the work and earnings of beneficiaries who work using current-law rules to determine whether they are performing SGA. SSA applies the same rules that it would apply to current-law beneficiaries who complete the TWP, Grace Period, and 36-month re-entitlement period of the Extended Period of Eligibility (EPE; Section 5.1 describes these periods). Thus, if earnings in a month after the BPP exceed the SGA threshold, SSA terminates beneficiaries' entitlement to SSDI benefits. The transition would not affect the benefits of subjects whose earnings are below the BYA when the BPP ends; these beneficiaries receive their full benefit amount and would continue to do so after the BPP ends if their earnings remain below SGA. In addition to the change in benefit rules after the end of the BPP, all former T1 subjects must access benefits counseling through the WIPA program instead of through BOND's WICs, and they must report earnings to their local SSA field office instead of to demonstration staff.

BOND treatment subjects' work incentives will change as they transition from the BPP to current-law SSDI rules. The change in incentives is the reverse of what treatment subjects face when they enter the BPP. Since SSDI entitlement is terminated if beneficiaries' earnings exceed the SGA threshold after the BPP ends, some beneficiaries may change their work and earnings after the end of the BPP. In addition, some beneficiaries may change their work and earnings before the end of the BPP—in anticipation of its end.<sup>98</sup>

Previous reports (see, for example, Hoffman et al. 2017 and Wittenburg et al. 2015) have discussed theoretical predictions about how the benefit offset will affect subjects' decisions regarding work and earnings. For predicted effects in which the direction is unambiguous, predictions for how subjects will respond to current law following the BPP have just the opposite direction; the expected direction of other effects remains ambiguous. Appendix C provides details about the theoretical predictions of behavior change in response to the transition out of the BPP.

---

<sup>98</sup> Beneficiaries may adjust their work behavior over time for reasons other than the end of the BPP. For example, aging and changes in health status or medical condition could affect the decision to work. As another example, experience or skills gained through work during the BOND demonstration period could affect the decision to continue to work. The finding that some subjects' offset use occurred in multiple spells instead of continuously (for example, using the offset in 2012 and 2014 but not 2013; see Section 5.8) provides evidence for the influence of these other factors.

The BOND impact analysis is designed to test subjects’ behavior under the offset rules versus under current law. Any potential change in the treatment condition away from the offset rules is therefore of interest to the evaluation. Given this, it is important to investigate the extent to which implementation activities concerning the transition out of the BPP and the time-limited nature of the BPP may have influenced treatment subjects’ behavior, particularly during the main impact analysis period of 2011–2015. To do so, the next section provides details about the number of T1 subjects whose BPP ended in 2016. The following two sections then consider the potential influence of (1) end-of-BPP activities, and (2) beneficiaries’ prior knowledge of and reaction to the BPP end date, on beneficiary behavior in 2011–2015.

### 8.3. BPP Timing and Number of Beneficiaries Affected by the End of the BPP

This section describes how the timing of the BPP is determined and provides estimates of the number of Stage 1 treatment subjects who reached the end of the BPP in 2016. A subject’s BPP start date depends on when he or she completes the TWP. Exhibit 8-1 illustrates the timeline of the BPP in relation to the end of the TWP, and highlights the earliest and latest timelines possible for the BPP. The T1 subjects who started the BPP *earliest* were those who completed the TWP before they were randomly assigned to the T1 group (first scenario in Exhibit 8-1). For them, the BPP began in May 2011, the month after random assignment, and ended in April 2016; that is, May 2016 was the first month they were back under current-law rules.<sup>99</sup> Beneficiaries who completed the TWP after random assignment entered the BPP the month after TWP completion. For example, a beneficiary who completed the TWP in October 2011 started the BPP in November 2011 and ended the BPP in October 2016 (second scenario, example 1 in Exhibit 8-1). 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 (second scenario, example 3 in Exhibit 8-1). Beneficiaries who do not complete the TWP by the end of September 2017 lose the opportunity to enter the BPP.

#### Exhibit 8-1. Timing of the BOND Participation Period

Stage 1 - Bond Participation Period Examples



<sup>99</sup> In this chapter, we define the BPP end date as the final month of the BPP, during which the offset rules apply.

The T1 group consists of 79,436 beneficiaries. As of January 2017, 7,316 T1 subjects were known to have BPP end dates in 2016. The vast majority of these end dates, 6,684, occurred in April 2016 (the earliest possible BPP ending) for beneficiaries who had completed the TWP before random assignment. The remaining 632 beneficiaries with 2016 BPP end dates were relatively evenly distributed between May and December.

The total number of beneficiaries who will eventually enter the BPP, and thus experience the transition from the offset rules to current law at the end of the BPP, is not yet known. As of March 2017, the total number of T1 subjects known to have completed the TWP—and thus known to have entered the BPP—was approximately 10,100, or about 13 percent of all T1 subjects.<sup>100</sup> All T1s who start the BPP will transition back to current law at the end of the BPP. The transition back to current-law rules is, however, most salient for the subset of beneficiaries who are using the offset (that is, those who have annual earnings above the BYA) when the BPP ends. About 55 percent of the 2,805 T1 subjects who were known to have ever used the offset had BPP end dates in 2016, including about 480 T1 subjects who used the offset in 2016. In the next section, we describe the steps the demonstration takes to remind beneficiaries about the end of the BPP and the transition back to current-law rules.

#### 8.4. Implementation Activities Around the BPP

Before the first cohort of T1 subjects reached their BPP end dates in April 2016, SSA and the BOND Implementation Team developed several new processes to inform and counsel subjects about the transition back to current-law rules. First, SSA-ORDES and the BOND Implementation Team coordinate to identify beneficiaries with upcoming BPP end dates. Next, the Implementation Team mails a letter to subjects three months before the BPP end date, notifying subjects when their BPP will end, informing them of the steps they need to take as part of their return to current-law rules and processes, providing information on resources to help them take those steps, and telling them to contact their BOND counselor with any questions. Approximately two months later (a month before the BPP end date) ORDES sends a shorter notice listing the upcoming BPP end date and some additional information.

The Implementation Team instructed WICs and EWICs not to proactively inform beneficiaries about the BPP end date before the three-month letter was mailed, both to avoid affecting beneficiaries' work and earnings (at the request of the Evaluation Team) and to allow the Implementation Team and SSA time to verify the end dates before mailing the letter. However, counselors were instructed to answer any questions beneficiaries ask about the BPP time frame and transition before the mailing of the three-month letter. Counselors are encouraged to discuss the end of the BPP with beneficiaries after the three-month letter is mailed, including if they are in contact with beneficiaries for another purpose.

More details about these implementation activities are in Appendix C.

---

<sup>100</sup> Additional subjects may be identified as having a TWP, and therefore a BPP end date, as SSA continues processing a backlog of pending work CDRs (Section 5.3).

## 8.5. Beneficiaries' Knowledge of, and Reactions to, the End of the BPP

Section 8.5.1 discusses beneficiaries' knowledge of BPP end dates before ORDES and the Implementation Team identify and notify them about the end of the BPP. Section 8.5.2 describes beneficiaries' reactions to the end of the BPP in light of the theoretical predictions described in Section 8.2.

### 8.5.1. Beneficiaries' Knowledge of BPP Duration and End Date

Theory suggests that some beneficiaries who are aware that their BPP is ending may change their work and earnings ahead of their return to current-law rules (section 8.2). As discussed earlier, after the BPP ends, SSDI entitlement is terminated if beneficiaries' earnings exceed the SGA threshold. Some beneficiaries earning more than SGA may reduce their earnings to maintain benefits, while others may increase earnings to compensate for the anticipated loss of benefit income. However, their behavior likely depends on their understanding of what will happen.

It is likely that most T1 subjects never had a good understanding of the BPP, in part because many appear ill-informed about the BOND offset overall (see Section 5.2). At the start of the demonstration, SSA and the Implementation Team attempted to notify all T1 subjects about the availability of the BOND offset and the five-year length of the BPP through a letter, notice, and additional phone outreach.<sup>101</sup> However, some T1 subjects may not have been reached by these outreach attempts, may not have understood them, or may not have remembered the duration of the BPP, especially if they had limited understanding or misunderstandings about other aspects of the demonstration rules. As of the end of 2016, however, only 29 percent of T1 subjects had spoken with members of the Implementation Team and received an explanation of the benefit offset (Section 3.6). By the time of the Stage 1 36-Month Survey, an estimated two-thirds of treatment subjects demonstrated an incorrect understanding of the offset (see section 5.2), and presumably did not understand the nature or specifics of the BPP.

We did not find evidence that long-term offset use increased beneficiary understanding of the BPP. During interviews conducted in 2015 with 30 Stage 1 treatment subjects, we asked respondents to describe BOND, including the time frame in which the BOND offset applied to them. Only 2 of 10 long-term offset users recalled that the BPP lasts five years. The general lack of awareness of the BPP length in these interviews suggests that few, if any, of these beneficiaries anticipated when they would return to current-law rules. Hence, we would not expect approaching end of the BPP to affect the earnings and benefits of many subjects until SSA notifies them of its pending approach, at most three months before it actually ends.

---

<sup>101</sup> The BOND Implementation Team sent a letter to all beneficiaries randomly assigned to the T1 group. The one-page letter described the offset and, although it did not mention the specific duration of the BPP, it did refer to a "longer period of time when you can have earnings and a cash benefit." SSA also sent T1 subjects a notice describing the BOND rules and their implications for benefits. The notice from SSA stated that BOND participation would last for 60 months, but did not provide details about the end date or the subsequent transition to current-law rules. More details appear in Chapter 2 of the *BOND Stage 1 Early Assessment Report* (Wittenburg et al. 2012).

