

**Ticket to Work Participant
Characteristics and Outcomes
Under the Revised Regulations**

Final Report

September 24, 2012

Gina A. Livermore
Denise Hoffman
Maura Bardos



MATHEMATICA
Policy Research

This page has been left blank for double-sided copying.



Contract Number:
0600-03-60130

Mathematica Reference Number:
08977.967

Submitted to:
Social Security Administration
Office of Retirement and Disability Policy
500 E Street, SW, 9th Floor
Washington, DC 20254
Project Officer: Paul O'Leary

Submitted by:
Mathematica Policy Research
1100 1st Street, NE, 12th Floor
Washington, DC 20002-4221
Telephone: (202) 484-9220
Facsimile: (202) 863-1763
Project Director: Gina A. Livermore

**Ticket to Work Participant
Characteristics and Outcomes
Under the Revised Regulations**

Final Report

September 24, 2012

Gina A. Livermore
Denise Hoffman
Maura Bardos

MATHEMATICA
Policy Research

This page has been left blank for double-sided copying.

ACKNOWLEDGMENTS

This report reflects the combined efforts of many people, including our Social Security Administration (SSA) project officer, Paul O’Leary. He and Elaine Gilby at SSA provided useful comments and guidance in developing this report.

At Mathematica, David Stapleton offered valuable input for the analysis plan, and Jody Schimmel provided comments on an early draft of the report. Debra Wright and Eric Grau helped us gain access to the three rounds of the National Beneficiary Survey (NBS) data and sampling-frame variables used in the analysis. Miriam Loewenberg and Dawn Phelps developed an abbreviated version of the 2010 Ticket Research File for use in the analysis, and they conducted the data match with the 2010 NBS. Ms. Loewenberg also conducted the match between the 2009 Ticket Research File and the 2005 and 2006 NBS rounds. Nathan Wozny provided invaluable assistance in developing the computations and programs necessary to conduct significance tests of the difference in the regression-adjusted means. Finally, Sharon Clark led the production effort for the report.

The opinions and conclusions expressed in this report are solely the authors’ and do not reflect the official views of SSA or Mathematica.

This page has been left blank for double-sided copying.

CONTENTS

ABSTRACT.....	xi	
ACRONYMS	xiii	
I	INTRODUCTION	1
	A. Background on TTW	3
	1. Service Environment Before the Passage of the Ticket Act.....	3
	2. The TTW Program Established by the Ticket Act	3
	3. Changes to the TTW Program Regulations	5
	B. Hypothesized Effects of the Revised Regulations	8
	1. Effects on TTW Participation and the Characteristics of Participants	8
	2. Effects on the Services Provided to TTW Participants.....	10
	3. Effects on the Employment Outcomes of TTW Participants.....	10
II	DATA AND METHODS	11
	A. Data Sources	11
	1. National Beneficiary Survey.....	11
	2. Ticket Research File.....	11
	3. County Unemployment Data from the Bureau of Labor Statistics	12
	B. Analysis Samples	12
	1. Post-Regulation-Change Samples	13
	2. Pre-Regulation-Change Samples	13
	C. Methods	14
III	TTW PARTICIPATION	17
	A. Trend in TTW Participation	17
	B. Characteristics of New TTW Participants Before and After the Regulation Change	18
	1. Descriptive Statistics	19
	2. Multivariate Determinants of TTW Participation	24

III (continued)

C. TTW Provider and Payment Types Before and After the Regulation Change26

 1. Descriptive Statistics26

 2. Multivariate Determinants of Assignment Under an EN Payment System27

IV SERVICE USE29

 A. Descriptive Statistics29

 B. Regression-Adjusted Estimates31

V EMPLOYMENT35

 A. Descriptive Statistics35

 B. Regression-Adjusted Estimates39

VI SATISFACTION WITH TTW41

 A. Descriptive Statistics41

 B. Regression-Adjusted Estimates42

VII CONCLUSIONS45

REFERENCES49

APPENDIX A DESCRIPTIVE STATISTICS FROM THE 2010 NBS..... A-1

APPENDIX B MULTIVARIATE REGRESSION MODEL ESTIMATES B-1

TABLES

I.1	EN Payments Under the Original and Revised Regulations	6
II.1	Sample Sizes	14
III.1	Sociodemographic Characteristics	20
III.2	Health-Related Characteristics	22
III.3	Activity and Functional Limitations	23
III.4	Program-Related Characteristics	24
III.5	TTW Provider and Payment Types	27
IV.1	Service Use	30
IV.2	Unmet Service Needs	31
IV.3	Regression-Adjusted Estimates of Service Use Before and After TTW Regulation Changes	33
V.1	Work-Related Goals and Expectations (%)	36
V.2	Employment Status	36
V.3	Job Characteristics of Employed TTW Participants	38
V.4	Job Satisfaction of Employed TTW Participants	39
V.5	Regression-Adjusted Estimates of Employment-Related Outcomes Before and After the TTW Regulation Changes	40
VI.1	Experiences with the TTW Program	42
VI.2	Regression-Adjusted Estimates of Experiences with the TTW Program Before and After the TTW Regulation Changes	43

This page has been left blank for double-sided copying.

FIGURES

III.1	TTW Participation Rates by Payment System, 2005–2010	18
III.2	Total Monthly Number of TTW Assignments by Provider Type and EN Payment System, 2005–2010	19

This page has been left blank for double-sided copying.

ABSTRACT

In July 2008, regulation changes to the Ticket to Work (TTW) program were implemented to increase the financial incentives for service providers to actively participate in the program. In response to these changes, we might expect to see changes in the characteristics and outcomes of beneficiaries who participate in TTW. In this report, we compare the characteristics and outcomes of two cohorts of TTW participants—one whose members assigned their Tickets before the revised regulations were implemented, and one whose members assigned their Tickets after. In our comparisons of the service use and employment outcomes of these pre- and post-regulation-change cohorts, we control for differences in their characteristics and differences in the unemployment rate between the two time periods.

We found that compared with the pre-regulation-change cohort, the post-regulation-change cohort had a larger share of younger beneficiaries, was more likely to have psychiatric conditions, and was less likely to have ever worked for pay. The two cohorts were similar in their service-use patterns, but the post-regulation-change cohort was less likely to report unmet service needs, more likely to report satisfaction with TTW, and less likely to be employed.

Although we found some significant differences between the pre- and post-regulation-change cohorts, the findings provide only limited evidence of changes that could be tied to the revised TTW regulations. In interpreting the findings, it is important to keep in mind that the analyses were not designed to measure the impacts of the revised regulations. Although the comparisons are intended to highlight differences in the experiences of TTW participants before and after the revised regulations that might be suggestive of impacts, any differences observed cannot be attributed with certainty to the regulation changes. Many factors external to the regulation changes likely contributed to the differences, and we were not able to control for these factors in our analyses. In particular, comparing the employment outcomes of the pre- and post-regulation-change cohorts was confounded by the significant economic recession that occurred from December 2007 through July 2009 and the persistently high unemployment rates that continued after the official end of the recession. Although we attempted to control for the high unemployment rates that occurred during the post-regulation-change period, our measure is unlikely to have adequately reflected the effects of the business cycle on individuals with significant disabilities.

This is the fifth in a series of reports that make up the seventh Ticket to Work evaluation report.

This page has been left blank for double-sided copying.

ACRONYMS

ADL	Activities of Daily Living
CDR	Continuing Disability Review
DI	Social Security Disability Insurance (under Title II of the Social Security Act)
EN	Employment Network
FIPS	Federal Information Processing Standard
IADL	Instrumental Activities of Daily Living
MSA	Metropolitan Statistical Area
PSU	Primary Sampling Unit
NBS	National Beneficiary Survey
SGA	Substantial Gainful Activity
SNAP	Supplemental Nutrition Assistance Program
SSA	Social Security Administration
SSI	Supplemental Security Income (Title XVI of the Social Security Act)
SVRA	State Vocational Rehabilitation Agency
TRF	Ticket Research File
TTW	Ticket to Work
VR	Vocational Rehabilitation
WIPA	Work Incentives Planning and Assistance

This page has been left blank for double-sided copying.

I. INTRODUCTION

The Social Security Administration (SSA) administers two programs that provide income support to nearly 12 million working-age people with disabilities—the Social Security Disability Insurance (DI) program and the Supplemental Security Income (SSI) program.¹ Although people who receive SSI or DI must initially demonstrate that they are unable to work at substantial levels due to their impairments, after benefits begin many can and do work. Some beneficiaries work at levels low enough to continue to receive benefits, and others earn at levels high enough to exit the SSI and DI programs.

In recent years, Congress has adopted programs to encourage SSI and DI beneficiaries to become and remain employed. The Ticket to Work (TTW) program, included in the Ticket to Work and Work Incentives Improvement Act of 1999 (Ticket Act), is intended to increase access to, and the quality of, rehabilitation and employment services available to disability beneficiaries.² The program is designed to provide beneficiaries with greater freedom to choose among more service providers, create competition among providers so they provide high quality services responsive to beneficiary needs, and give providers incentives to deliver services in the most efficient and appropriate manner to achieve desired outcomes.

Under TTW, eligible beneficiaries can obtain a Ticket that can be redeemed for vocational rehabilitation (VR), employment, or other support services from participating providers called employment networks (ENs). These providers receive payments from SSA if the beneficiaries they serve achieve successful employment outcomes. This type of payment system is sometimes referred to as an outcome- or performance-based payment system. Congress hoped that TTW would give providers incentives to serve beneficiaries in ways that encourage them to enter the workforce and reduce their reliance on SSA disability benefits.

A major goal of TTW was to increase beneficiary choice of employment-service providers, but as of 2007 many beneficiaries still had little or no choice of ENs (Stapleton et al. 2008). The vast majority (95 percent of Ticket holders in December 2007) assigned their Tickets to the State Vocational Rehabilitation Agency (SVRA) and received services from the agency as they had before TTW was implemented.

In an effort to strengthen the program, SSA significantly changed the regulations governing TTW. The revised regulations took effect on July 21, 2008. These revised regulations were designed both to make TTW more financially attractive to providers and to reflect a more flexible return-to-work concept. The regulations made ENs eligible for payments for clients working at lower levels of earnings than before and increased the total value of potential payments. They also sought to reduce the administrative burden of participating in TTW for providers through implementing regulatory and administrative changes.

¹ The SSI program also serves children with disabilities and individuals age 65 and over.

² Other programs and resources included in the Ticket Act include the Work Incentives Planning and Assistance (WIPA) program, expedited benefit reinstatement, extended Medicare coverage, Area Work Incentive Coordinators, Medicaid Infrastructure Grants, state Medicaid Buy-In programs, and Protection and Advocacy for Beneficiaries of Social Security.

The primary purpose of this report is to compare the TTW-related experiences of beneficiaries before and after implementation of the revised TTW regulations, and assess the extent to which there were changes in the following:

- The characteristics of beneficiaries who assigned their Tickets under TTW, particularly those who assigned Tickets to providers operating under the EN payment systems
- The types and intensity of services received by TTW participants
- The employment expectations and outcomes of TTW participants
- Participant satisfaction with TTW

The pre- and post-regulation-change analyses are based on comparisons of the characteristics and experiences of two cohorts: beneficiaries and TTW participants interviewed in 2005 and 2006 in rounds 2 and 3 of the National Beneficiary Survey (NBS), and beneficiaries and TTW participants interviewed in 2010 in round 4 of the NBS.³

Although the primary purpose of the report is to compare beneficiary experiences before and after implementation of the revised TTW regulation, a secondary purpose is to provide updated information about the characteristics and employment-related outcomes of TTW participants based on data in the 2010 NBS, analogous to the detailed statistics on TTW participants based on earlier rounds of the NBS and presented in previous TTW evaluation reports (Thornton et al. 2004, 2006, and 2007; Stapleton et al. 2008). These statistics are presented in Appendix A for TTW participants overall and by type of TTW provider. To facilitate comparisons and provide context, analogous statistics are also shown for all beneficiaries and beneficiaries indicating work goals and expectations.⁴

In the remainder of this chapter, we provide background information about TTW, including details about TTW under the revised regulations. This information is drawn extensively from Altshuler et al. (2011). The chapter concludes with a brief discussion of the potential impacts of the revised TTW regulations on beneficiary participation in TTW, and also looks briefly at beneficiaries' experiences in the program and employment outcomes. The remaining chapters of the report describe the data and methods used in the analyses (Chapter II) and present the findings of the analyses with respect to TTW participation (Chapter III), service use (Chapter IV), employment (Chapter V), and satisfaction with the TTW program (Chapter VI). A summary and concluding remarks are provided in Chapter VII.