### 8.5.2. Beneficiaries' Reactions to the End of the BPP

Beneficiaries' reactions to the end of the BPP provide insights about how they perceive the benefit offset. To explore these reactions, we asked counselors open-ended questions during the 2016 focus groups. First, we asked them about offset users' plans for work after the end of the BPP. Second, we asked them if those plans appeared to be influenced by whether subjects' benefits were fully or partially offset. We also asked counselors to estimate the percentage of offset users in their caseloads who had indicated they would maintain or increase work after their BPP end dates, and the percentage who planned to reduce their work. These responses reflect the counselors' informed observations but cannot provide conclusive evidence for the treatment group as a whole, for several reasons. Not all beneficiaries interact with WICs and EWICs, and of those who do, not all discuss their plans for work after the BPP. Counselors also reported that, at the time of the focus groups, few beneficiaries in their caseloads were near the BPP end date. Finally, counselors reported the plans and intentions of beneficiaries while they were still in the demonstration; those plans and subsequent actions might change when they leave BOND.

During the focus groups, counselors consistently reported that offset users' plans for working after the BPP appear to be primarily influenced by their current levels of earnings. According to these counselors, and consistent with theory, beneficiaries with earnings high enough to fully offset benefits tend to indicate they are likely to continue working at that level after the BPP ends. For example, one WIC recalled a few beneficiaries who had been able to increase their wages during BOND enough that their benefits had been fully offset. The counselor said these subjects reported that they planned to continue to work at the same level after their BPP ended. In contrast, counselors said that beneficiaries whose benefits are partially offset tend to indicate they are likely to reduce hours or stop working after the BPP ends. For example, one counselor mentioned a beneficiary who planned to reduce hours after her BPP end date because she has an anxiety-related condition and did not want to lose her SSDI benefits in case her health declined or she lost her job in the future. However, she was also worried that it would be hard to get by with an income that would be lower than her income during the BPP. Finally, counselors speculated that proportionally more beneficiaries plan to reduce work than plan to maintain or increase work after their BPP ends. Beneficiaries' plans to change work or earnings in response to the incentives created by the end of the offset may indicate that the reverse is also true—that previously, the incentive of the offset motivated at least some beneficiaries to alter their work and earnings behavior. However, underscoring the need for caution in interpreting these responses, the counselors noted that relatively few subjects were close to their BPP end dates and that not all subjects had discussed their plans for work after BOND with their counselors.

Finally, during the focus groups with counselors and the interviews with Implementation Team members who work directly with beneficiaries, we asked staff to describe other ways in which beneficiaries respond when they find out about the end of the BPP. Several counselors across three of the groups reported that beneficiaries have inquired whether they can extend their time in BOND, and are frustrated that it is ending. Implementation Team respondents reported similar reactions; beneficiaries have expressed a desire to remain in BOND to keep using the offset, or to enroll again. However, two counselors also noted that some beneficiaries were happy the BPP is ending because they were frustrated with payment issues, primarily overpayments and other incorrect payments that they experienced while under the offset rules.

## 8.6. Summary

BOND is a time-limited demonstration. In 2016, a total of 7,316 Stage 1 treatment subjects transitioned back to current-law SSDI rules when their BPP ended. SSA and the BOND Implementation Team have implemented a process to identify subjects with upcoming end dates and to notify them about the BPP end date. This process includes explaining the steps subjects need to take as they transition to current-law rules, and providing information about resources to help them with the transition. The earliest Stage 1 BPP end dates were in April 2016 and subjects with this BPP end date were first sent letters in January 2016. Consequently, 2015 was the last year in which no subjects had an end date or were notified about the end date. Given this timing, implementation activities to identify and notify these beneficiaries are not likely to have affected work and earnings outcomes in 2015 or before. In addition, the 2015 Stage 1 treatment subject interviews suggest that anticipation of, and anticipatory behavior in response to, the end of the BPP were quite limited.

Overall, beneficiaries' reactions to the end of the BPP as reported by counselors suggest that some beneficiaries may decide to change their approach to work or earnings after transitioning back to current-law SSDI rules, when they no longer have the opportunity to use the BOND benefit offset. Counselors report that beneficiaries are more likely to say they plan to reduce earnings or stop working if their benefits are only partially reduced under the offset, while those whose earnings are fully offset are more likely to say they plan to give up their SSDI eligibility to continue earning at the same level.

For 2016, the BPP end date notifications sent early in the year will presumably have at least some effects on measured impacts on T1 subjects in 2016, especially from May through December when the benefits of the 6,684 subjects who entered the BPP when BOND started will have been subject to current-law rules. We will estimate impacts on BOND outcomes for the 2016 calendar year in a future report.

## 9. Conclusion

This chapter summarizes and discusses the findings of the second interim report on Stage 1 of BOND. The purpose of Stage 1 is to examine how the BOND benefit offset—a \$1 reduction in benefits for every \$2 in earnings in excess of the annual level that SSA considers to be substantial gainful activity (SGA) (the BOND Yearly Amount [BYA]), supported by tailored demonstration processes and counseling services—would affect earnings and program outcomes for the national SSDI population. To accomplish this goal, SSA and the Evaluation Team randomly assigned a nationally representative sample of SSDI beneficiaries to two groups: Stage 1 treatment group beneficiaries (T1 subjects) whose benefits are adjusted under the offset, and Stage 1 control group beneficiaries (C1 subjects) who continue to have their benefits paid under current-law rules.

The process and participation analyses in this report cover the full period from Stage 1 random assignment in April 2011 through the sixth calendar year of implementation (2016), with an emphasis on the most recent findings.<sup>102</sup> These analyses describe how the demonstration was implemented and the treatment subjects' experiences with work incentives counseling and the benefit offset. They use data from: (1) interviews with Work Incentives Counseling (WIC) and Enhanced Work Incentives Counseling (EWIC) staff, the BOND Implementation team, and SSA's ORDES work unit staff; and (2) the demonstration's Beneficiary Tracking System (BTS) and SSA administrative data.

The report also provides impact estimates for annual earnings and benefit outcomes based on SSA administrative data for 2015, and compares them to estimates for earlier years.<sup>103</sup> It also updates earlier analyses of work-related overpayments based on BTS and SSA administrative data through 2014, including 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.

### 9.1. Use of WIC services declined, but some T1 subjects received services for the first time

As of December 2016, approximately 5 percent of T1 subjects had received WIC services at some point during the demonstration. During 2016, WIC staff continued to provide beneficiaries with guidance on fulfilling reporting requirements and interpreting SSA letters or notices, and offered benefits counseling to help subjects understand how the offset rules affect their benefits. As expected, fewer T1 subjects sought these services than in previous years of the demonstration: the percentage receiving services declined from 2013 (2.9 percent) to 2016 (1.2 percent).

---

<sup>102</sup> Hoffman et al. (2017), Derr et al. (2015), and Wittenburg et al. (2012) report findings from earlier process and participation analyses of Stage 1.

<sup>103</sup> Hoffman et al. (2017), Wittenburg et al. (2015), Stapleton et al. (2014), and Stapleton et al. (2013) report findings from earlier impact analyses of Stage 1.

Among T1 subjects who received WIC services during 2016, 18 percent were first-time users of WIC. Many of the first-time WIC users may have been induced to seek services by SSA's progress in processing the backlog of work Continuing Disability Reviews (CDRs), which frequently result in sending a notice to the beneficiary about the status of their benefits and eligibility for the offset. Other subjects may have sought WIC services for the first time after receiving notice of the end of their BOND Participation Period (BPP), the five-year opportunity to use the benefit offset.

As previously reported, WIC services available to T1 subjects were designed to be comparable to services available to C1 subjects through the Work Incentives Planning and Assistance (WIPA) program (Derr et al. 2015; Hoffman et al. 2017). In practice, that goal appears to have been met, with three exceptions. First, WIC counselors were initially responsible for post-entitlement work to facilitate benefit offset adjustments. This may have reduced time available for benefits counseling to T1 subjects. Second, during the year-long period when the WIPA program was not funded (2012–2013), comparable work incentives counseling services may have been unavailable to some C1 subjects. Third, in 2016 focus groups, several WIC staff in centralized sites (who perform relatively fewer operational post-entitlement tasks than WIC staff in non-centralized sites) reported that they provide a higher level of attention and ongoing support to beneficiaries than WIPA counselors provide. In addition, some WIC counselors in non-centralized sites observed that WIPA counselors may provide more timely services. It is unclear whether these three differences were substantial enough to have materially affected the impacts of the benefit offset.

## **9.2. An ORDES staff increase is reducing the backlog of first benefit adjustments, but delays will persist until long-pending cases are completed**

Since the start of BOND, beneficiaries have experienced delays in receiving their first benefit adjustments under the offset.<sup>104</sup> Many T1 subjects in the work CDR queue (12 percent) had encountered CDR processing times longer than 270 days.

Several administrative processes appear to be responsible for these long processing times. First, SSA's work CDR process, which determines administrative eligibility for the benefit offset, has been delayed by insufficient ORDES staffing to manage the volume of cases. Insufficient staffing led to a sizeable backlog of unprocessed work CDRs. Second, deficiencies in SSA's BOND Stand Alone System (BSAS) have delayed automated adjustments and diverted staff resources from the timely processing of work CDRs.

An increase in ORDES staff in 2016 appears to have led to notable progress in reducing the work CDR backlog. As a result of processing long-pending cases, in the 13 months that ended in December 2016, the percentage of BOND treatment group work CDR cases more than 270 days (nine months) old fell from 71 to 12 percent. With the higher staffing levels, first benefit adjustments for T1 subjects who began using the offset during 2016 or later should be timelier, assuming SSA staffing levels remain sufficient. However, observed delays will continue to be substantial until all of the long-pending cases in the backlog are processed.

---

<sup>104</sup> These delays and their causes are discussed in Hoffman et al. (2017), Derr et al. (2015), and Wittenburg et al. (2012).



For all offset users with first adjustments in 2013 through 2016, the median duration from the month in which treatment beneficiaries first used the offset until SSA first adjusted their benefit under the offset was slightly less than two years (22 months). This period was slightly shorter for beneficiaries whose initial benefit adjustment followed a submitted Annual Earnings Estimate (AEE), which in most cases indicates proactive beneficiary involvement in the benefit adjustment process; the median duration for cases with an AEE was 17 months, versus 23 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, earnings and benefits might have been different had adjustments occurred more quickly. This point may be particularly relevant to the approximately half of offset users who did not submit an AEE. Many of them may have known little—and possibly nothing at all—about the benefit offset before SSA adjusted their benefits. The substantial overpayments generated by long delays may have further contributed to confusion about the relationship between benefits and earnings or may have directly affected subsequent beneficiary behavior.

### **9.3. The share of T1 subjects who have used the offset has grown in the first six years of the demonstration, although limited understanding of the offset may have hampered growth, and most users used the offset for more than one year**

Since the opportunity to use the offset began in May 2011, the share of T1 subjects who have ever used the offset has grown gradually. As of December 2016, SSA had adjusted the benefits of 3.5 percent of T1 subjects. An additional 2.8 percent had a cessation date in BTS as of December 2016 and hence will use the offset if they work and earn above BYA during the remainder of their BPP, the five-year opportunity to use the offset.

Use of the benefit offset almost certainly depends on how well those who might benefit understand the offset. Previously reported evidence suggests that understanding is quite limited.<sup>105</sup> In addition, WIC staff who participated in 2016 focus groups reported that beneficiaries in their caseloads have difficulty comprehending how they could gain by using the benefit offset.

Several beneficiary characteristics are predictive of adjustments under the offset from May 2011 through December 2016. Holding other characteristics constant, beneficiaries who were younger, or who had certain primary conditions (such as neoplasms), high baseline monthly SSDI benefits, or high baseline average indexed monthly earnings were all more likely to have a benefit adjustment. Disabled adult children and widows, and beneficiaries with representative payees were less likely to have a benefit adjustment under the offset, all other things being equal.

As of December 2016, most offset users had used the offset for more than one year. To date, more than one quarter (29 percent) of offset users had used the offset in just one calendar year. Almost half (48

---

<sup>105</sup> Hoffman et al. (2017) reports on beneficiaries' understanding of BOND based on results from a survey and findings from focus groups with benefits counselors.

percent) had used it in three or more calendar years (Exhibit 5-8). Because this latter group used the offset for longer than the median 22-month delay in benefit adjustment, it appears that a substantial share of users maintained earnings above BYA after SSA first adjusted their benefits.

#### **9.4. Overpayments were more prevalent for T1 subjects than for C1 subjects, but smaller on average, and were less prevalent and smaller after the first benefit adjustment occurred under the offset**

The long delays in the benefit adjustment process have resulted in high rates of overpayments among offset users. Administrative data through October 2016 reveal that 87 percent of T1 offset users from 2011 to 2014 had at least one work-related overpayment or incorrect payment (which we refer to collectively as “overpayments”). For those with an overpayment, the mean amount of the overpayment was \$6,200 across the entire period. Overpayments occur for reasons related to the timeliness and accuracy of benefit adjustment, including: beneficiaries’ failure to report earnings timely, revised AEEs, inaccurate AEEs, delays in SSA processing of work CDRs, and BSAS errors.

Exploratory analysis produced strong evidence that overpayments are more prevalent for T1 subjects than for C1 subjects, but smaller on average. Based on benefit adjustments made through October 2016, overpayment prevalence for T1 subjects in 2014 was 1.5 percent, versus 1.0 percent for C1 subjects. The mean overpayment across all T1 subjects (including those with no overpayments) was \$49 versus \$69 for C1 subjects. During the demonstration’s first four years combined, the likelihood of an overpayment was 18 percent higher for T1 subjects. Over the same period, T1 subjects accrued \$88 less in mean overpayments than did C1 subjects, a difference that is 34 percent of the C1 mean. When the reduction in overpayments is spread over the 2.8 percent of T1 subjects with overpayments, the mean reduction over the four-year period (compared to the mean overpayment amount for C1s) is estimated to be \$3,180.

According to 2016 WIC and EWIC focus group participants, overpayments for T1 subjects were smaller and less frequent after SSA made the first offset adjustment. Findings from analysis of T1 administrative data confirm this observation. During the period before SSA made the first adjustment, 81 percent of T1 subjects who used the offset had an overpayment, with an average monthly amount of \$506. In contrast, 47 percent of those same T1 offset users had an overpayment in the period after SSA made the first adjustment, with an average monthly amount of \$305.

Some T1 beneficiaries 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 moderate beneficiaries’ reactions by preparing them for overpayments as they accrued during work CDR delays. 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 T1 subjects’ earnings.

#### **9.5. For 2015, there is no evidence of an impact of BOND on total earnings and there is strong evidence of a positive impact on SSDI benefits paid during the year**

As in previous years, in 2015, the most recent year for which earnings information is available, we found no confirmatory evidence of an impact of the BOND offset on total earnings of T1 subjects relative to C1

subjects. The exploratory analysis of earnings impacts implies that this result masks offsetting effects on earnings for two T1 subgroups. On the one hand, it appears that T1 subjects who would have earned less than BYA under current law increased their earnings on average, because the percentage of T1s who earned more than BYA in 2015 was 0.27 percentage points higher than the 2.97 percent C1 base, a statistically significant difference. On the other hand, it appears that those who would have earned more than BYA under current law reduced their earnings under the offset, on average, because there were statistically significant reductions in the percentages of T1 beneficiaries with earnings above both twice BYA (-0.13 percentage points on a base of 1.44 percent) and three times BYA (-0.09 percentage points on a base of 0.80 percent). Each of these results is consistent with the theory presented in the *Evaluation Analysis Plan*. These offsetting effects help explain the confirmatory finding of no statistically significant impact on earnings averaged across the entire sample.

For the second confirmatory outcome, we found statistically strong evidence of a positive effect of the benefit offset on total SSDI benefits *paid in* 2015, similar to previously reported findings for 2011 through 2014. The point estimate, \$145 per year, is about one 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: benefit gains exceed benefit reductions on net.

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 T1 subjects through 2014—overpayments for T1 subjects that are, on average, \$20 less than for C1 subjects—suggest that retroactive adjustments will make the estimated impact on benefits paid for 2015 larger than the estimate for the impact on benefits paid in 2015. It is possible, however, that impacts on mean overpayments will be positive in the most recent years, rather than negative, once SSA completes the backlog of work CDRs. This is because, as of December 2015, the T1 backlog was apparently larger than the C1 backlog. If so, the estimated impact on benefits paid for the most recent years could be smaller than the estimated impact on benefits paid in the same year.

#### **9.6. About 9 percent of T1 subjects reached the end of the BPP in 2016, and there is no reason to think they changed behavior substantially before the BPP ended**

In 2016 the first cohort of T1 subjects reached the end of the BPP, the five-year opportunity to access the benefit offset, and returned to current-law rules. After that point, monthly earnings above SGA lead to termination of SSDI entitlement. Approximately 7,000 T1 subjects (9 percent) reached the end of the BPP in 2016; of these, about 1,500 had used the benefit offset at some point, including about 500 who were using the offset when they reached the end of the BPP.

Some working T1 subjects may change their behavior as their BPP ends. There is no reason to think such changes affected impacts for 2015, because no BPP end date notifications were sent until 2016. Such effects seem likely in 2016, however. Hence, we asked counselors in focus groups to share information

about plans for changes reported by their T1 clients who had received a BPP end date notification in 2016. They reported that most beneficiaries who are receiving a partial benefit under the offset plan to reduce their earnings or stop working to avoid complete loss of their SSDI benefits. The counselors also reported that most T1 subjects whose earnings are so high that their SSDI benefits are zero under the offset are planning to give up their SSDI eligibility and continue earning at the same level.

## 9.7. Taking Stock

This report adds to evidence from earlier Stage 1 reports that the benefit offset does not affect the average earnings of T1 subjects. It may be that few beneficiaries are in a position to take advantage of the benefit offset (for instance, they are unable to find work with sufficient earnings, or unable to work because of a medical condition). Further, as the exploratory evidence indicates, there are opposing impacts for two groups: (1) those who would earn less than BYA under current law and (2) those who would earn more than twice BYA. The increased earnings of the first group may be offset by the decreased earnings of the second group. The decline in earnings among those who would have earned more than BYA in the absence of BOND may be motivated by a desire to gain a partial benefit, or a larger partial benefit.