³ Although within-cohort differences in the characteristics and outcomes of participants who assigned Tickets to SVRAs compared with those who assigned Tickets to ENs are also of interest, we do not examine the issue in this report. Differences between those groups have been studied extensively and reported in previous TTW evaluation reports (Thornton et al. 2007; Stapleton et al. 2008; and Livermore et al. 2010).

⁴ Readers are referred to Wright et al. (2012) for similar statistics on all beneficiaries disaggregated by program (SSI, DI, and concurrent) based on the 2010 NBS.

A. Background on TTW

1. Service Environment Before the Passage of the Ticket Act

Social Security disability beneficiaries can face significant challenges in their efforts to find and retain jobs and to achieve financial independence. Employment-related services represent an important source of assistance that can help beneficiaries in these efforts. Before 1994, SVRAs were the sole source of SSA-funded vocational and employment services. State disability-determination services referred new disability beneficiaries deemed to be good candidates for VR services to SVRAs.⁵ Beneficiaries also could apply to SVRAs directly for services. Since 1981, SSA reimbursed SVRAs (subject to program rules and limits) for the cost of the services provided to beneficiaries who achieved employment above the SSA-defined substantial gainful activity (SGA) level for nine months in a one-year period (SSA 2010).⁶

Although SVRAs helped many people with disabilities return to work, the market for employment services had several shortcomings. With SVRAs acting as the only source of SSA-funded employment services for this population, Social Security disability beneficiaries seeking services had little choice in either types of services or service providers. In addition, geographic distance from providers and waiting lists for services may have deterred some from seeking SVRA services.

In 1994, SSA made an effort to expand the availability of VR services by adopting regulations to institute the Alternate Participant Program. Under the Alternate Participant Program, which was implemented in 1996, qualified organizations contracted with SSA to provide services to beneficiaries who could not be served by SVRAs. These alternate providers were reimbursed in the same way as SVRAs. However, for a variety of reasons, very few beneficiaries ever enrolled with alternate providers (Livermore et al. 2003).

2. The TTW Program Established by the Ticket Act

In 1999, Congress passed the Ticket Act, which included the TTW program along with other provisions aimed at promoting employment among individuals with disabilities. The goal of TTW is to facilitate beneficiaries' independence from SSA disability benefits by increasing the number of organizations providing rehabilitation and employment services, thereby providing beneficiaries with greater access to and choice of services. Under TTW, any qualified entity—whether public or private, for profit or not for profit—can contract with SSA to provide services. These entities are referred to as employment networks or ENs. TTW was phased in over a period of approximately three years, from February 2002 through September 2004. Under contract changes implemented in 2011, SSA expanded the qualification requirements to include an acceptable business plan.

⁵ State disability-determination services typically also referred denied Social Security applicants who were good candidates for SVRA services.

⁶ In 2012, SSA defined the monthly SGA level as \$1,010 in monthly earnings for sighted beneficiaries and \$1,690 for blind beneficiaries. Since 1999, the SGA level is revised annually to reflect changes in the national average wage index.

All DI beneficiaries and SSI recipients are eligible for support services from SVRAs or non-SVRA ENs under TTW. The assignment of the Ticket to a provider is based on a mutual and voluntary agreement between the beneficiary and provider. A provider may choose to deny services to a Ticket holder or cease the provision of service. Similarly, beneficiaries may reassign their Ticket to a new provider for any reason.

ENs work with clients to develop an Individual Work Plan (referred to as an Individual Employment Plan among SVRAs) targeted to meet each client's employment goals. The plan identifies the services needed to help achieve these goals. Services vary across beneficiaries and can range from basic services, such as assistance with resume development and job search, to more intensive services, such as long-term education or training.

ENs are eligible to receive payments from SSA when the beneficiaries they serve achieve specific employment outcomes. The original Ticket Act provisions created two payment systems called the outcome-only and the milestone-outcome payment systems. Under the outcome-only system, ENs are paid for each month in which a client's benefits are suspended due to earnings, up to a maximum of 60 months. Under the original milestone-outcome system, ENs received up to four payments when beneficiaries achieved certain employment milestones, defined in terms of earnings above SGA for a certain number of months during a specific time frame. If a beneficiary had his or her benefits suspended due to earnings, the EN was also eligible to receive up to 60 outcome payments under the milestone-outcome system.

The EN payment systems instituted under TTW are available to SVRAs, but SVRAs also are allowed to continue to serve beneficiaries under the traditional SVRA reimbursement system. SVRAs can choose to serve beneficiaries under one of the EN payment systems or under the traditional reimbursement system, and can do so on a case-by-case basis. In contrast, ENs are not permitted to change payment systems on a case-by-case basis. ENs must serve all beneficiaries under a chosen system (outcome-only or milestone-outcome), but are periodically allowed to change their designation.

The TTW program aimed to attract providers in order to spawn competition among them and ultimately give beneficiaries greater choice of providers. It was thought that increased competition among providers, combined with financial incentives, would lead to higher quality services for DI beneficiaries and SSI recipients, and would also increase beneficiaries' access to service providers and enable them to select from a variety of approaches to service delivery.

Despite its intentions, the TTW program failed to achieve many of its desired results. Participation in the program has been low. As of December 2007, only 2.3 percent of eligible beneficiaries had assigned their Tickets, and of those who assigned Tickets, only 5.4 percent received services from a non-SVRA EN (Altshuler et al. 2011). Although Ticket assignment rates were about two-times higher among work-oriented beneficiaries (Livermore et al. 2009b), these figures suggest that the service environment remains similar to that which existed prior to the passage of the Ticket Act.

Lower-than-anticipated participation by ENs may have contributed to the low beneficiary-participation rates. Of the over 1,200 organizations registered as ENs in June 2008 (including SVRAs), only 305 had accepted one or more Tickets and only 147 had accepted five or more Tickets (Altshuler et al. 2011). Several factors have contributed to providers' reluctance to serve Ticket holders, including the financial risk involved in providing services, the considerable time lag before

payment is received, and the administrative burden associated with screening candidates, tracking client earnings, and filing claims for payment (Livermore et al. 2003; Thornton et al. 2006).

3. Changes to the TTW Program Regulations

The Ticket Act authorized the commissioner of Social Security to make modifications to the TTW program to improve its effectiveness. SSA used that authority to enact significant revisions to the TTW program regulations designed to address several of the program's perceived shortcomings. The revised regulations, which went into effect on July 21, 2008, focused on reforms to the payment system but also included other types of changes.

a. Payment System Changes

Under the revised regulations, the total amount payable under both the outcome-only and milestone-outcome systems increased; the increases for SSI-only recipients were substantial (Table I.1).⁷ Outcome-only payments are now indexed at 67 percent of the average monthly DI or SSI-only benefit payment, up from 40 percent under the original regulations. For a DI beneficiary in 2012, this translates to an outcome payment amount of \$719 (compared to \$429 under the old system).⁸ The increase in the outcome payments for DI beneficiaries was coupled with a shorter period over which ENs could receive the payments—reduced from 60 months to 36. Milestone-outcome payments increased from 85 percent of the total potential payment under the outcome-only payment system to 90 percent. The minimum earnings thresholds needed to trigger milestone payments were also reduced. For example, under the original regulations the first milestone payment was made when a DI beneficiary achieved monthly earnings above SGA (\$1,010 in 2012); but under the revised regulations, the earnings threshold for the first milestone payment is much lower (\$360 in 2012).⁹ There are also more milestones under the revised regulations, allowing ENs to be paid more frequently. The payment increases were largest for SSI-only recipients. Under the original regulations, potential EN payments were about 70 percent higher for DI beneficiaries than for SSI-only recipients. Under the revised regulations the potential payments are about equal.

The new TTW legislation changed several other regulations in favor of ENs. Under the original legislation, ENs were required to refund any payments received for a beneficiary who was retroactively determined by SSA to be ineligible for disability benefits. These EN overpayments are no longer subject to repayment. Another feature of the revised regulations, called Partnership Plus, allows SVRAs and ENs to serve beneficiaries sequentially; ENs are eligible for certain milestone and outcome payments even if an SVRA has been reimbursed under the traditional cost reimbursement system for serving the same beneficiary.

⁷ For a full description of the regulation changes, see Altshuler et al. (2011).

⁸ The average monthly DI benefit payment in 2012 is \$1,073.04.

⁹ An additional provision prohibits early (Phase 1) milestone payments to ENs for beneficiaries who have worked above the trial work period level (\$720 in 2012) during the past 18 months. Later (Phase 2) milestone payments and outcome payments are permitted.

Table I.1. EN Payments Under the Original and Revised Regulations

Payment Type	Earnings/Benefits Requirements		Payment for DI Beneficiary (\$)	Payment for SSI-Only Recipient (\$)
Original Regulations				
Milestone-Outcome				
Milestone payments	1	1 month with SGA-level earnings	365	210
	2	3 of 12 months with SGA-level earnings	730	419
	3	7 of 12 months with SGA-level earnings	1,460	837
	4	12 of 15 months with SGA-level earnings	1,825	1,046
Outcome payments	1 - 60	Each month at \$0 cash disability benefits	365	210
Total potential milestone-outcome payment			21,900	12,600
Outcome-Only				
Outcome payments	1 - 60	Each month at \$0 cash benefits	430	246
Total potential outcome-only payment			25,800	14,760
Revised Regulations				
Milestone-Outcome				
Phase 1 milestones	1	1 month with earnings at 50 percent of the trial work level	1,288	1,288
	2	3 of 6 months with earnings at trial work level	1,288	1,288
	3	6 of 12 months with earnings at trial work level	1,288	1,288
	4	9 of 19 months with earnings at trial work level	1,288	1,288
Phase 2 milestones	1-11	(DI) Each month with SGA-level earnings	387	n.a.
	1-18	(SSI) Each month at \$0 cash disability benefits	n.a.	222
Outcome payments	1-36	(DI) Each month with SGA-level earnings	387	n.a.
	1-60	(SSI) Each month at \$0 cash disability benefits	n.a.	222
Total potential milestone-outcome payment			23,341	22,468
Outcome-Only				
Outcome payments	1-36	(DI) Each month with SGA-level earnings	719	n.a.
	1-60	(SSI) Each month at \$0 cash benefits	n.a.	412
Total potential outcome-only payment			25,884	24,720

Source: Social Security Administration 2008.