However, it is also possible that impacts would have been substantially different had T1 subjects for whom the offset was salient (such as those who were working or who had a cessation date) better understood how they could use the offset to their advantage. A great deal of evidence has emerged from counselors, in-depth interviews of beneficiaries with cessation dates, and the Stage 1 36-Month Survey that understanding of the offset is limited among T1 subjects, including many who are working. That half of users entered the offset without engaging with the demonstration to submit an AEE suggests that some beneficiaries may not have known about the offset before their benefits were adjusted, and others may have poorly understood its implications for their benefits. These users had an opportunity to learn about the offset when SSA first adjusted their benefits, but that usually occurred long after their first month of offset use (the median lag was 23 months for those not submitting an AEE). Of course, C1 subjects' understanding of current-law rules is also far from perfect, as demonstrated in the responses of those interviewed for the Stage 1 36-Month Survey (Hoffman et al. 2017). However, the survey results also suggest that, as a group, C1 subjects' understanding of current-law rules is more accurate than T1 subjects' understanding of BOND offset rules. Based on this information, one cannot be confident that T1 subjects for whom the BOND offset was salient were as well informed as they would be under a national benefit offset program, despite the demonstration's considerable outreach efforts and the consistent availability of WIC counselors to help T1 subjects use the offset. Presumably beneficiaries' understanding of offset rules would eventually improve following national adoption, as knowledge of the rules spread among all beneficiaries, their service providers, and other stakeholders.

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 T1 subjects who, under current law, would have given up their benefits due to earnings for at least some of the study period are receiving a partial benefit under the BOND offset that is larger, in aggregate, than the reduction in benefits among those T1 subjects who were induced by the offset to increase their earnings from below BYA to above BYA. Holding constant the increase in benefits paid to the former group, the impact on average benefits would have been lower, or even negative, if more of the remaining T1 subjects had been induced to increase their earnings to above BYA, or had increased their earnings by a greater amount.

## References

- Bell, Stephen H., Daniel Gubits, David Stapleton, David Wittenburg, Michelle Derr, Arkadipta Ghosh, and Sara Ansell. "BOND Implementation and Evaluation. Evaluation Analysis Plan." Final Report Submitted to Social Security Administration. Cambridge, MA: Abt Associates, March 2011.
- Bloom, Howard S., Carolyn J. Hill, and James A. Riccio. "Linking Program Implementation and Effectiveness: Lessons from a Pooled Sample of Welfare-to-Work Experiments." *Journal of Policy Analysis and Management*, vol. 22, no. 4, 2003, pp. 551-575.
- Bloom, Howard S., and Charles Michalopoulos. "When Is the Story in the Subgroups? Strategies for Interpreting and Reporting Intervention Effects for Subgroups." *Prevention Science*, vol. 14, no. 2, 2013, pp. 179-188.
- Burkhauser, Richard V., Andrew J. Houtenville, and David C. Wittenburg. "A User's Guide to Current Statistics on the Employment of People with Disabilities." In *The Decline in Employment of People with Disabilities: A Policy Puzzle*, edited by David C. Stapleton and Richard V. Burkhauser, pp. 23-86. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2003.
- Card, David, Jochen Kluve, and Andrea Weber. "What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations." Working Paper 21431. Cambridge, MA: National Bureau of Economic Research, 2015.
- Derr, Michelle, Denise Hoffman, Jillian Berk, Ann Person, David Stapleton, Sarah Croake, Christopher Jones, and Jonathan McCay. "BOND Implementation and Evaluation: Process Study Report." Submitted to the Social Security Administration, Office of Research, Demonstrations, and Employment Support. Cambridge, MA: Abt Associates, February 2015.
- Greenberg, David H., Charles Michalopoulos, and Philip K. Robins. "A Meta-Analysis of Government-Sponsored Training Programs." *Industrial and Labor Relations Review*, vol. 57, no. 1, 2003, pp. 31-53.
- Gubits, Daniel, Michelle Derr, Jillian Berk, Ann Person, David Stapleton, Denise Hoffman, Stephen Bell, Rachel Cook, and David Wittenburg. "BOND Implementation and Evaluation: Stage 2 Early Assessment Report." Submitted to the Social Security Administration. Cambridge, MA: Abt Associates, and Washington, DC: Mathematica Policy Research, 2013.
- Gubits, Daniel, Winston Lin, Stephen Bell, and David Judkins. "BOND Implementation and Evaluation: First- and Second-Year Snapshot of Earnings and Benefit Impacts for Stage 2." Submitted to the Social Security Administration. Cambridge, MA: Abt Associates, and Washington, DC: Mathematica Policy Research, 2014.
- Gubits, Daniel, Judy Geyer, Denise Hoffman, Sarah Croake, Utsav Kattel, David Judkins, Stephen Bell, and David Stapleton. "BOND Implementation and Evaluation: 2015 Stage 2 Interim Process,

- Participation, and Impact Report.” Submitted to the Social Security Administration. Cambridge, MA: Abt Associates, and Washington, DC: Mathematica Policy Research, 2017.
- Hoffman, Denise, Sarah Croake, David R. Mann, David Stapleton, Priyanka Anand, Chris Jones, Judy Geyer, Daniel Gubits, Stephen Bell, Andrew McGuirk, David Wittenburg, Debra Wright, Amang Sukasih, David Judkins, and Michael Sinclair. “2016 Stage 1 Interim Process, Participation, and Impact Report.” Submitted to the Social Security Administration. Cambridge, MA: Abt Associates, and Washington, DC: Mathematica Policy Research, 2017.
- Houtenville, Andrew J., Debra L. Brucker, and Eric A. Lauer. *Annual Compendium of Disability Statistics: 2016*. Durham, NH: University of New Hampshire, Institute on Disability, 2017.
- Houtenville, Andrew J., and Tony Ruiz. *Annual Compendium of Disability Statistics: 2012*. Durham, NH: University of New Hampshire, Institute on Disability, 2012.
- Johnson, Nicholas, Phil Oliff, and Erica Williams. “An Update on State Budget Cuts.” Washington, DC: Center on Budget and Policy Priorities, 2011.
- Liu, Su, and David C. Stapleton. “Longitudinal Statistics on Work Activity and Use of Employment Supports for New Social Security Disability Insurance Beneficiaries.” *Social Security Bulletin*, vol. 71, no. 3, 2011, pp. 35-60.
- Livermore, Gina A., Denise Hoffman, and Maura Bardos. “Ticket to Work Participant Characteristics and Outcomes Under the Revised Regulations.” Submitted to the Social Security Administration, Office of Retirement and Disability Policy. Washington, DC: Mathematica Policy Research, 2012.
- Rehabilitation Research and Training Center on Disability Statistics and Demographics. *Annual Compendium of Disability Statistics: 2009*. New York, NY: Hunter College, 2009.
- Robins, Philip K., and R.W. West. “Labor Supply Response Over Time.” *Journal of Human Resources*, vol. 15, no. 4, 1980, pp. 524-544.
- Rupp, Kalman, and Gerald F. Riley. “Longitudinal Patterns of Medicaid and Medicare Coverage Among Disability Cash Benefit Awardees.” *Social Security Bulletin*, vol. 72, no. 3, 2012, pp. 19-35.
- Schimmel, Jody, Sarah Prenovitz, Gina Livermore, and Alex Bryce. “Evaluation of the Work Incentives Planning and Assistance (WIPA) Program in 2011: Beneficiaries Served, Services Provided, and Program Costs.” Submitted to the Social Security Administration. Washington, DC: Mathematica Policy Research, 2013.
- Schimmel Hyde, Jody, and David C. Stapleton. “Changes to the Ticket to Work Regulations in 2008 Attracted Providers and Participants, But Impacts on Work and Benefits Are Unclear.” *Social Security Bulletin*, vol. 75, no. 4, 2015, pp. 15-33.

- Schochet, Peter. “The Estimation of Average Treatment Effects for Clustered RCTs of Education Interventions.” Washington, DC: U.S. Department of Education, Institute of Education Sciences, March 2009.
- Social Security Administration. “The Social Security Administration’s Report on Continuing Disability Reviews Resulting from Work Activity.” Report to House Appropriations Committee. Washington, DC: SSA, January 26, 2011.
- Social Security Administration. *Annual Statistical Report on the Social Security Disability Insurance Program, 2011*. Baltimore, MD: SSA, 2012.
- Social Security Administration. *Monthly Statistical Snapshot, December 2012*. Baltimore, MD: SSA, 2013a.
- Social Security Administration. *OASDI and SSI Program Rates & Limits, 2014*. Washington, DC: SSA, 2013b.
- Social Security Administration, Office of the Inspector General. *Overpayments in the Social Security Administration’s Disability Programs—A 10-Year Study*. Baltimore, MD: SSA, 2015. Available at <https://oig.ssa.gov/sites/default/files/audit/full/pdf/A-01-14-24114.pdf>. Accessed June 12, 2016.
- Social Security Administration. “Program Operations Manual System (POMS): GN 02201.013. Administrative Tolerances Title II Overpayments.” Available at <https://secure.ssa.gov/poms.nsf/lnx/0202201013>. Accessed February 29, 2016.
- Social Security Administration. *Annual Statistical Supplement to the Social Security Bulletin, 2015*. Washington, DC: SSA, 2016.
- Stapleton, David, Stephen Bell, David Wittenburg, Brian Sokol, and Debi McInnis. “BOND Final Design Report.” Submitted to the Social Security Administration. Cambridge, MA: Abt Associates, and Washington, DC: Mathematica Policy Research, 2010.
- Stapleton, David, David Wittenburg, Daniel Gubits, David Judkins, David Mann, and Andrew McGuirk. “BOND Implementation and Evaluation: First-Year Snapshot of Earnings and Benefit Impacts for Stage 1.” Cambridge, MA: Abt Associates, and Washington, DC: Mathematica Policy Research, 2013.
- Stapleton, David, David Wittenburg, David R. Mann, Denise Hoffman, and Andrew McGuirk. “BOND Implementation and Evaluation: Second-Year Snapshot of Earnings and Benefit Impacts for Stage 1.” Submitted to the Social Security Administration, Office of Program Development & Research. Washington, DC: Mathematica Policy Research, 2014.
- Weathers, Robert, and Jeffrey Hemmeter. “The Impact of Changing Financial Work Incentives on the Earnings of Social Security Disability Insurance (SSDI) Beneficiaries.” *Journal of Policy Analysis and Management*, vol. 30, no. 4, 2011, pp. 708-728.

Williams, R.L., and J.R. Chromy. "SAS Sample Selection MACROS." *Proceedings of the Fifth International SAS Users Group International Conference*. Cary, NC: SAS Institute, 1980.

Wittenburg, David, David Stapleton, Michelle Derr, Denise W. Hoffman, and David R. Mann. "BOND Implementation and Evaluation: BOND Stage 1 Early Assessment Report." Submitted to the Social Security Administration, Office of Program Development & Research. Cambridge, MA: Abt Associates, May 2012.

Wittenburg, David, David R. Mann, David Stapleton, Daniel Gubits, David Judkins, and Andrew McGuirk. "BOND Implementation and Evaluation: Third-Year Snapshot of Earnings and Benefit Impacts for Stage 1." Submitted to the Social Security Administration. Cambridge, MA: Abt Associates, and Washington, DC: Mathematica Policy Research, 2015.



## Appendix A. 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 October 2016 DBAD, Exhibit A-1 presents the numbers of beneficiaries in the T1 and C1 groups in each year from 2011 through 2014. The sample size for the analysis is increasing slightly over time because more beneficiaries are missing historical DBAD data in earlier years than in the later years. We previously conducted an overpayment analysis for 2011, 2012, and 2013 using the October 2015 DBAD, which included a slightly larger sample. We lose 0.22 percent of T1s and 0.27 percent of C1s in 2011, 2012, and 2013 when we use the October 2016 DBAD instead of the October 2015 DBAD.

The sample sizes differ in the 2015 and 2016 DBAD databases for two reasons. First, some beneficiaries are not included in the October 2016 SSA administrative data. There is no documentation explaining why this occurs.<sup>106</sup> 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). Second, some beneficiaries are included in the October 2016 SSA administrative data but are missing basic programmatic information, another data anomaly that is not explained in data documentation.

Because the change in the sample size is small (less than one-third of one percent) and the number of T1 and C1 subjects is large, we do not expect this change to substantively affect our results. The statistics for beneficiaries who used the offset will be entirely unaffected because beneficiaries without programmatic records could not have used the offset. That is, these beneficiaries were either not in active pay status (and hence not eligible for the offset) or SSA did not have the programmatic information needed to apply the offset and adjust benefits. The decrease in the sample size among beneficiaries who received an overpayment during the analysis period was less than fifteen-hundredths of one percent. Furthermore, these rates are approximately equal across T1 and C1 subjects and therefore are unlikely to affect the overpayment impact analysis.

### Exhibit A-1. Sample Sizes for Overpayment Analysis

	2011	2012	2013	2014
T1	65,090	65,193	65,194	65,201
C1	716,968	717,427	717,416	717,389

<sup>106</sup> 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 had a disallowed claim. These criteria should not apply to the BOND beneficiaries, who were current beneficiaries in 2010 when the BOND sample was selected.

## Appendix B. Subgroup Exhibits for 2015 Earnings and Benefit Impacts

### Exhibit B-1. Impact Estimates for Subgroups Defined by Duration of SSDI Receipt

Outcome	Short Duration			Long Duration			Estimated Difference in Impact (7)
	T1 Mean (1)	C1 Mean (2)	Impact Estimate (3)	T1 Mean (4)	C1 Mean (5)	Impact Estimate (6)	
<b>Earnings and Employment Outcomes (January–December 2015)</b>							
Total earnings	\$1,818	\$1,813	\$4 (\$45)	\$1,370	\$1,354	\$15 (\$31)	-\$11 (\$55)
Employment during year (%)	14.79	14.75	0.04 (0.26)	12.58	12.22	0.36* (0.17)	-0.32 (0.31)
Earnings above BYA (%)	3.93	3.72	0.20 (0.11)	2.94	2.64	0.30** (0.09)	-0.09 (0.14)
Earnings above 2x BYA (%)	1.64	1.83	-0.19** (0.07)	1.16	1.27	-0.10 (0.07)	-0.08 (0.10)
Earnings above 3x BYA (%)	0.92	1.04	-0.11* (0.06)	0.62	0.70	-0.08 (0.04)	-0.03 (0.07)
<b>Benefit Outcomes (January–December 2015)</b>							
Total SSDI benefits paid	\$11,850	\$11,775	\$76** (\$33)	\$10,842	\$10,672	\$169*** (\$30)	-\$93†† (\$45)
Number of months with SSDI payments	10.16	10.07	0.09** (0.03)	10.29	10.14	0.15*** (0.02)	-0.06 (0.04)
Total SSI benefits paid	\$324	\$330	-\$6 (\$9)	\$405	\$409	-\$4 (\$10)	-\$3 (\$13)
Number of months with SSI payments	1.30	1.33	-0.03 (0.03)	1.84	1.84	-0.00 (0.02)	-0.03 (0.03)

Source: SSA administrative records for calendar year 2015 and baseline SSA administrative data.

Notes: See Chapter 2 for variable definitions. All earnings outcomes are based on a measure of earnings subject to Social Security taxes (see Chapter 2 for further detail). Weights are used to ensure that the BOND subjects who met analysis criteria are representative of the national beneficiary population in the month of random assignment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted. Dollar values are not adjusted for inflation.

Unweighted sample sizes: Short Duration T1 = 38,669; Short Duration C1 = 209,790; Long Duration T1 = 38,446; Long Duration C2 = 681,808.

\*/\*\*/\*\* 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 B-2. Impact Estimates for Subgroups Defined by Baseline SSI Status**

Outcome	SSDI-Only			Concurrent			Estimated Difference in Impact (7)
	T1 Mean (1)	C1 Mean (2)	Impact Estimate (3)	T1 Mean (4)	C1 Mean (5)	Impact Estimate (6)	
<b>Earnings and Employment Outcomes (January–December 2015)</b>							
Total earnings	\$1,634	\$1,616	\$18 (\$30)	\$922	\$937	-\$15 (\$45)	\$33 (\$54)
Employment during year (%)	13.55	13.16	0.38** (0.15)	11.89	12.18	-0.29 (0.29)	0.67†† (0.32)
Earnings above BYA (%)	3.48	3.18	0.30*** (0.08)	2.12	1.99	0.13 (0.19)	0.17 (0.21)
Earnings above 2x BYA (%)	1.50	1.63	-0.13* (0.06)	0.44	0.57	-0.14 (0.11)	0.01 (0.12)
Earnings above 3x BYA (%)	0.84	0.93	-0.10** (0.04)	0.15	0.20	-0.05 (0.04)	-0.05 (0.06)
<b>Benefit Outcomes (January–December 2015)</b>							
Total SSDI benefits paid	\$12,341	\$12,197	\$144*** (\$26)	\$5,758	\$5,632	\$127* (\$58)	\$17 (\$63)
Number of months with SSDI payments	10.31	10.18	0.13*** (0.02)	9.99	9.83	0.16** (0.06)	-0.03 (0.06)
Total SSI benefits paid	\$35	\$36	-\$1 (\$2)	\$1,940	\$1,959	-\$18 (\$38)	\$17 (\$38)
Number of months with SSI payments	0.17	0.17	0.00 (<0.01)	8.47	8.52	-0.05 (0.07)	0.05 (0.07)

Source: SSA administrative records for calendar year 2015 and baseline SSA administrative data.

Notes: See Chapter 2 for variable definitions. All earnings outcomes are based on a measure of earnings subject to Social Security taxes (see Chapter 2 for further detail). Weights are used to ensure that the BOND subjects who met analysis criteria are representative of the national beneficiary population in the month of random assignment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted. Dollar values are not adjusted for inflation.

Unweighted sample sizes: SSDI-only T1 = 64,709; SSDI-only C1 = 694,270; Concurrent T1 = 12,406; Concurrent C1 = 197,328.

\*/\*\*/\*\* 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 B-3. Stage 1 Impact Estimates for Subgroups Defined by Employment in 2010**

Outcome	Employed			Not Employed			Estimated Difference in Impact (7)
	T1 Mean (1)	C1 Mean (2)	Impact Estimate (3)	T1 Mean (4)	C1 Mean (5)	Impact Estimate (6)	
<b>Earnings and Employment Outcomes (January–December 2015)</b>							
Total earnings	\$5,784	\$5,821	-\$38 (\$128)	\$622	\$600	\$22 (\$21)	-\$60 (\$130)
Employment during year (%)	46.64	45.77	0.87 (0.56)	6.36	6.22	0.14 (0.11)	0.73 (0.57)
Earnings above BYA (%)	12.07	11.21	0.86* (0.39)	1.41	1.27	0.15** (0.05)	0.72† (0.39)
Earnings above 2x BYA (%)	5.05	5.79	-0.73** (0.24)	0.53	0.54	-0.01 (0.04)	-0.72††† (0.25)
Earnings above 3x BYA (%)	2.94	3.39	-0.45** (0.16)	0.25	0.27	-0.01 (0.03)	-0.43††† (0.16)
<b>Benefit Outcomes (January–December 2015)</b>							
Total SSDI benefits paid	\$11,986	\$11,492	\$494*** (\$72)	\$10,973	\$10,902	\$71** (\$25)	\$423††† (\$76)
Number of months with SSDI payments	10.38	9.95	0.43*** (0.07)	10.22	10.15	0.07*** (0.02)	0.36††† (0.07)
Total SSI benefits paid	\$190	\$193	-\$3 (\$11)	\$420	\$424	-\$4 (\$9)	\$1 (\$14)
Number of months with SSI payments	0.93	0.92	0.01 (0.04)	1.83	1.84	-0.01 (0.02)	0.02 (0.04)

Source: SSA administrative records for calendar year 2015 and baseline SSA administrative data.