Note: Payment amounts are calculated at the 2012 levels. The value of outcome payments is adjusted down in the milestone-outcome system. n.a. indicates that payment amounts were not applicable to the corresponding group.

b. TTW Eligibility Changes

Eligibility for TTW was expanded under the 2008 regulation changes. Before July 2008, new beneficiaries categorized by SSA as “medical improvement expected” were eligible to participate in

TTW only if their first medical continuing disability review (CDR) found them still eligible for disability benefits.¹⁰ Under the revised regulations, all adult beneficiaries with disabilities are eligible to participate.

c. Introduction of the Ticket In-Use Status for SVRAs

Before the 2008 regulations, SVRAs could receive payments from SSA (through the traditional reimbursement, milestone-outcome, or outcome-only payment systems) only when their beneficiary clients agreed to assign their Tickets to the SVRA and completed the Ticket-assignment process.¹¹ Under the revised regulations, SVRAs are not required to submit signed agreements from each Ticket holder they are serving; instead, they submit a file of potential Ticket holders they are serving, and SSA designates the Tickets of these individuals as in use. While a Ticket is in use, the SVRA is eligible to be reimbursed under the traditional SVRA payment system, and the beneficiary remains eligible for a medical CDR waiver.¹² The Ticket cannot be assigned to another EN without first being taken out of use. SVRAs must still complete the Ticket-assignment process to assign Tickets under the milestone-outcome or outcomes-only payment systems (Altshuler et al. 2011).

d. Other Changes

Under the revised regulations, ENs must document a beneficiary's recent work and earnings as part of the Ticket-assignment process. This is sometimes referred to as the "earnings look back." When a beneficiary first assigns a Ticket, some or all of the Phase 1 milestone payments may not be available if the beneficiary has worked above the trial work level (\$720 in 2012) during the previous 18 months. For example, the first Phase 1 milestone payment is not available if the client had earnings above the trial work level in the month before Ticket assignment. Phase 2 milestones remain available for all beneficiaries. The intent of this rule is to compensate ENs only for services that move beneficiaries beyond their initial employment level. The requirement that ENs document the recent work history during the Ticket-assignment process is intended to inform the EN of the TTW payments for which it may or may not be eligible.

TTW participants are not subject to medical CDRs while they are participating in the program and making "timely progress" towards work. The definition of timely progress for purposes of maintaining the medical CDR waiver was updated and made stricter under the revised regulations. Originally, for example, there was no work requirement in the first two years of Ticket assignment, whereas under the revised regulations, timely progress is considered three months of earnings above SGA in the first year of Ticket assignment. The new regulations do, however, include education as a marker of timely progress.

¹⁰ Medical CDRs are periodic reviews in which SSA determines whether a beneficiary has medically recovered enough to engage in SGA, or remains disabled based on the medical criteria used for program eligibility.

¹¹ The Ticket-assignment process generally requires the EN to verify the beneficiary's eligibility for TTW, develop an Individual Work Plan, and have the beneficiary complete and sign a Ticket-assignment form. The process also now requires ENs to document the beneficiary's recent work activity (see Section A.3.d).

¹² Beneficiaries actively participating in TTW are exempt from these reviews.

B. Hypothesized Effects of the Revised Regulations

A primary purpose of the revised regulations was to make the EN payment systems potentially more lucrative so that more providers would be enticed to actively participate in TTW. As documented elsewhere (Altshuler et al. 2011; Prenovitz et al. 2012) and briefly described in Chapter III, ENs did indeed begin to accept more Tickets after implementation of the revised regulations. Given the changes to the payment systems and resulting increase in TTW participation by providers and beneficiaries (as well as other changes implemented with the revised regulations), we would expect to see certain effects on the characteristics and outcomes of beneficiaries who participate in TTW. We discuss these potential effects below.

1. Effects on TTW Participation and the Characteristics of Participants

Several features of the revised regulations could potentially affect the number and characteristics of TTW participants. As noted previously, beneficiary participation in TTW increased following implementation of the revised regulations, and continued to increase since through 2010. ENs appear to be more willing than in the past to accept Tickets from beneficiaries.^{13, 14} It is possible that the changes to the payment system have increased providers' incentives to serve individuals who under the original regulations were perceived as unable to earn at levels that would generate at least milestone payments. Because milestone payments are now triggered by lower earnings—that is, because providers are more likely to be compensated with milestone payments soon after a beneficiary becomes employed—ENs might be more willing to accept Tickets from individuals who need substantial time or assistance to eventually achieve SGA-level earnings.

The relative increase in the total potential payments for SSI-only recipients might also induce ENs to serve more of these beneficiaries who have very limited or no work experience. SVRAs might also be more inclined to serve some of their clients under the EN milestone-outcome system, rather than under the traditional payment system, even if those clients are perceived as being unlikely to achieve sustained SGA-level earnings.¹⁵ If higher potential total payments induce ENs to serve individuals who require more intensive assistance to reach SGA-level earnings, then TTW participants who assigned their Tickets under the revised regulations might be more likely than earlier participants to have more severe disabilities or need more intensive employment-support services.

¹³ Immediately following implementation of the revised regulations, the number of ENs affiliated with TTW also increased. Since 2009, however, SSA has made a concerted effort to terminate contracts with ENs that have not been active in the program or that are attempting to participate in ways not aligned with SSA's goal of helping beneficiaries work and earn at levels that reduce their reliance on Social Security disability benefits. See Prenovitz et al. (2012) for further discussion.

¹⁴ The increase in Ticket assignments could also be due to an increase in beneficiary demand for services. But given the rather sharp increase in Ticket assignments under the milestone-outcome payment system during the months immediately following implementation of the revised regulations, it is unlikely that a sudden change in demand for services by beneficiaries was the sole cause.

¹⁵ Following implementation of the revised regulations, SVRA Ticket assignments under an EN payment system increased substantially (Prenovitz et al. 2012). The large majority of these were under the milestone-outcome system.

Other features of the revised regulations might also have changed the composition of TTW participants. The introduction of the Ticket in-use status substantially changed the way Tickets are assigned for beneficiaries receiving SVRA services under the traditional payment system. The changes led to an increase in the number of Tickets assigned to SVRAs, as reflected in administrative data by in-use status. Although many of these individuals were already participating in SVRA services under the original regulations, their participation was not reflected in the administrative data,¹⁶ and thus not reflected in previous analyses of TTW participants under those regulations.¹⁷ In comparing the pre- and post-regulation-change cohorts in the NBS, then differences in the characteristics of TTW participants assigned under the traditional payment system might become apparent. The differences, however, are likely to reflect SVRA idiosyncrasies regarding their Ticket-assignment processes both before and after the revised regulations. Previous analyses suggest that under the original regulations, SVRAs in the Phase 1 states were more aggressive in attempting to assign the Tickets of clients they were serving under the traditional payment system than were SVRAs in the Phase 2 and 3 states (Stapleton et al. 2008).¹⁸ Since implementation of the revised regulations, SVRAs have used different procedures for transmitting information about the beneficiary clients they are serving, likely resulting in variation across SVRAs in the timeliness and accuracy of the Ticket in-use designations (Altshuler et al. 2011).

Expanding TTW eligibility to new beneficiaries categorized as “medical improvement expected” might affect the overall composition of TTW participants if these beneficiaries are more likely than others to participate in TTW, and if they have characteristics that differ from other participants’. In general, we might expect these beneficiaries to be younger, to have been on the rolls a shorter time, and to have disabling health conditions that are not permanent or that are likely to improve with treatment. But given that these new beneficiaries who have not yet had their first medical CDR are likely to represent a tiny fraction of all TTW participants, at least during the period immediately following implementation of the revised regulations represented by our postregulation sample, we would not expect this change in the regulations to have a noticeable impact on the composition of beneficiaries. Over time, however, this group might represent a larger share of beneficiaries who participate in TTW.¹⁹

¹⁶ SVRAs often would not assign the Tickets of clients they believed would not achieve employment outcomes sufficient to generate SSA payments.

¹⁷ Such analyses include those conducted for the TTW program evaluation presented in Thornton et al. 2004, 2006, and 2007; Stapleton et al. 2008 and 2009; and Livermore et al. 2010.

¹⁸ TTW, implemented in 2002, was phased in nationwide over three years. In 2002, the first year of the program, SSA distributed Tickets in the following 13 states, known as the Phase 1 states: Arizona, Colorado, Delaware, Florida, Illinois, Iowa, Massachusetts, New York, Oklahoma, Oregon, South Carolina, Vermont, and Wisconsin. Phase 2 ran from November 2002 through September 2003, during which time SSA distributed Tickets in the following 20 Phase 2 states and the District of Columbia: Alaska, Arkansas, Connecticut, Georgia, Indiana, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, North Dakota, South Dakota, Tennessee, and Virginia. Phase 3 ran from November 2003 through September 2004, during which time SSA distributed Tickets in 17 states: Alabama, California, Hawaii, Idaho, Maine, Maryland, Minnesota, Nebraska, North Carolina, Ohio, Pennsylvania, Rhode Island, Texas, Utah, Washington, West Virginia, and Wyoming, as well as in American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the Virgin Islands.

¹⁹ The abbreviated TRF10 data used in the analyses conducted for this report (see Chapter II) do not contain the information needed to identify those in the post-regulation change sample who were labeled “medical improvement

Finally, we might expect the revised regulations' stricter and more concerted effort to enforce timely progress requirements to change the composition of TTW participants in that it might reduce the number of TTW enrollees not actively participating in the program. But SSA did not start enforcing these requirements until November 2010 (Prenovitz et al. 2012), and so the composition and employment outcomes of our post-regulation-change analysis sample will not reflect any effects of the timely progress requirements.

2. Effects on the Services Provided to TTW Participants

If ENs anticipate higher TTW revenues, they might be willing to provide more intensive or otherwise more expensive services.²⁰ Service provision might also change if the needs of TTW participants are different because the characteristics of participants have changed for the reasons discussed in the previous section. If ENs are providing enhanced services under the revised regulations, then beneficiary satisfaction with TTW services might also improve.

3. Effects on the Employment Outcomes of TTW Participants

Employment outcomes of TTW participants might improve under the revised regulations if, as discussed in the previous section, ENs respond to higher potential revenues by providing more intensive services to beneficiaries that in turn lead to better employment outcomes. However, if providers respond to the reduced earnings requirements associated with the revised milestone payments by increasing their acceptance of Tickets from individuals who are unlikely to ever achieve SGA-level earnings, the employment outcomes of TTW participants under the milestone-outcome system might worsen under the revised regulations.

In addition to provider incentives that might work in opposing directions, another confounding factor in our comparison of employment outcomes for pre- and post-regulation-change cohorts is the significant economic recession from December 2007 through July 2009, along with the persistently high unemployment rates that continued after the official end of the recession. Although we attempt to control for the high unemployment rates that occurred during the post-regulation-change period in our analyses, our blunt measure is unlikely to precisely reflect the effect of the business cycle on individuals with significant disabilities. Our findings very likely reflect economic and other external factors that affected beneficiary employment during the post-regulation-change period beyond any effects of the revised regulations.

(continued)

expected" and had not yet passed their first medical CDR, so we do not explicitly analyze this potential effect of the revised regulations in this report.

²⁰ In addition to increasing the potential payment amounts available to ENs and reducing the earnings requirements for triggering certain milestone payments, the TTW program implemented a variety of administrative changes intended to reduce the burden on providers of submitting claims for payment. See Altshuler et al. (2011) for further discussion.

II. DATA AND METHODS

The analyses presented in this report use data from three rounds of the NBS that were linked to SSA administrative data and other external data sources. In this chapter, we describe the data sources and samples used in the analyses and provide an overview of the study methods.

A. Data Sources

1. National Beneficiary Survey

Four rounds of the NBS—administered in 2004, 2005, 2006, and 2010—have been conducted as part of the TTW program evaluation. Each NBS round includes two components: (1) a nationally representative sample of Social Security disability beneficiaries ages 18 to 64 and (2) a cross-sectional sample of TTW participants.²¹ Each survey round used the same core set of questions designed to provide a wealth of information about the characteristics, service use, and employment activities of Social Security disability beneficiaries.

To construct comparable samples of TTW participants enrolled in the program both before and after the regulation changes that occurred in 2008, we used data from the second, third, and fourth rounds of the NBS (2005, 2006, and 2010 NBS). Because TTW was implemented in phases, the first three rounds of the NBS contain TTW participant samples that are representative of TTW participants residing in particular states. The 2005 NBS contains a representative sample of TTW participants residing in Phase 1 and Phase 2 rollout states, and the 2006 NBS contains a representative sample of TTW participants residing in Phase 3 states. Thus, by combining the 2005 and 2006 NBS samples, we were able to construct a nationally representative sample of pre-regulation-change TTW participants that is comparable to the TTW participant sample in the 2010 NBS, which contains a nationally representative sample of TTW participants who assigned their Tickets after the 2008 regulation changes took effect.²² Section B further describes our methods for constructing the pre- and post-regulation-change TTW samples.