Notes: See Chapter 2 for variable definitions. All earnings outcomes are based on a measure of earnings subject to Social Security taxes (see Chapter 2 for further detail). Weights are used to ensure that the BOND subjects who met analysis criteria are representative of the national beneficiary population in the month of random assignment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted. Dollar values are not adjusted for inflation.

Unweighted sample sizes: Employed T1 = 14,689; Employed C1 = 138,173; Not Employed T1 = 62,426; Not Employed C1 = 753,425.

\*/\*\*/\*\* 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 B-4. Impact Estimates 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)
	T1 Mean (1)	C1 Mean (2)	Impact Estimate (3)	T1 Mean (4)	C1 Mean (5)	Impact Estimate (6)	
<b>Earnings and Employment Outcomes (January–December 2015)</b>							
Total earnings	\$1,615	\$1,594	\$21 (\$32)	\$1,237	\$1,248	-\$10 (\$41)	\$31 (\$52)
Employment during year (%)	14.30	13.93	0.37* (0.17)	10.69	10.71	-0.02 (0.30)	0.39 (0.35)
Earnings above BYA (%)	3.40	3.13	0.27** (0.09)	2.84	2.58	0.26 (0.17)	0.01 (0.19)
Earnings above 2x BYA (%)	1.42	1.54	-0.12* (0.06)	1.03	1.18	-0.15** (0.07)	0.03 (0.09)
Earnings above 3x BYA (%)	0.77	0.86	-0.09* (0.05)	0.57	0.65	-0.08 (0.05)	-0.01 (0.07)
<b>Benefit Outcomes (January–December 2015)</b>							
Total SSDI benefits paid	\$11,230	\$11,073	\$157*** (\$30)	\$10,943	\$10,839	\$103** (\$36)	\$53 (\$47)
Number of months with SSDI payments	10.26	10.12	0.15*** (0.02)	10.22	10.13	0.09** (0.03)	0.06 (0.04)
Total SSI benefits paid	\$385	\$390	-\$5 (\$9)	\$371	\$374	-\$3 (\$10)	-\$2 (\$14)
Number of months with SSI payments	1.67	1.69	-0.02 (0.02)	1.70	1.69	0.01 (0.02)	-0.03 (0.03)

Source: SSA administrative records for calendar year 2015 and baseline SSA administrative data.

Notes: See Chapter 2 for variable definitions. All earnings outcomes are based on a measure of earnings subject to Social Security taxes (see Chapter 2 for further detail). Weights are used to ensure that the BOND subjects who met analysis criteria are representative of the national beneficiary population in the month of random assignment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted. Dollar values are not adjusted for inflation.

Unweighted sample sizes: Access to Medicaid Buy-In Programs T1 = 48,941; Access to Medicaid Buy-In Programs C1 = 567,760; No Access to Medicaid Buy-In Programs T1 = 28,174; No Access to Medicaid Buy-In Programs C1 = 323,838.

\*/\*\*/\*\* 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 B-5. Impact Estimates 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)
	T1 Mean (1)	C1 Mean (2)	Impact Estimate (3)	T1 Mean (4)	C1 Mean (5)	Impact Estimate (6)	
<b>Earnings and Employment Outcomes (January–December 2015)</b>							
Total earnings	\$2,234	\$2,225	\$9 (\$44)	\$851	\$836	\$14 (\$29)	\$-5 (\$53)
Employment during year (%)	18.25	18.07	0.18 (0.22)	8.76	8.42	0.33 (0.23)	-0.16 (0.32)
Earnings above BYA (%)	5.03	4.69	0.34** (0.13)	1.62	1.42	0.20* (0.09)	0.14 (0.16)
Earnings above 2x BYA (%)	2.08	2.23	-0.16* (0.08)	0.62	0.72	-0.11* (0.05)	-0.05 (0.10)
Earnings above 3x BYA (%)	1.07	1.20	-0.13** (0.06)	0.39	0.44	-0.05 (0.04)	-0.08 (0.07)
<b>Benefit Outcomes (January–December 2015)</b>							
Total SSDI benefits paid	\$9,753	\$9,539	\$215*** (\$43)	\$12,395	\$12,320	\$75** (\$31)	\$140††† (\$53)
Number of months with SSDI payments	10.16	9.96	0.20*** (0.04)	10.33	10.26	0.07** (0.02)	0.13††† (0.05)
Total SSI benefits paid	\$557	\$558	\$-0 (\$14)	\$222	\$231	\$-8 (\$5)	\$8 (\$15)
Number of months with SSI payments	2.33	2.34	-0.01 (0.03)	1.09	1.10	-0.01 (0.02)	0.01 (0.03)

Source: SSA administrative records for calendar year 2015 and baseline SSA administrative data.

Notes: See Chapter 2 for variable definitions. All earnings outcomes are based on a measure of earnings subject to Social Security taxes (see Chapter 2 for further detail). Weights are used to ensure that the BOND subjects who met analysis criteria are representative of the national beneficiary population in the month of random assignment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted. Dollar values are not adjusted for inflation.

Unweighted sample sizes: Age 49 or Less at Baseline T1 = 36,283; Age 49 or Less at Baseline C1 = 428,043; Age 50 or More at Baseline T1 = 40,832; Age 50 or More at Baseline C1 = 463,555.

\*/\*\*/\*\* 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 B-6. Impact Estimates 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)
	T1 Mean (1)	C1 Mean (2)	Impact Estimate (3)	T1 Mean (4)	C1 Mean (5)	Impact Estimate (6)	
<b>Earnings and Employment Outcomes (January–December 2015)</b>							
Total earnings	\$1,758	\$1,671	\$87 (\$68)	\$1,458	\$1,460	\$-2 (\$28)	\$89 (\$74)
Employment during year (%)	15.86	15.53	0.34 (0.37)	12.76	12.51	0.24 (0.15)	0.09 (0.40)
Earnings above BYA (%)	4.11	3.50	0.61** (0.25)	3.07	2.87	0.20** (0.09)	0.41 (0.26)
Earnings above 2x BYA (%)	1.52	1.58	-0.06 (0.12)	1.27	1.41	-0.14** (0.05)	0.08 (0.13)
Earnings above 3x BYA (%)	0.77	0.81	-0.05 (0.09)	0.70	0.80	-0.10** (0.04)	0.05 (0.10)
<b>Benefit Outcomes (January–December 2015)</b>							
Total SSDI benefits paid	\$11,199	\$11,075	\$124* (\$59)	\$11,136	\$10,992	\$144*** (\$26)	\$-20 (\$65)
Number of months with SSDI payments	10.67	10.54	0.13* (0.07)	10.17	10.04	0.13*** (0.02)	0.00 (0.07)
Total SSI benefits paid	\$417	\$417	\$-0 (\$14)	\$374	\$379	\$-5 (\$8)	\$5 (\$16)
Number of months with SSI payments	1.88	1.91	-0.03 (0.04)	1.64	1.64	-0.00 (0.02)	-0.03 (0.05)

Source: SSA administrative records for calendar year 2015 and baseline SSA administrative data.

Notes: See Chapter 2 for variable definitions. All earnings outcomes are based on a measure of earnings subject to Social Security taxes (see Chapter 2 for further detail). Weights are used to ensure that the BOND subjects who met analysis criteria are representative of the national beneficiary population in the month of random assignment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted. Dollar values are not adjusted for inflation.

Unweighted sample sizes: Primary Impairment of Major Affective Disorder T1 = 12,024; Primary Impairment of Major Affective Disorder C1 = 145,893; All Other Primary Impairments T1 = 65,091; All Other Primary Impairments C1 = 745,705.

\*/\*\*/\*\* 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 B-7. Impact Estimates for Subgroups Defined by Primary Impairment of Back Disorder**

Outcome	Primary Impairment of Back Disorder			All Other Primary Impairments			Estimated Difference in Impact (7)
	T1 Mean (1)	C1 Mean (2)	Impact Estimate (3)	T1 Mean (4)	C1 Mean (5)	Impact Estimate (6)	
<b>Earnings and Employment Outcomes (January–December 2015)</b>							
Total earnings	\$1,137	\$1,099	\$38 (\$69)	\$1,565	\$1,557	\$8 (\$29)	\$30 (\$74)
Employment during year (%)	9.88	9.63	0.25 (0.31)	13.80	13.54	0.26 (0.16)	-0.01 (0.34)
Earnings above BYA (%)	2.55	2.15	0.40 (0.24)	3.35	3.10	0.25** (0.08)	0.15 (0.25)
Earnings above 2x BYA (%)	1.01	1.12	-0.11 (0.11)	1.36	1.49	-0.13** (0.05)	0.02 (0.12)
Earnings above 3x BYA (%)	0.55	0.64	-0.09 (0.08)	0.74	0.83	-0.09* (0.04)	-0.00 (0.09)
<b>Benefit Outcomes (January–December 2015)</b>							
Total SSDI benefits paid	\$13,404	\$13,339	\$65 (\$47)	\$10,775	\$10,621	\$154*** (\$26)	-\$89† (\$54)
Number of months with SSDI payments	11.12	11.02	0.10** (0.03)	10.11	9.97	0.14*** (0.02)	-0.04 (0.04)
Total SSI benefits paid	\$176	\$173	\$3 (\$7)	\$414	\$420	-\$6 (\$8)	\$8 (\$11)
Number of months with SSI payments	0.88	0.86	0.02 (0.02)	1.81	1.82	-0.01 (0.02)	0.04 (0.03)

Source: SSA administrative records for calendar year 2015 and baseline SSA administrative data.