For selected analyses, we also used the national beneficiary samples from the 2005 NBS, 2006 NBS, and 2010 NBS and combined them with the TTW participant samples to create combined pre- and post-regulation-change national samples. The methods used to construct these samples are described in Section B.

2. Ticket Research File

The NBS records were matched to SSA administrative data contained in the 2009 Ticket Research File (TRF09) and an abbreviated version of the 2010 Ticket Research File (TRF10). The annual TRFs are made up of extracts from a number of SSA administrative data files and contain a record for all individuals age 18 to full retirement who participated in the SSI and DI programs at any point from March 1996 through December 2010. These data were used to obtain TTW

²¹ The first three NBS rounds also include longitudinal TTW participant samples.

²² Detailed information about the sample designs of the 2005, 2006, and 2010 NBS rounds is in Stapleton et al. (2008), Livermore et al. (2009a), and Wright et al. (2012).

enrollment information and to provide SSI- and DI-related characteristics for members of the sample during the time periods surrounding the sampling and interview months for use in the analysis.

Each year since 2004, SSA has sponsored an annual update of the TRF. The records from the 2005 NBS and 2006 NBS were matched to the TRF09. The TRF09 contains retrospective information covering the sampling and interview periods for respondents to these surveys. The 2010 NBS records were matched to an abbreviated version of the TRF10 in order to capture SSA-related information around the NBS interview period in 2010. Because the planned update for the full TRF10 was delayed, SSA sponsored the development of an abbreviated version of the TRF10 so that SSA administrative data through December 2010 could be used for purposes of the Work Incentives Planning and Assistance (WIPA) and TTW program evaluations. The abbreviated TRF10 contains records only for beneficiaries who had ever participated in the WIPA or TTW programs as of March 2011, and for all beneficiaries who responded to the 2010 NBS, a total of 668,348 observations.

3. County Unemployment Data from the Bureau of Labor Statistics

To account for local economic conditions, we included county-level unemployment data in selected analyses. Federal information processing standard (FIPS) codes collected for the NBS sample members were used to match NBS respondents with the average annual county unemployment rates associated with the year of their respective NBS interviews. These local unemployment rates were produced by the Local Area Unemployment Statistics program within the Bureau of Labor Statistics (U.S. Department of Labor 2012a, 2012b, 2012c).

Unemployment information and FIPS codes were missing for a small number of cases. Of the over 3,000 U.S. counties, unemployment information was missing from seven counties in 2005 and 2006. All seven counties were in the New Orleans area; due to the severe population displacement associated with Hurricane Katrina, estimates were not created for the parishes that make up the New Orleans Metropolitan Statistical Area (MSA) (U.S. Department of Labor 2012d). For our purposes, the MSA-level unemployment rate for New Orleans was used for the 151 observations from those areas (93 from the TTW participant sample and 58 from the national beneficiary sample). FIPS codes were missing for an additional eight observations in the TTW participant sample. For six of these, zip code information from the TRF was used to identify the state of residence, and state-level annual unemployment rates were used. For the two remaining observations, state of residence could not be identified, so we used the national unemployment rate during the year of interview.

B. Analysis Samples

Below, we describe how we constructed the pre- and post-regulation-change samples. Construction of the pre-change sample using the 2005 and 2006 NBS TTW participant samples was done in a manner intended to mimic the sampling criteria used for the post-change sample derived from the 2010 NBS TTW participant sample. For this reason, we first describe the features of the post-change sample.

1. Post-Regulation-Change Samples

The post-regulation-change sample of TTW participants was drawn from the 2010 NBS. The TTW participant sample in this NBS round was representative of all TTW participants who had assigned a Ticket after July 2008 (when the new regulations took effect) and also were enrolled in TTW at some time between January and October 2009 (the sampling month). Thus, at sampling, the Tickets of those in the sample had been assigned for 16 months or fewer (from July 2008 until the end of October 2009). The post-regulation-change sample is representative of TTW participants nationwide who had assigned their Ticket 16 or fewer months prior to the sampling date.²³

For analyses related to TTW participation, we combined the 2010 NBS cross-sectional beneficiary sample with the TTW participant sample and developed a set of weights specifically for use with this combined sample to ensure that it is nationally representative of all beneficiaries.

2. Pre-Regulation-Change Samples

To construct a nationally representative sample of pre-regulation-change TTW participants that was comparable to the post-regulation-change sample available in the 2010 NBS, we used the 2005 and 2006 NBS rounds and selected TTW participant sample members that met the following criteria:

- At sampling, they were in the 2005 NBS TTW cross-sectional sample and residing in a Phase 1 or Phase 2 state, or they were in the 2006 NBS TTW participant cross-sectional sample and residing in a Phase 3 state.
- Their Ticket had been assigned for 16 or fewer months as of the sampling month and had been assigned at some point during the calendar year of sampling up to the sampling month.

The original TTW sample weights associated with each record in the respective survey were used in the analyses of the TTW participants.

For analyses related to TTW participation, we constructed a combined national cross-sectional beneficiary sample from the 2005 and 2006 NBS rounds. This sample combines the TTW participant samples meeting the criteria described above with subsets of the nationally representative beneficiary samples from the two survey rounds—beneficiaries residing in Phase 1 and 2 states were selected from the 2005 NBS and beneficiaries residing in the Phase 3 states were selected from the 2006 NBS. We then constructed a set of weights designed to make this combined sample nationally representative of all Phase 1 and 2 beneficiaries in 2005 and Phase 3 beneficiaries in 2006.

Table II.1 shows the weighted and unweighted sample sizes for the pre- and post-regulation-change samples. For most of the findings presented, we show statistics for TTW participants by the

²³ In analyzing the TTW participant sample from the 2010 NBS using the matched administrative records from the abbreviated TRF10, it was discovered that 25 respondents did not meet the sampling criteria. In nearly all of these cases, TTW participation status, as reflected in the SSA administrative data, was changed retroactively at some point after the NBS sampling occurred and these 25 cases were excluded from the analyses presented in this report

type of payment system under which their Ticket was assigned—that is, whether it was assigned under an EN payment system (milestone-outcome or outcome-only) or under the traditional SVRA payment system.²⁴ The sample sizes for these groups are also shown in Table II.1. Note that in the analyses presented throughout this report, participants with Tickets assigned to SVRAs under one of the EN payment systems are categorized as being assigned to an EN.

Table II.1. Sample Sizes

	Pre-Regulation- Change Samples	Post-Regulation- Change Samples
Combined Samples		
Unweighted number	6,175	5,078
Weighted number	9,540,139	11,098,007
TTW Participant Samples		
All		
Unweighted number	2,283	2,755
Weighted number	50,050	81,273
EN Payment System^a		
Unweighted number	1,423	2,027
Weighted number	7,592	15,965
SVRA Traditional Payment System		
Unweighted number	860	728
Weighted number	42,458	65,308

Source: 2005, 2006, and 2010 National Beneficiary Surveys matched to the TRF09 and abbreviated TRF10.

^a Includes participants assigned to SVRAs under one of the EN payment systems.

C. Methods

All statistics presented were derived using the relevant survey weights, and all standard errors used to compute tests of statistical significance account appropriately for the survey's complex sampling design using procedures available in SUDAAN statistical software.²⁵

To control for differences in characteristics between the pre- and post-regulation-change cohorts, we developed regression-adjusted estimates for selected outcomes. To develop regression-adjusted estimates of the selected outcomes of interest, we estimated two regression models for each outcome: one for the pre-regulation-change sample and an identical model for the post-regulation-

²⁴ We used the payment system under which the Ticket was assigned as of the survey sampling date to categorize TTW participants as being assigned to the EN or traditional SVRA payment system.

²⁵ To efficiently meet the objectives of the survey, the sample design incorporates geographic primary sampling units (PSUs) and strata defined by age, TTW participation status, phase of TTW rollout, and TTW payment system. The relevant weights and PSU and strata indicators must be used to produce statistics that are representative of all working-age SSI and DI beneficiaries and TTW participants in the relevant geographic areas covered by each survey, and to generate standard errors of the estimates that are adjusted for the sample design. See Bethel and Stapleton (2002), Stapleton et al. (2008), Livermore et al. (2009a), and Wright et al. (2012) for detailed descriptions of the survey objectives and sample design for the 2005, 2006, and 2010 NBS.

change sample.²⁶ The coefficients from each model were applied to the corresponding means of the post-regulation-change sample to obtain fitted values or regression-adjusted estimates of each outcome. In this manner, the estimates were adjusted to hold constant the characteristics of the pre- and post-regulation-change samples at the mean values of the post-regulation-change cohort.

In regression models estimating monthly earnings, earnings were estimated using a log-transformed ordinary least squares regression model. Earnings, along with most financial data, tend to be positively skewed. Taking the natural log reduces this skewness and has other statistical advantages. Estimates produced from regressions of log monthly earnings were then retransformed to dollar amounts using a nonparametric smearing method that accounts for nonnormal distributions (Duan 1983).

We used the following method to compute significance tests of the differences between the regression-adjusted means for the pre- and post-regulation-change cohorts:

Let $Y_{t,i}$ be the outcome of interest for individual i in time t . Let \bar{Y}_t be the sample mean of $Y_{t,i}$.

Let $X_{t,i}$ be a vector of covariates for individual i in time t . Let \bar{X}_t be the sample mean of $X_{t,i}$.

We want to compare $\hat{Y}_{post}(\bar{X}_{post})$, the post-regulation-change cohort regression-adjusted mean outcome for a person with the post-regulation-change cohort mean characteristics, to $\hat{Y}_{pre}(\bar{X}_{post})$, the pre-regulation-change cohort regression-adjusted mean outcome for a person with the post-regulation-change cohort mean characteristics. First we estimated the regression models:

$$(1) \quad Y_{post,i} = X_{post,i}' \beta_{post} + \varepsilon_i$$

and

$$(2) \quad Y_{pre,i} = X_{pre,i}' \beta_{pre} + \varepsilon_i$$

Using SUDAAN to account for the complex sample design, we obtained point estimates $\hat{\beta}_{post}$ and $\hat{\beta}_{pre}$ and variance-covariance matrices $\hat{\Sigma}_{post}$ and $\hat{\Sigma}_{pre}$. The point estimate of

²⁶ Each model included a dummy variable representing Ticket assignment under an EN payment system. This variable was used to estimate the regression-adjusted means for the EN (mean value = 1) and SVRA traditional (mean value = 0) subgroups, along with the EN- and SVRA-specific mean values for the post-regulation-change cohort applied to all other variables in the model.

$\hat{Y}_{post}(\bar{X}_{post}) = \bar{X}_{post}'\hat{\beta}_{post}$ should be the same as \bar{Y}_{post} . Similarly, $\hat{Y}_{pre}(\bar{X}_{post}) = \bar{X}_{post}'\hat{\beta}_{pre}$, but will differ from \bar{Y}_{pre} . Therefore, we are interested in testing whether

$$(3) \quad \hat{\delta} = \hat{Y}_{post}(\bar{X}_{post}) - \hat{Y}_{pre}(\bar{X}_{post}) = \bar{X}_{post}'(\hat{\beta}_{post} - \hat{\beta}_{pre})$$

is statistically different from zero. The point estimate was obtained from the SUDAAN output and average characteristics, and (assuming the samples are independent) the variance was calculated as follows:

$$(4) \quad \hat{\sigma}_{\delta}^2 = \bar{X}_{post}'(\hat{\Sigma}_{post} + \hat{\Sigma}_{pre})\bar{X}_{post}$$

A t-test was then performed using $t = \frac{\hat{\delta}}{\hat{\sigma}_{\delta}}$.