Notes: See Chapter 2 for variable definitions. All earnings outcomes are based on a measure of earnings subject to Social Security taxes (see Chapter 2 for further detail). Weights are used to ensure that the BOND subjects who met analysis criteria are representative of the national beneficiary population in the month of random assignment. Standard errors are in parentheses. Means and impact estimates are regression-adjusted. Dollar values are not adjusted for inflation.

Unweighted sample sizes: Primary Impairment of Back Disorder T1 = 11,698; Primary Impairment of Back Disorder C1 = 116,604; All Other Primary Impairments T1 = 65,417; All Other Primary Impairments C1 = 774,994.

\*/\*\*/\*\* 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 C. Implementation of the End of the BPP

In this appendix, we discuss how subjects may respond to the end of the BOND Participation Period (BPP) (Section C.1). Then we describe the efforts of the Implementation Team and ORDES to identify and notify subjects of their BPP end dates (Section C.2), educate beneficiaries about the consequences of the BPP end date (Section C.3), and prepare beneficiaries for their return to current-law SSDI rules and processes (Section C.4).

### C.1. How Subjects May Respond to the End of the BPP

Previous reports (see, for example, Hoffman et al. 2017 and Wittenburg et al. 2015) have discussed theoretical predictions about how the benefit offset will affect subjects' decisions regarding work and earnings. For predicted effects in which the direction is unambiguous, predictions for how subjects will respond to current law following the BPP have the opposite direction; the expected direction of other effects remains ambiguous. Below are theoretical predictions of how subjects will respond to the end of the BPP:

- Theory predicts that some beneficiaries would be induced to work by the benefit offset—particularly those for whom work is not attractive unless earnings are above the SGA level—and that some others who work but earn less than the SGA level would be induced to earn more than the SGA level. For beneficiaries induced to work or increase earnings by the benefit offset, we expect the loss of the benefit offset at the conclusion of the BPP to induce some to reduce their earnings to below the SGA level.
  - Those whose earnings exceed the SGA level by *less* than their full benefit amount as the BPP ends will find that their post-BOND income from earnings and benefits, combined, will be higher if they reduce their earnings to just below the SGA level and receive full benefits rather than maintain their current earnings and receive no benefits; hence, these individuals are very likely to reduce their earnings to below the SGA amount.
  - At the opposite extreme, those whose earnings are so high that their benefits under the offset are zero have revealed that they prefer to have earnings at this level, with no benefits. Therefore, the effect of the end of the BPP on total income will not, by itself, give these beneficiaries reason to reduce their earnings to less than the SGA amount. Other effects of the end of the BPP might do so, however (see below).
  - Those in between these two groups—whose earnings exceed the SGA level by *more* than their full benefit amount, but not by enough to have zero benefits under the offset—will find that their total income is lower if they opt for earnings below the SGA amount and have full benefits restored rather than maintaining their current earnings after the BPP ends. Some may choose to reduce their earnings to below the SGA amount, because they prefer a specific combination of work effort and income over the alternatives. Others, however, might choose to maintain or increase their earnings; when they were subject to the offset, a \$2 increase in earnings resulted in a \$1 benefit reduction, whereas once the BPP ends any increase in earnings will not reduce benefits, because benefits will have been terminated.
- Theory also predicts that some treatment subjects who, under current law, would have earned above the SGA level and would not have received benefits, would, under BOND, opt to earn less

while receiving partial benefits. There are two reasons they might opt for lower earnings under the offset:

- Substitution effects: Under current law, earnings reductions result in no change in benefits if earnings are still above SGA. Under the offset, earnings reductions are “less costly” if earnings are still above SGA because every \$2 reduction in earnings results in a \$1 increase in benefits and therefore only a \$1 decrease in total income. In neoclassical economic theory, the offset is described as reducing the price of leisure for those who would earn SGA under current law; “leisure” refers to time spent in activities other than paid work.
- Income effects: If a beneficiary’s earnings are between SGA and the point where benefits under the offset are zero, he or she will automatically experience an increase in income under the offset, and this income will allow the beneficiary to allocate more time to leisure (that is, the uses of their time other than paid work).

When offset eligibility ends, all of these changes in incentives occur in reverse. Thus, we would expect some of those who, for these reasons, have lower earnings under the offset than they would have under current law to increase their earnings after the BPP.

- There are reasons why treatment subjects might behave differently after their BPP ends than the analysis of income incentives above would imply; some might earn more than otherwise expected, but others might earn less.
  - Through their experience working, some offset users might decide that the nonmonetary benefits of work override any possible increase in income they might achieve by reducing their earnings to below the SGA amount. These beneficiaries are likely to maintain or even increase their earnings.
  - The offset reduced the risk of attempting to engage in SGA-level work, and some of those who did so successfully may have learned that they have more potential for future earnings than they previously thought. Hence, they may continue on that earnings trajectory following the end of the BPP even if a reduction in earnings would increase their income in the short run.
  - Those who reduce earnings to less than the SGA amount will need to comply with current-law reporting requirements for earnings, whereas if they remain at a higher earnings level and give up their benefits they can avoid the burden of reporting their earnings.
- There are other aspects of current-law SSDI rules that may cause treatment subjects to adjust their earnings after the end of their BPP. Two important considerations are the threat of losing entitlement and Medicare coverage. A detailed discussion of these considerations is outside the scope of this report.

In summary, transitioning from offset rules to current-law rules may cause a reduction in the earnings behavior of some treatment subjects with annual earnings above the BYA. However, other treatment subjects with annual earnings above the BYA may choose to maintain or increase earnings.

## C.2. Identifying and Notifying Subjects of the BPP End Date

SSA and the BOND Implementation Team developed several processes to identify and verify T1 subjects' BPP end dates, notify them about the end date, and inform them about the steps involved to transition back to current-law rules. First, ORDES and the BOND Implementation Team coordinate to identify beneficiaries with upcoming BPP end dates. The Implementation Team looks for such beneficiaries using BTS data on TWP dates and BPP start and end dates, and ORDES staff draw similar data from SSA's Disability Control File. Next, Implementation and ORDES staff verify their findings by checking for discrepancies between the two sources and resolving them. Lastly, Implementation Team and ORDES staff notify subjects approaching their BPP end dates of the upcoming transition. The Implementation Team mails a letter three months before the BPP end date, notifying subjects when their BPP will end, informing them of the steps they need to take as part of their return to current-law rules and processes, and providing information on resources to help them take those steps. Approximately two months later (a month before the BPP end date) ORDES uses BSAS (see Section 5.5) to generate a notice to the beneficiaries. This shorter document lists the upcoming BPP end date; includes information about Medicare premiums, as beneficiaries remain eligible for Medicare for at least some time after the BPP ends; and provides information about post-BPP steps and activities that is more limited than the information in the earlier letter.

As a result of these processes, most subjects learn of their specific end date about three months before it occurs. Notifying subjects about the end of the BPP at that time could affect BOND outcomes if subjects change their work behavior or earnings in anticipation of losing the benefit offset and WIC services. Yet, even if subjects rapidly reduced their work or earnings following the notice, it would affect only the final few months of the BPP.<sup>107</sup> The Implementation Team consulted with the BOND Evaluation Team about the timing of the letters to avoid the possibility of affecting demonstration outcomes during the fifth year of the follow-up period. Because the earliest BPP end dates were in April 2016, sending the first letter three months beforehand means 2015 was the last year in which no subjects had an end date or were notified about the end date.

Although most subjects receive accurate information about the BPP end dates three months before they occur, in rare cases when data are missing, outdated, or entered incorrectly in both BTS and the Disability Control File and are not corrected in time, subjects may receive inaccurate information about the BPP end date. In such cases, beneficiaries may also receive notification more or less than three months before the BPP end date. It is possible that this could cause premature changes to work or earnings. Approximately 30 of the 6,684 beneficiaries in the cohort of T1s with April 2016 end dates (less than one percent) were later found to have been provided incorrect information about the BPP end date. In these instances, the Implementation Team issues a corrected three-month letter as soon as an error is discovered. Interview respondents reported that the issue causing the initial errors has been resolved, meaning that only a few subjects were affected. During the focus groups with BOND counselors, one WIC reported that several beneficiaries received multiple notifications, each with a different BPP end date. For example, one subject received a letter with a BPP end date listed but later received a second notification letter with a different end date. The WIC described having more difficulty supporting beneficiaries until the correct end date was known, but did not mention whether this affected subjects' work or earnings behavior.

---

<sup>107</sup> Some beneficiaries may be aware of the timing of the BPP end date before they receive the letter.