III. TTW PARTICIPATION

Given the changes to TTW documented in the previous chapter, it is likely that there were changes in the number and composition of TTW participants. In this chapter, we discuss the trend in TTW participation overall and by provider and payment type; present descriptive statistics on the sociodemographic, health and disability, and program-participation characteristics of new TTW participants before and after the regulation change; and examine the determinants of TTW participation after controlling for other personal characteristics using multivariate regression models.

A. Trend in TTW Participation

Based on analyses of SSA administrative data, the revised regulations appear to have had an effect on beneficiary and provider participation in TTW. In this section, we present information reported in Prenovitz et al. (2012) that shows the trends in TTW participation before and after implementation of the revised regulations. This information is intended to provide background and context for the findings based on the NBS data presented subsequently.²⁷

The overall TTW participation rate increased after implementation of the revised regulations in July 2008, and it continued to do so gradually through December 2010, reaching a rate of 2.38 percent of eligible beneficiaries (or about 6.0 percent of work-oriented beneficiaries)²⁸ in that month (Figure III.1). This represents a total of 293,478 Ticket assignments, up from 231,468 in July 2008 (2.16 percent), when the revised regulations took effect. Ticket assignments to SVRAs under the in-use payment option remained largely flat at slightly under 2 percent since 2008;²⁹ growth in the participation rate came instead from Ticket assignments under the EN payment systems. The EN participation rate reached 0.45 percent in December 2010, representing 55,545 Ticket assignments, up from 24,727 in July 2008 (0.23 percent).

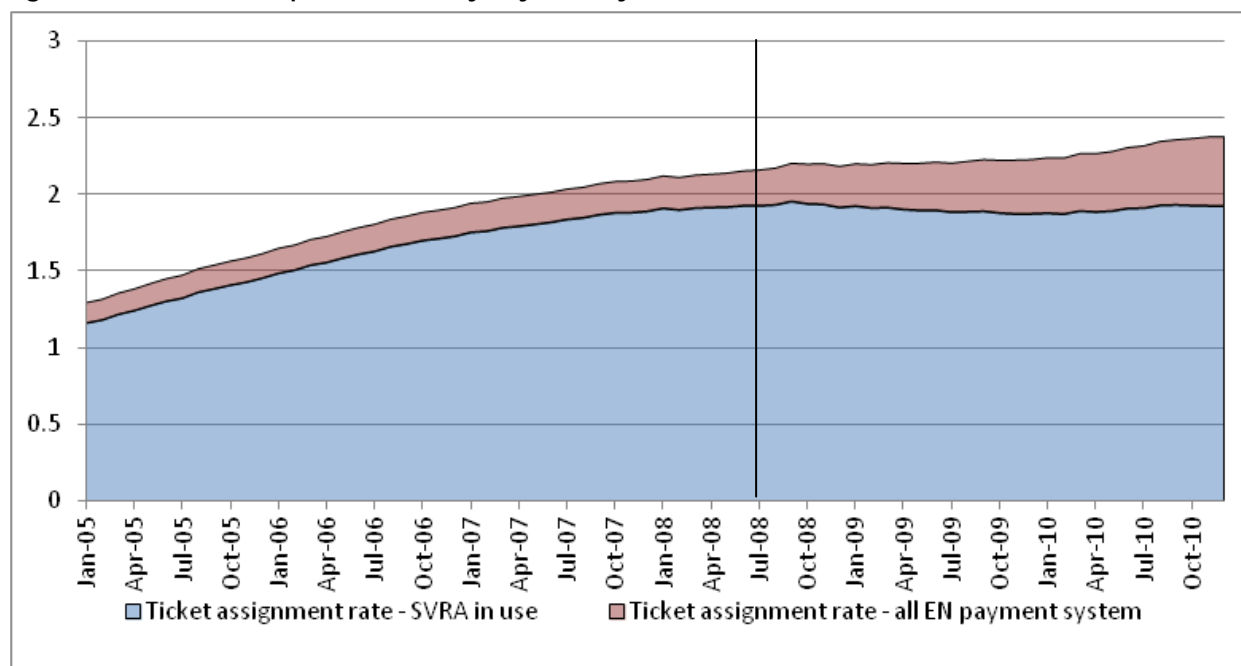
Most of the gains in Ticket assignments can be attributed to assignments under the milestone-outcome system, especially assignments made to ENs. Since December 2007, the rate of Ticket assignments to ENs under the milestone-outcome system has tripled, from 0.09 percent to 0.28 percent, and the assignment rate to SVRAs under the milestone-outcome system has doubled, from 0.07 percent to 0.14 percent. The increase in participation under the milestone-outcome system, particularly while assignments under other payments systems remained largely stagnant, suggests that the revised regulations were instrumental in making the milestone-outcome payment option more enticing to ENs (Prenovitz et al. 2012).

²⁷ The NBS data do not permit a detailed analysis of trends over time, so we provide selected information from Prenovitz et al. (2012) to illustrate the increase in Ticket assignments and use of the milestone-outcome payment system following implementation of the revised regulations.

²⁸ This assumes that nearly all TTW participants are work-oriented (see Table V.1) and that 40 percent of all beneficiaries are work-oriented, based on findings reported in Livermore et al. (2009b).

²⁹ Note that although the trend in SVRA in-use assignments appears flat, many assignments occurred retroactively after the new regulations were implemented. If the number of in-use assignments in Figure III.1 during the pre-regulation-change period is compared with analogous statistics reported in TTW evaluation reports based on older data, a larger increase is evident.

Figure III.1. TTW Participation Rates by Payment System, 2005–2010



Source: Prenovitz et al. (2012), based on data from the Disability Control File, April 2011.

Note: The vertical line represents the month in which the revised TTW regulations became effective (July 2008).

As expected, the total number of Ticket assignments mirrors the participation rate (Figure III.2). The total number of Ticket assignments under the milestone-outcome payment option grew rapidly beginning shortly before the introduction of the revised regulations and continued to do so through 2010. Like the growth in the participation rate, this growth is more pronounced among ENs than among SVRAs and has been accompanied by only small changes in the use of the outcome-only option (Prenovitz et al. 2012).

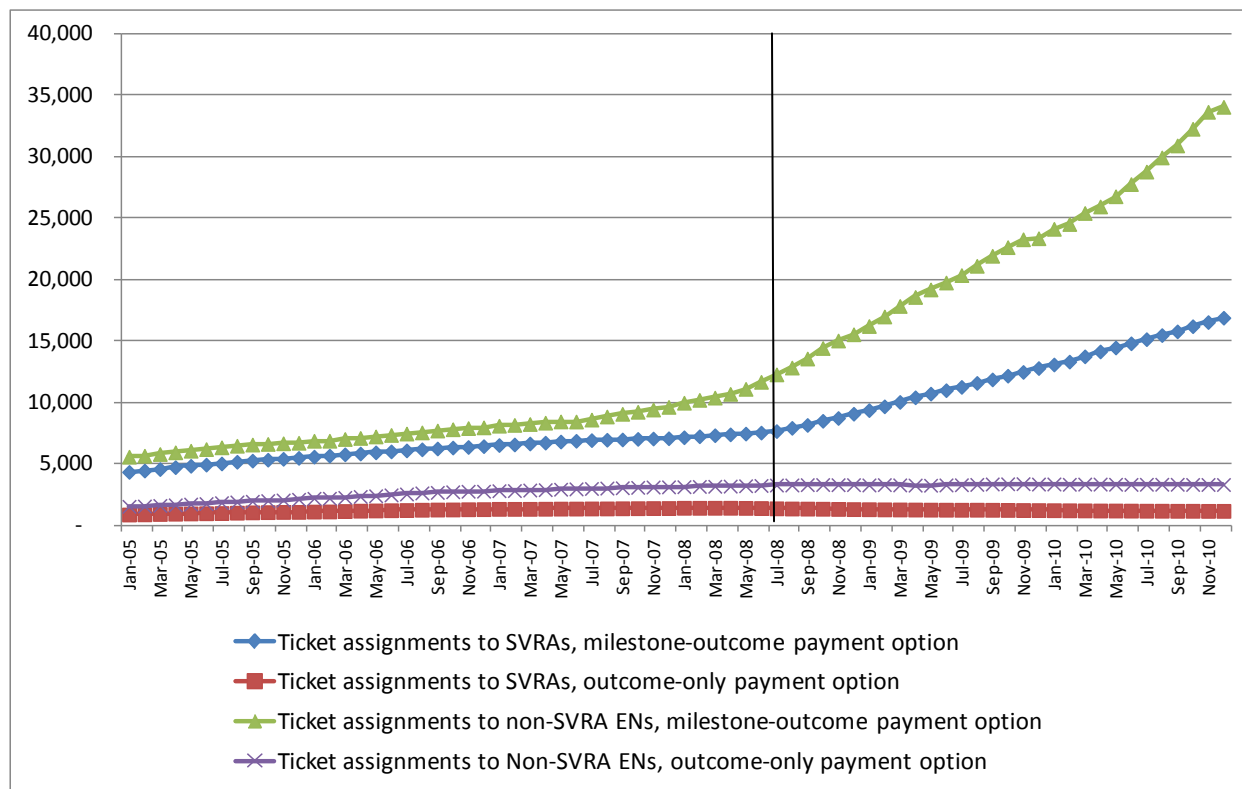
In summary, TTW participation grew after implementation of the revised regulations, particularly in terms of Ticket assignments to providers operating under the milestone-outcome payment system. Although the share of all TTW-eligible beneficiaries enrolled in the program has grown since July 2008 when 2.16 percent of all beneficiaries were enrolled, the share remained fairly small, at 2.38 percent, as of December 2010.

B. Characteristics of New TTW Participants Before and After the Regulation Change

TTW participation is based on a voluntary and mutual agreement between a service provider and a beneficiary. A select portion of beneficiaries seek services from TTW providers; from this pool of potential participants, ENs may find it in their best interest to work with only a subset. Under the revised regulations, the demographic, health, and program-related characteristics of beneficiaries who participate in TTW may have changed. As discussed above, changes in the payment system might have made providers more willing to serve individuals with impairments that present relatively greater barriers to employment. There are also likely to be other differences

between the pre- and post-regulation-change cohorts as the demographic and health profile of DI beneficiaries, SSI recipients, and the nation as a whole changes over time.

Figure III.2. Total Monthly Number of TTW Assignments, by Provider Type and EN Payment System, 2005–2010



Source: Prenovitz et al. (2012), based on data from the Disability Control File, April 2011.

Note: The vertical line represents the month in which the revised TTW regulations became effective (July 2008).

In what follows, we describe participants’ sociodemographic, health, disability, and program-participation characteristics, focusing on differences between the pre- and post-regulation-change cohorts.

1. Descriptive Statistics

a. Sociodemographic Characteristics

New participants who enrolled in TTW before the 2008 regulation changes are different from those who enrolled after 2008 in certain sociodemographic characteristics, including age, education, children’s ages, and ethnicity (Table III.1).

The overall age distribution differed significantly between the two cohorts. Post-regulation-change participants who were new EN clients were more heavily concentrated in the age 55 and over category. In contrast, post-regulation-change traditional SVRA clients were almost eight percentage points more likely to be between ages 18 and 24 than their pre-regulation-change counterparts. Part of the shift for traditional SVRA clients could be explained by participation of

those categorized as “medical improvement expected” who had not passed their first medical CDR. This group likely made up only a small portion of all TTW participants, however, so it is unlikely to account for the entirety of this shift.

Table III.1. Sociodemographic Characteristics

	Pre-Regulation-Change TTW Participants			Post-Regulation-Change TTW Participants (Difference)		
	All	EN	SVRA	All	EN	SVRA
Sex (%)						
Male	52.3	54.0	52.0	1.2	-3.6	2.2
Age in Years (%)						
18-24	14.7	9.8	15.6	7.0 ^a	0.6 ^a	8.9 ^a
25-39	33.1	27.8	34.0	-6.4 ^a	-2.3 ^a	-7.0 ^a
40-54	39.9	48.1	38.4	-5.0 ^a	-6.1 ^a	-5.2 ^a
55+	12.3	14.4	12.0	4.3 ^a	7.7 ^a	3.3 ^a
Race (%)						
White only	67.1	59.2	68.6	1.4	-0.8	2.4
Black only	26.4	32.1	25.4	-1.5	3.0	-3.0
Other	6.4	8.7	6.1	0.2	-2.2	0.5
Ethnicity (%)						
Hispanic or Latino	9.0	8.0	9.2	3.6 ^b	2.5	4.0 ^b
Education (%)						
Did not complete high school or GED	19.4	19.9	19.3	-3.1 ^a	-1.9	-3.4 ^a
High school	40.7	38.3	41.1	9.4 ^a	2.3	11.3 ^a
Beyond high school	40.0	41.8	39.6	-6.4 ^a	-0.5	-7.9 ^a
Marital Status (%)						
Married	16.9	22.9	15.8	-0.8	-1.3	-1.0
Divorced, widowed, separated	27.6	30.4	27.1	-0.6	3.7	-1.8
Never married	55.5	46.7	57.1	1.4	-2.4	2.8
Household Income as a Share of Federal Poverty Level (%)						
< 100	49.6	47.4	50.0	1.1	2.3	1.0
100-299	40.3	42.3	39.9	0.5	-0.6	0.7
300+	10.1	10.2	10.0	-1.6	-1.6	-1.5
Living Arrangement (%)						
Lives alone	25.3	29.0	24.7	1.3	2.0	0.8
Own Children (%)^c						
Has children	23.5	26.9	22.9	-0.9	-3.5	-0.5
Has children under age 6	5.4	6.4	5.3	2.1	-0.6	2.6 ^b

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Note: Values shown for the post-regulation-change cohort represent differences from the analogous pre-regulation-change cohort values.

^aDifference is statistically significant at the 0.05 level, chi-square test.

^bDifference is statistically significant at the 0.05 level, two-tailed t-test.

^cOwn children defined as biological, adoptive, and/or foster care children of the respondent.

Other sociodemographic changes appear to be congruent with the differences in the age distribution between the pre- and post-regulation-change cohorts. Post-regulation-change traditional SVRA clients, who were younger than their pre-regulation-change counterparts, were more likely to have children under age six. They were also significantly more likely to have earned a high school

degree and less likely to have education beyond high school. It is possible that educational attainment may increase over time as more of the post-regulation-change SVRA clients age 18–24 obtain more education.

Among all TTW participants, those in the post-regulation-change cohort were significantly more likely to be of Hispanic or Latino ethnicity than their pre-regulation-change counterparts. This difference likely reflects general changes in the ethnic composition of the U.S. population. The proportion of U.S. residents who are Hispanic or Latino has been steadily increasing over the past several decades, as has the proportion of all Social Security disability beneficiaries. DI and SSI beneficiaries who consider themselves to be Hispanic or Latino increased from 10.8 percent in 2006 to 12.4 percent in 2010 (Livermore et al. 2009a; Wright et al. 2011).

b. Health and Disability Characteristics

New TTW participants in the pre- and post-regulation-change periods had similar health characteristics. About 22 percent of both groups reported being in excellent or very good health, and over 75 percent believed their current health was as good as or better than it was during the previous year (Table III.2). There were, however, several differences between the two cohorts with respect to self-reported limitations and age of disability onset. Post-regulation-change participants were more likely to have psychiatric disabilities, musculoskeletal disabilities, and disabilities related to diseases of the respiratory system. They were also less likely to have disabilities related to diseases of the nervous system or sensory limitations than were members of the pre-regulation-change cohort. Based on the findings of previous studies, we know that DI beneficiaries with musculoskeletal conditions are significantly less likely to report having work-related goals or expectations (Livermore et al. 2009b) and are less likely to be employed (Livermore et al. 2009a) than beneficiaries who report other types of disabling health conditions. This suggests that, as hypothesized, ENs might be more willing to serve individuals with potentially lower employment prospects under the revised payment system, including those with musculoskeletal conditions.

The age of disability onset differs between the pre- and post-regulation-change cohorts. About 45 percent of post-regulation-change traditional SVRA clients experience disability onset before age 18, representing a fairly small, but statistically significant, increase over the same statistic for the pre-regulation-change cohort (41 percent). Among post-regulation-change EN clients, disability onset is more prevalent later in life; 32 percent experience onset after age 40, compared with 23 percent of pre-regulation-change participants. These changes are consistent with the changes in the age distribution discussed previously (a higher proportion of post-regulation-change SVRA clients are 18 to 24 years old and a higher proportion of EN clients are over age 55 relative to their pre-regulation-change counterparts). Further, characteristics such as lower levels of education (Table III.1) and younger age at disability onset might indicate significant obstacles to employment. The increasing presence of these characteristics among SVRA clients might reflect greater demand among these individuals for the relatively more intensive services offered through SVRAs.

The activity and functional limitations reported by new pre- and post-regulation-change TTW participants are similar, with a few exceptions. Post-regulation-change SVRA participants were significantly more likely to have difficulties shopping for personal items, preparing meals, concentrating, and getting along with others than their pre-regulation-change counterparts (Table III.3). The significant differences between cohorts in health conditions observed for SVRA clients are also evident for beneficiaries as a whole, in part due to the fact that almost 85 percent of TTW participants had Tickets assigned to SVRAs under the traditional payment system. There were

no significant differences between cohorts with respect to the remaining 9 of the 13 activities shown in Table III.3. The largest share of participants (44 to 47 percent) in both cohorts did not experience any limitations in activities of daily living (ADL) or independent activities of daily living (IADL).

Table III.2. Health-Related Characteristics

	Pre-Regulation-Change TTW Participants			Post-Regulation-Change TTW Participants (Difference)		
	All	EN	SVRA	All	EN	SVRA
Self-Reported Reason(s) for Limitation (%)^a						
Psychiatric conditions	37.7	40.8	37.1	5.0 ^b	3.1	5.3
Musculoskeletal conditions	20.3	24.3	19.6	3.0	6.6 ^b	1.8
Diseases of the nervous system	18.4	15.0	19.0	-4.1 ^b	-0.8	-4.7 ^b
Sensory disorders	13.7	9.2	14.5	-5.4 ^b	-2.4	-5.8 ^b
Injury or poisoning	10.0	10.9	9.8	0.3	0.2	0.3
Diseases of the circulatory system	9.7	12.4	9.2	0.1	0.8	-0.2
Endocrine/nutrition disorders	9.1	12.1	8.5	0.2	-1.1	0.4
Intellectual disability	7.3	5.6	7.6	-1.0	-2.6	-0.4
Diseases of the respiratory system	3.5	5.8	3.1	3.2 ^b	0.8	3.6 ^b
Other	26.4	26.9	26.3	4.2 ^b	4.4 ^b	4.2
No conditions limit activities	11.5	10.2	11.8	1.9	1.0	2.1
Age (in years) at Disability Onset (%)						
< 18	39.0	29.9	40.6	2.1 ^c	-3.8 ^c	4.1 ^c
18-24	18.1	15.2	18.6	-4.0 ^c	-0.1 ^c	-4.7 ^c
25-39	25.0	31.7	23.8	-2.1 ^c	-4.9 ^c	-1.8 ^c
40-54	16.6	20.6	15.9	1.8 ^c	5.9 ^c	0.6 ^c
55+	1.3	2.6	1.1	2.2 ^c	3.0 ^c	1.8 ^c
General Health (%)						
Excellent/very good	22.4	17.9	23.2	1.5	-1.1	2.4
Good/fair	58.4	56.1	58.9	-0.9	4.2	-2.1
Poor/very poor	19.2	26.0	17.9	-0.6	-3.1	-0.3
Current Health Compared to Last Year (%)						
Much/somewhat better	29.3	27.4	29.6	-0.5	0.4	-0.6
About the same	49.8	46.6	50.4	-3.5	-3.4	-3.4
Much/somewhat worse	20.9	26.0	20.0	4.0	2.9	4.0
Obese (%)	38.4	39.8	38.2	0.4	2.8	-0.3

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Note: Values shown for the post-regulation-change cohort represent differences from the analogous pre-regulation-change cohort values.

^aMultiple responses possible.

^bDifference is statistically significant at the 0.05 level, two-tailed t-test.

^cDifference is statistically significant at the 0.05 level, chi-square test.

Table III.3. Activity and Functional Limitations

	Pre-Regulation-Change TTW Participants			Post-Regulation-Change TTW Participants (Difference)		
	All	EN	SVRA	All	EN	SVRA
Difficulty with Activities of Daily Living (ADL) (%)^a						
Getting into or out of bed	19.3	21.7	18.9	-0.2	1.9	-0.9
Bathing or dressing	15.8	12.7	16.4	-1.8	2.9	-2.8
Getting around inside the house	11.1	10.4	11.3	-0.5	1.8	-1.1
Eating	8.0	8.1	7.9	1.2	1.9	1.1
None of the above	68.9	68.2	69.0	-0.6	-4.3 ^b	0.4
Difficulty with Instrumental Activities of Daily Living (IADL) (%)^a						
Getting around outside of the home	28.5	29.1	28.4	-0.4	2.1	-1.1
Preparing meals	24.0	20.8	24.6	5.4 ^b	-0.4	7.0 ^b
Shopping for personal items	22.5	20.2	22.9	4.5 ^b	-1.0	6.0 ^b
None of the above	55.1	57.5	54.7	-0.9	0.2	-1.4
Difficulty with Functional Activities (%)^a						
Walking 3 blocks, climbing 10 steps, standing for 1 hr., and/or crouching	64.2	70.8	63.0	-0.9	-1.0	-1.2
Speaking, hearing, and/or seeing	52.0	54.6	51.5	0.2	-3.2	0.9
Coping with stress	53.0	56.5	52.4	0.7	0.0	0.6
Grasping, reaching, and/or lifting 10 pounds	44.9	51.2	43.8	-2.8	-0.2	-3.9
Concentrating	46.6	49.0	46.1	6.5 ^b	1.3	7.7 ^b
Getting along with others	26.4	29.5	25.8	4.7 ^b	-1.7	6.2 ^b
Number of ADL/IADL Difficulties (%)						
0	46.5	47.1	46.4	-2.2	-1.7	-2.4
1-2	33.6	34.3	33.5	0.1	-0.1	0.1
3+	19.9	18.6	20.1	2.1	1.8	2.3

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Note: Values shown for the post-regulation-change cohort represent differences from the analogous pre-regulation-change cohort values.

^aMultiple responses possible.

^bDifference is statistically significant at the 0.05 level, two-tailed t-test.

c. Program Participation

The pre- and post-regulation-change cohorts were similar with regard to SSA program participation (Table III.4). Over 40 percent of participants in both groups were DI-only beneficiaries, less than one-third were SSI-only recipients, and about one-quarter were concurrent beneficiaries. Given the relative increase in the payments made to ENs for SSI-only recipients under the revised regulations, we might have expected to see an increase in the proportion of SSI-only recipients. This was not the case, however.

Post-regulation-change TTW participants were more dependent on public assistance programs than pre-regulation-change participants (Table III.4). Post-regulation-change participants received more in non-SSA benefits each month, although the difference was not statistically significant among traditional SVRA clients. The increase in reliance on non-SSA assistance appears to be driven by a large increase in the receipt of food stamps. A significantly higher share of all post-regulation-

change participants receive food stamps (38 percent) compared with their pre-regulation-change counterparts (25 percent).