In some cases, subjects may remain unaware that the BPP is ending because their letters were returned by mail as undeliverable. This group consists of beneficiaries who had not updated their address with the demonstration. Initial letters were returned as undeliverable for approximately 10 percent of the earliest T1 end-date cohort—subjects with end dates in April 2016. According to the Implementation Team, the returned letters were disproportionately for beneficiaries who did not use the offset; offset users typically provided updated contact information to their WICs. The Implementation Team did re-mail letters to this group, using updated address information from SSA’s systems. Some subjects may have eventually changed their behavior in response to receiving the letter, but later than if they had received the initial letter. This has not been an issue for beneficiaries with end dates after April 2016.

As discussed in Chapter 5, work CDRs are necessary to determine disability cessation dates and are a key milestone on the path to benefit adjustment.<sup>108</sup> The cessation date also determines the BPP start date. For multiple reasons, however, there is often a long time between the TWP completion date and when it is identified through a work CDR. Hence, in many cases the BPP start and end dates are not identified until two or three years after the start date, and in extreme cases the BPP end date occurs very soon after it is first identified, or even before. In these extreme cases, some beneficiaries may still receive the Implementation Team letter before the BPP end date (although less than three months in advance), but others may not receive it until after the end date. Of all T1 offset users with BPP end dates in 2016, 3.0 percent received notification after the end date, including 1.2 percent of those who used the offset in 2016. This late notification may have consequences for beneficiaries after they transition to current-law rules (including an unexpected loss of benefits), but it means that any effects on their work or earnings decisions apply to an even shorter amount of time toward the end of the BPP (if they were notified before the BPP end date), or not at all (if they were notified after the end date). In addition, these beneficiaries’ behavior throughout the BPP may have been different than if SSA had notified them of their cessation date closer to when it occurred.<sup>109</sup>

---

<sup>108</sup> A work CDR can establish a TWP completion date without also establishing a cessation date—for example, if the beneficiary completed the TWP but never earned more than the SGA threshold afterward. In most cases, however, the TWP completion date is not identified until the completion of the work CDR that also establishes the cessation date and paves the way for offset use.

<sup>109</sup> In some cases with extreme delays in completing the work CDR, the beneficiaries were aware of the offset because they reported their SGA-level earnings. The report itself triggered a work CDR, but it was delayed due to the work CDR backlog. In other cases, the beneficiaries did not report SGA-level earnings but SSA became aware of them after the fact and initiated a work CDR, which would also have been delayed. This latter set of cases may reflect beneficiaries who were not aware of BOND and the offset, and whose behavior during the BPP was guided by their understanding of current law. Of course, they did not necessarily have an accurate understanding of current law either.

### C.3. Educating Beneficiaries About BPP End Dates

In addition to notifying beneficiaries about the BPP end date, another important part of the process is educating them about the transition to current-law rules, so they are prepared for the transition. The Implementation Team uses the BPP end date letter and WIC support to educate beneficiaries about the transition from offset rules to current-law rules. The three-month letter from the Implementation Team describes the steps beneficiaries need to take as they return to current-law rules and processes that will apply after the end of the BPP, and also tells them they should contact their counselor with any questions and to receive any assistance they might need with these steps. The one-month notice from ORDES reminds beneficiaries to contact the BOND call center for assistance.

The Implementation Team conducted training for WIC (and EWIC) staff in November 2015 about the transition from offset rules to current law and how to counsel beneficiaries about the BPP ending. Counselors received a guidance document of frequently asked questions and answers as well as a checklist of information they should cover with beneficiaries. During the 2016 focus groups with WIC staff, respondents said they are generally comfortable providing guidance to beneficiaries and answering their questions about the end of the BPP.

According to the guidance provided by the Implementation Team, BOND counselors are not responsible for notifying beneficiaries about their end dates; this is accomplished by the notification letters. Furthermore, the guidance advised counselors not to reach out to beneficiaries before the three-month letter was mailed, both to avoid affecting beneficiaries' work and earnings (at the request of the Evaluation Team) and because the Implementation Team and ORDES may not have verified an end date before mailing the letter. However, counselors are encouraged to follow up with beneficiaries after the three-month letter is mailed, and should discuss the BPP end date if they are in contact with beneficiaries for another purpose after that time.<sup>110</sup> In addition, counselors were instructed to answer any questions beneficiaries ask about the BPP time frame and transition before the three-month letter is mailed. Although counselors are not required to reach out to beneficiaries after the three-month letter is mailed, Implementation Team respondents said that some counselors are initiating this contact once a beneficiary in their caseload receives the letter. Implementation Team respondents also noted that beneficiaries who had worked with their counselors in the past were likely to contact them after receiving notification letters.

Asking counselors to refrain from proactively telling beneficiaries about BPP end dates until the three-month letter was mailed ensured that BPP end date activities would not contribute to changes in work and earnings before that time. The counseling activities during the last three months help beneficiaries understand the BPP time frame and the transition process, so that beneficiaries are equipped to make informed choices about work and earnings after the BPP ends. Most WIC staff and supervisors said the main difference between counseling beneficiaries near the end of their BPP and counseling them earlier in the BPP was more emphasis on explaining current-law rules and beneficiaries' responsibilities when returning to those rules.

---

<sup>110</sup> The Implementation Team adds a case note to BTS when mailing the letter, which notifies the counselor of the upcoming end date.

#### C.4. Preparing Subjects for the Return to Current-Law Rules and Processes

Rules for reporting earnings change when a beneficiary returns to current-law rules. Before the end of the BPP, treatment beneficiaries report earnings and submit paperwork related to earnings and benefits to demonstration staff. In some sites, WIC staff handle these functions; in other sites, a centralized group of Implementation Team staff work with beneficiaries (see Section 4.4). After the BPP ends, this work shifts to local SSA field offices, and beneficiaries must report earnings there.<sup>111</sup> To prepare beneficiaries for this transition, the three-month letter from the Implementation Team tells beneficiaries to report their earnings to the local field office starting in the month after their BPP end date. The letter includes a list of resources and a link to the SSA website where beneficiaries can find their local office. The one-month notice ORDES sends does not mention the local field office, but it does list the BOND call center's phone number.

SSA field office and processing center staff review a beneficiary's work and earnings status beginning with the month after the BPP end date, and if they find that the beneficiary may be working above the SGA threshold, they conduct a post-BPP work CDR. If this review reveals earnings above the SGA amount after the last BPP month, then SSA terminates benefits, as it would at the end of the Extended Period of Eligibility (EPE).<sup>112</sup> Otherwise, the beneficiary receives his or her full monthly SSDI benefit amount. After the BPP ends, but while the review is in process (including the possible work CDR), SSA pays full benefits to beneficiaries who were receiving full or partial benefits as of their BPP end date—meaning they were working below the SGA threshold or above it but not enough for their benefits to be fully offset—as a default. SSA does not pay benefits during this review period to those who received zero benefits in the last BPP month, either because their earnings were high enough that their benefits were fully offset, or because they had not yet submitted an AEE.<sup>113</sup>

All treatment subjects still eligible for SSDI at the end of their BPP are also eligible for Medicare. After their BPP ends, they will remain eligible for Medicare for at least some time. Those who continue to receive SSDI continue to be eligible for Medicare. Those whose SSDI entitlement is terminated (due to earning above SGA after their BPP ends) remain eligible for Medicare for a limited period under the Extended Period of Medicare Coverage provisions that already apply under current law to beneficiaries whose benefits are terminated for SGA-level work. The duration of extended Medicare eligibility depends on when a beneficiary first earned above the SGA threshold after TWP completion; at the earliest, eligibility ends 7 years and 9 months (93 months) after the TWP ends.

---

<sup>111</sup> However, the Implementation Team will continue to assist beneficiaries with submitting documentation for non-countable income to SSA for the calendar year in which the BPP ended (as the beneficiaries were subject to the offset for part of the year). The non-countable income is needed for SSA's automated reconciliation process for the beneficiaries' final (partial) year in BOND.

<sup>112</sup> SSA considers beneficiaries who reach the end of the BPP to have completed the 36-month re-entitlement period of the EPE.

<sup>113</sup> The approach to default post-BPP benefit amounts avoids overpayments to subjects who have enough earnings to be fully offset. However, if subjects receiving partial benefits continue to earn above the SGA amount after the BPP, the benefits paid to them by default while SSA reviews their status will be overpayments.

During their time in the demonstration, Stage 1 subjects are eligible to receive counseling on work incentives from WICs; after their BPP, they are eligible for counseling from CWICs, the counselors who provide counseling on current-law SSDI rules to beneficiaries under the WIPA program. After a BOND subject's BPP end date, WICs do not provide additional counseling, but they can refer subjects to the WIPA program and other post-BPP resources, and can provide limited explanations of letters or other notifications sent to beneficiaries.

To support this transition, the three-month letter describes the availability of WIPA services, and an accompanying resource list includes information on how to contact the WIPA program to receive services. The Implementation Team conducted training for CWIC staff providing WIPA services in the BOND sites about serving former BOND beneficiaries. The training summarized the demonstration and the adjustment of subjects' benefits under the offset. It also noted that beneficiaries might have received relevant documents from their BOND counselor, and that they might need help from CWICs with the transition to current-law rules, including reporting earnings to SSA or dealing with overpayments. Finally, SSA removes the BOND flag from the WIPA tracking system; the flag was there to alert CWICs about beneficiaries who were in BOND at the time, so the WIPA counselors would not inadvertently provide counseling to them.