Table III.4. Program-Related Characteristics

	Pre-Regulation-Change TTW Participants			Post-Regulation-Change TTW Participants (Difference)		
	All	EN	SVRA	All	EN	SVRA
SSA Program at Sampling (%)						
DI-only	44.0	48.7	43.1	-2.0	2.6	-3.4
Concurrent	25.6	23.6	26.0	-0.2	1.7	-0.6
SSI-only	30.4	27.7	30.9	2.2	-4.3	3.9
Mean monthly SSA benefit (2010\$)	855.7	882.8	851.1	11.7	48.8	0.6
Mean monthly non-SSA benefit (2010\$)	108.5	108.2	108.6	33.5 ^a	41.4 ^a	31.5
Mean months since initial SSA award	151.9	150.1	152.2	4.2	-6.3	6.9
Income and Assistance in Month Before Interview (%)^b						
SSA benefits	94.4	93.8	94.5	-0.1	0.7	-0.2
Food stamps (Supplemental Nutrition Assistance Program)	24.7	26.7	24.4	13.1 ^a	12.4 ^a	13.0 ^a
Earnings	28.8	29.3	28.8	-7.9 ^a	-4.8 ^a	-8.8 ^a
Public cash assistance/welfare	2.8	4.8	2.5	0.5	-0.8	0.6
Private disability insurance	1.9	2.0	1.9	0.2	-0.1	0.2
Pensions	1.5	2.6	1.3	1.2 ^a	0.0	1.5 ^a
Veterans' benefits	0.9	1.3	0.8	0.2	-0.3	0.3
Workers' Compensation	0.6	0.6	0.6	0.0	-0.2	0.1
Unemployment Insurance	0.2	0.7	0.2	0.9 ^a	0.8 ^a	0.8 ^a
Other source of income/assistance	5.3	3.9	5.5	-0.2	0.5	-0.3

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Note: Values shown for the post-regulation-change cohort represent differences from the analogous pre-regulation-change cohort values.

^aDifference is statistically significant at the 0.05 level, two-tailed t-test.

^bMultiple responses possible.

The greater reliance on non-SSA sources of assistance, and on food stamps in particular, among the post-regulation-change cohort may be in part because members of this group are significantly less likely to have any earned income. Among post-regulation-change participants, 21 percent had earnings, compared with 29 percent of pre-regulation-change participants. The large decline in the percentage with earnings (along with the statistically significant increase in the receipt of unemployment insurance) may in large part be due to the ongoing effects of the 2007–2009 recession. We investigate the employment outcomes of the pre- and post-regulation-change cohorts in greater detail in Chapter V.

2. Multivariate Determinants of TTW Participation

To investigate the determinants of participation in TTW, we estimated a separate multivariate regression model of the likelihood of TTW participation for each cohort. These models allow us to examine the relationship between individual and economic characteristics and participation in TTW,

holding all other characteristics constant. Here, we discuss some general findings from qualitative comparisons of the pre- and post-regulation-change cohort models.³⁰ The estimates from these models are provided in Appendix Table B.2.

When comparing the determinants of participation for pre- and post-regulation-change beneficiaries, it is important to keep in mind that the likelihood of TTW participation and the characteristics of those who assign Tickets may be influenced by more than any effects of the revised regulations. They may also be influenced by more general changes in the characteristics of the larger pool of DI beneficiaries and SSI recipients who are eligible for the program, as well as by changes in the economy and broader employment-service environment.

Age and education. Age and education are strong, significant predictors of TTW participation in both the pre- and post-regulation-change cohorts. In both groups, those age 18 to 24 have more than three times the odds of participating in TTW than those age 55 and over after holding other characteristics constant. TTW participation was also more likely for those with a high school education or beyond compared with those with less than a high school education. These findings are consistent with the strong associations between TTW participation and age and education documented in previous TTW evaluation reports (Thornton et al. 2006 and 2007; Stapleton et al. 2008).

Health and disability. The association between disabling health conditions and TTW participation differs for the pre- and post-regulation-change cohorts. All else held constant, those with sensory limitations were significantly more likely to participate in TTW before the regulation changes, while those with musculoskeletal or nervous system conditions were significantly less likely to participate following the regulation changes. Among pre-regulation-change beneficiaries, those with high levels of overall physical health, as measured by the SF-8 Physical Component Summary, were less likely to assign Tickets, while the reverse is true in the post-regulation cohort.³¹ There are, however, two commonalities: psychiatric disabilities are significant and positively associated with participation, and substance abuse is significant and negatively associated with participation among beneficiaries in both cohorts.

Program participation. Among post-regulation-change beneficiaries, several program-related characteristics are associated with an increased likelihood of Ticket assignment, holding other characteristics constant. DI-only beneficiaries are significantly more likely to participate than SSI-only recipients, as are those who have received SSA benefits for fewer than 24 months. People who receive more than \$1,000 a month in SSA benefits are also significantly more likely to participate. These factors were not statistically significant in regressions based on the pre-regulation-change cohort.

³⁰ We did not perform tests to assess the significance of differences between the parameter estimates of the pre- and post-regulation-change models.

³¹ The SF-8™ Health Survey is a generic, multipurpose eight-item survey intended to assess health status across several domains, and includes physical and mental component summary measures. The eight items provide respondents' ratings of their general health and the degree to which physical health, mental health, and bodily pain interfered with specific activities during the previous four weeks.

Employment history. Among both pre- and post-regulation-change beneficiaries, those who have ever worked for pay are significantly more likely to participate in TTW than those who haven't. Pre-regulation-change beneficiaries have 4.1 times the odds of participating compared with 2.3 times the odds among the post-regulation-change cohort. Although significant for both samples, the slightly weaker association between previous employment and Ticket assignment among the more recent cohort is congruent with the lowering of employment-related standards among providers.

C. TTW Provider and Payment Types Before and After the Regulation Change

Although TTW expanded on the earlier efforts of the Alternate Participant Program to increase provider choice and competition, SSA administrative data indicate that as of December 2007, only 5.4 percent of all TTW participants had Tickets assigned to a non-SVRA EN, and only 9.2 percent had Tickets assigned under a nontraditional payment system (Altshuler et al. 2011). The July 2008 TTW regulation changes enhanced the EN payment system with the goal of increasing EN participation in TTW. In this section we assess the changes in the shares of Ticket assignments by provider and payment types among new TTW participants that occurred after the revised regulations were instituted. We then examine changes in the importance of specific individual characteristics in determining the likelihood of Ticket assignment under an EN payment system after implementation of the revised regulations.

1. Descriptive Statistics

As noted previously, there was an increase in the number of Ticket assignments to ENs after implementation of the revised regulations. This increase is also evident when we compare our pre- and post-regulation-change cohorts of new TTW participants identified in our NBS analysis samples (Table III.5). Although the share of assignments to SVRAs under the traditional payment system continued to represent the large majority of assignments (80 percent), there was a significant change in the distribution of new Ticket assignments under the revised regulations. The share of Tickets assigned under an EN payment system increased from 15 percent to nearly 20 percent. The increase is due entirely to an increase in the share of Ticket assignments to non-SVRA ENs. Assignments to SVRAs operating under an EN payment system and under the traditional payment system both declined by approximately four percentage points.

The increase in EN Ticket assignments is due to an increase in the share of Tickets assigned under the milestone-outcome payment system. Assignments to this payment system were 6.8 percentage points higher in the post-regulation-change cohort than in the pre-regulation-change cohort. This increase is coupled with a 4.4 percentage point decrease in use of the traditional payment system, and a 2.4 percentage point decline in use of the outcome-only system. These findings are expected, given that under the revised regulations, the milestone payments were increased and the employment thresholds to obtain them were reduced, thus making this payment system substantially more attractive to providers. Although the outcome-only payment system was also enhanced, it appears that for ENs, the potential for a slight increase in payment was not worth the greater risk associated with Ticket assignments under the outcome-only system.

Table III.5. TTW Provider and Payment Types

	Pre-Regulation-Change TTW Participants	Post-Regulation- Change TTW Participants	Difference (percentage points)
Provider Type (%)			
EN (all)	15.2	19.6	4.4 ^a
EN (non-SVRA)	6.6	15.1	8.5 ^a
EN (SVRA)	8.6	4.5	-4.1 ^a
SVRA (traditional)	84.8	80.4	-4.4 ^a
Payment Type (%)			
Outcome-only	3.1	0.7	-2.4 ^b
Milestone-outcome	12.1	18.9	6.8 ^b
Traditional	84.8	80.4	-4.4 ^b

Source: 2005, 2006, and 2010 National Beneficiary Surveys matched to the TRF09 and abbreviated TRF10.

^aDifference is statistically significant at the 0.05 level, two-tailed t-test.

^bDifference is statistically significant at the 0.05 level, chi-square test.

2. Multivariate Determinants of Assignment Under an EN Payment System

To investigate the determinants of Ticket assignment under an EN payment system, we estimated a separate multivariate regression model of the likelihood of EN assignment for each cohort. These models allow us to examine the relationship between individual and economic characteristics and Ticket assignment under an EN payment system, holding all other characteristics constant. Here, we discuss some general findings from comparisons of the pre- and post-regulation-change cohort models. The estimates from these models are provided in Appendix Table B.3.

For this analysis, we defined EN Ticket assignment as a Ticket under the outcome-only or milestone-outcome system, regardless of whether the Ticket was assigned to a non-SVRA or SVRA EN. Given the small number of participants whose Tickets were assigned under the outcome-only system (0.7 percent of post-regulation-change participants), we do not examine the two EN payment systems separately but instead conduct a joint analysis of the two nontraditional payment systems. The models were estimated using only the TTW participant samples from each cohort; thus the findings discussed below are conditional on TTW participation.

In the pre-regulation-change cohort, few characteristics are statistically significant predictors of EN assignment. Conditional on TTW participation, African Americans were significantly more likely to have assigned their Tickets to an EN than those of other races, all else held constant. This relationship holds for the post-regulation-change cohort as well. Those with sensory limitations and those with low levels of overall physical health (as measured by the SF-8 Physical Component Summary) are less likely to assign Tickets to ENs; this relationship does not hold for the post-regulation-change cohort.

In the post-regulation-change cohort, several health, program, employment, and demographic characteristics are significant predictors of EN assignment. TTW participants with the following characteristics were significantly more likely than others to assign Tickets to an EN, other factors held constant: those with musculoskeletal conditions, beneficiaries who first received benefits in the past 24 months, and those who had ever worked for pay. Young participants (age 18 to 39) were less

likely to assign Tickets to an EN. Many of these differences are also evident in the univariate statistics presented in Chapter II. For example, only 10 percent of post-regulation-change EN clients are age 18 to 24, compared with almost 25 percent of post-regulation-change traditional SVRA clients.

IV. SERVICE USE

Social Security disability beneficiaries use of a variety of services. In addition to employment-related services such as those offered under TTW, people with disabilities may use services offered outside the TTW program such as medical, counseling, and education-related services, among others. The revised TTW regulations could have affected the services beneficiaries receive under TTW in several ways. First, if the mix of beneficiaries who assigned Tickets changed under the revised regulations, post-regulation-change beneficiaries may have different service-use patterns and needs relative to TTW participants under the original regulations. Second, the relatively more generous payment systems instituted under the revised regulations might prompt ENs to provide more or otherwise enhanced services relative to those provided under the original regulations.

In this chapter, we discuss changes in service-use patterns among TTW participants, around the time of the 2008 TTW regulation changes. In Section A, we compare the relationship between several service-use outcomes and Ticket assignment before and after the regulation changes. In Section B, we compare regression-adjusted means for recent use of any services, recent use of employment-specific services, hours of service use, and unmet service need for new pre- and post-regulation-change TTW participants.

In interpreting the service-use information, it is important to note that the NBS queried respondents about their service use during the previous year regardless of whether the services were provided under the auspices of TTW. Thus, the service types and intensities reported in what follows reflect both TTW and non-TTW services used by participants.³²

A. Descriptive Statistics

New pre- and post-regulation-change participants in TTW had similar service-use patterns. Overall, about 60 percent of both groups reported using any services in the year before NBS interview (Table IV.1). Among those who used services, service intensity (measured by the total number of service hours),³³ service types, and reasons for using services also did not differ substantially between the pre- and post-regulation-change cohorts. Most participants in both cohorts (about 70 percent) received fewer than 100 hours of services, and the distributions by types of services used (for example, training, counseling, medical services) did not differ significantly between the two cohorts.

With respect to the reasons for using services, there were few statistically significant differences between the pre- and post-regulation-change cohorts, and only one that appears to be substantial (Table IV.1). Fewer post-regulation-change clients used services for employment-related reasons

³² Although questions in the NBS attempt to distinguish TTW services from other services, respondents were frequently unable to do so, rendering these data, in our opinion, unreliable. Thus, we do not rely on respondent reports and instead analyze all services used by TTW participants during the calendar year before the NBS interview.

³³ To reduce the effect of extreme outliers on our estimates, we top coded annual hours of service use at 2,500 hours. Approximately 0.5 percent of the pre-regulation-change sample and 1.4 percent of the post-regulation-change sample reported using more than 2,500 hours of service in the year before the NBS interview.

Table IV.1. Service Use

	Pre-Regulation-Change TTW Participants			Post-Regulation-Change TTW Participants		
	All	EN	SVRA	All	EN	SVRA
Full Sample						
Used Any Services in Previous Year						
Unweighted number	1,382	846	536	1,711	1,247	464
Weighted number	30,683	4,393	26,290	50,446	9,468	40,979
Weighted percent	61.3	57.9	61.9	62.1	59.3	62.7
Used Employment-Related Services in Previous Year (%)^a	55.5	47.5	56.9	51.6	46.4	52.8
Used More Than 50 Hours of Service in Previous Year (%)	36.8	32.3	37.5	34.0	31.0	34.7
Service Users						
				Difference		
Mean Hours of Service Use	168.8	143.0	173.3	5.2	5.5	6.7
Median Hours of Service Use	28.0	22.0	30.0	-4.0	0.5	-5.0
Hours of Service Use (%)						
< 25 hours	44.6	50.2	43.6	3.4	1.2	3.6
25-100 hours	23.8	23.4	23.8	-1.5	0.2	-1.8
101-500 hours	15.5	15.4	15.5	-0.8	-1.6	-0.6
501-1,000 hours	5.3	3.3	5.7	-0.9	-1.8	-0.7
1,001-1,500 hours	1.4	0.8	1.5	0.6	1.1	0.5
1,501-2,000 hours	1.0	0.5	1.1	-0.3	0.1	-0.3
2,001-2,500 hours	1.6	1.8	1.5	0.3	0.3	0.2
Unknown	7.0	4.6	7.4	-0.9	0.7	-1.1
Types of Services Used in Previous Year (%)^b						
Training/job-modification advice/on-the-job training	64.6	56.7	65.9	-3.4	-5.5	-2.4
Personal counseling/group therapy	63.1	65.1	62.8	0.7	-0.1	0.7
Work assessment/help to find a job	62.0	57.6	62.7	-1.5	-2.9	-0.9
Medical services	49.6	54.1	48.8	0.7	4.9	-0.6
Occupational/physical/speech therapy	31.5	30.3	31.8	0.0	2.7	-0.6
Special equipment or devices	17.6	15.2	18.1	0.4	2.8	-0.1
Other	8.7	6.0	9.1	-0.8	1.1	-1.0
Reason(s) for Using Services in Previous Year (%)^b						
To improve health/well-being	54.4	58.0	53.8	1.2	2.7	0.7
To find a job or get a better job	50.4	42.0	51.8	-7.1 ^c	-0.5	-8.1 ^c
To improve ability to do daily activities	21.8	18.5	22.4	-0.8	-1.5	-0.4
To increase income	13.6	9.2	14.4	-6.3 ^c	-0.7	-7.4 ^c
To access specific services	9.6	7.2	10.1	-0.6	2.5	-1.3
Someone pressured respondent to use services	1.4	1.9	1.4	-0.4	-1.3 ^b	-0.3
To avoid a continuing disability review	1.5	1.3	1.6	-1.0 ^c	-0.5	-1.2
Other	8.1	9.7	7.9	4.1 ^c	1.0	4.7 ^c
Unknown	1.5	1.0	1.6	0.1	0.4	0.0

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Note: Values shown in the lower section of the table for the post-regulation-change cohort represent differences from the analogous pre-regulation-change cohort values.

^aEmployment-related services include job training, job coaching, work assessment, advice or help finding a job, the use of any services to find a job or increase income, and full-time school enrollment.

^bMultiple responses possible.

^aDifference is statistically significant at the 0.05 level, two-tailed t-test.

such as finding a job, getting a better job, or increasing income, and the difference is driven by the statistically significant differences for SVRA clients only; among EN clients, there were no significant differences between cohorts in the reasons for using employment services. A few other reasons for using services show statistically significant differences between the pre- and post-regulation-change cohorts (being pressured to use services, avoiding a continuing disability review), but these reasons were reported by roughly 1 percent or less of all TTW participants in each cohort.

In Table IV.2, we examine the likelihood of TTW participants' reporting unmet service needs and the reasons why TTW participants believed their service needs went unmet. Overall, the share of TTW participants reporting unmet needs did not differ significantly between the two cohorts. However, post-regulation-change SVRA clients were significantly more likely than their pre-regulation-change counterparts to report having unmet service needs in the previous year. Among those reporting unmet service needs, there was a substantial decline in several of the reported reasons for not receiving services among post-regulation-change participants, although only one of these was statistically significant. Post-regulation-change participants with unmet needs were significantly less likely than members of the less recent cohort to report problems with services or service provider agencies as the reason for their unmet needs.

Table IV.2. Unmet Service Needs

	Pre-Regulation-Change TTW Participants			Post-Regulation-Change TTW Participants (Difference)		
	All	EN	SVRA	All	EN	SVRA
Services Needed in Previous Year but Not Received (%)	19.3	24.5	18.4	3.0	-2.9	4.1 ^a
Reason Why Services Were Not Received Among Those with Unmet Service Needs (%)^b						
Problems with services/agency	18.3	23.2	17.1	-7.1 ^a	-13.2 ^a	-5.7
Could not afford services	16.2	10.6	17.6	-5.6	-0.9	-6.8
Lack of information	14.0	16.5	13.4	2.1	0.6	2.4
Wasn't eligible/request refused	8.9	9.6	8.8	1.3	0.8	1.3
Too difficult/confusing	5.0	5.9	4.8	-0.6	-3.0	0.0
Did not try to get services	1.9	1.8	1.9	-0.5	1.2	-0.8
Other	31.3	29.5	31.8	8.4 ^a	13.3 ^a	7.2
Unknown	4.4	3.1	4.7	2.0	0.8	2.3

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Note: Values shown for the post-regulation-change cohort represent differences from the analogous pre-regulation-change cohort values.

^aDifference is statistically significant at the 0.05 level, two-tailed t-test.

^bMultiple responses possible.

B. Regression-Adjusted Estimates

To control for differences in characteristics between the pre- and post-regulation-change cohorts, we developed regression-adjusted estimates for selected service-use outcomes. As discussed in Chapter II, to develop regression-adjusted values, we estimated two regression models for each outcome: one for the pre-regulation-change sample and an identical model for the post-regulation-

change sample. The coefficients from each model are applied to the corresponding means of the post-regulation-change sample to obtain fitted values or regression-adjusted estimates of each outcome. In this manner, the estimates are adjusted to hold constant the characteristics of the pre- and post-regulation-change samples at the mean values of the post-regulation-change cohort. We used the same method to produce the regression-adjusted statistics presented in subsequent chapters.

We believe it is important to make these adjustments because there were changes in the characteristics of pre- and post-regulation-change TTW participants (discussed in Chapter III), but perhaps more important, the economy experienced a significant downturn around the time the new regulations were implemented—an event that could have affected many of the employment-related outcomes of interest in our analysis. The regression-adjusted estimates attempt to control for differences in participant characteristics and the economic environment between the pre- and post-regulation-change cohorts.

In Table IV.3, we show the regression-adjusted means for five service-use measures: recent use of any services, recent use of employment services,³⁴ use of 50 or more hours of service in the previous year, mean service-use hours among users, and the likelihood of reporting unmet service needs. None of means for the service-use measures are significantly different between the pre- and post-regulation change cohorts overall. However, the likelihood of reporting unmet needs is significantly different between the two cohorts of EN clients at the five percent level, and the difference is marginally significant for all clients ($p=0.06$). Holding constant the individual characteristics and economic conditions at the post-regulation-change mean values, the predicted likelihood of unmet service need declined by 16.3 percentage points for EN clients and 9.5 percentage points for traditional SVRA clients. This decline suggests that following the regulation changes, providers may have improved in their ability to meet the service needs of participants, served clients with lower needs, or referred clients to appropriate service providers at higher rates than before the regulation changes were enacted. Among ENs, the clients of which the decline in unmet need was particularly large, these changes may have been in response to the enhanced TTW payment system.

The regression-adjusted means for the pre-regulation-change cohort differ from the unadjusted differences reported in Table IV.2. In the pre-regulation-change regression models used to calculate the regression-adjusted means, an increase in the unemployment rate is associated with a significant increase in the likelihood of unmet need (Appendix Table B.8). Accordingly, when evaluated at the 2010 mean area unemployment rate (which is larger than the average unemployment rate in 2005 and 2006), the regression-adjusted mean values for unmet service need increased. This suggests that if ENs in the pre-regulation change period had been operating in the weak economy of the post-regulation change period, there would have been more unmet need than was observed.

³⁴ Employment services include job training, job coaching, work assessment, advice or help finding a job, the use of any services to find a job or increase income, and enrollment as a full-time student. Note that Table IV.2 presents rates of use for some employment services among service users only, whereas Table IV.3 analyzes use of any employment-specific services for all TTW participants.

Table IV.3. Regression-Adjusted Estimates of Service Use Before and After TTW Regulation Changes

	Regression-Adjusted Mean Generated from Pre- Regulation-Change Coefficients			Regression-Adjusted Mean Generated from Post- Regulation-Change Coefficients (Difference)		
	All	EN	SVRA	All	EN	SVRA
Likelihood of recent use of any services	62.4	60.3	62.9	1.5	0.3	1.8
Likelihood of recent use of any employment-specific services	54.8	47.8	56.5	-3.3	-2.2	-3.6
Likelihood of using more than 50 hours of services	37.3	32.2	36.7	-2.3	-1.0	-1.9
Mean hours of service use for those who use services	165.4	135.6	172.4	8.6	12.9	7.6
Likelihood of unmet need	27.1	34.5	25.4	-8.4	-16.3 ^a	-6.5

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Notes: Values shown for the post-regulation-change cohort represent differences from the analogous pre-regulation-change cohort values.

See Appendix Tables B.4–B.8 for the regression estimates used to compute the adjusted means.

^aDifference is statistically significant at the 0.05 level, two-tailed t-test.

This page has been left blank for double-sided copying.

V. EMPLOYMENT

TTW was designed to (1) expand access to services that help beneficiaries become employed and to (2) give service providers incentives to help beneficiaries achieve earnings at levels that will eventually eliminate their reliance on SSI and DI benefits. The original TTW legislation aimed to induce 0.5 percent of beneficiaries to become employed at levels that cease disability benefit receipt (42 U.S.C. 1320b-19). Employment and exit from the rolls at such levels, according to the legislation, would more than cover the cost of providing services under TTW. Evidence from the program's early years, although inconclusive with respect to net costs, suggests disappointing results under the original regulations (Thornton 2011; Stapleton et al. 2008). As discussed in Chapter II, the employment outcomes of TTW participants might improve under the revised regulations if ENs respond to the enhanced payment systems by providing more-intensive services to beneficiaries that lead to better employment outcomes. However, if providers respond to the reduced earnings requirements associated with the revised milestone payments by increasing their acceptance of Tickets from individuals who are unlikely to ever achieve SGA-level earnings, then the employment outcomes of TTW participants under the milestone-outcome system might worsen under the revised regulations.

In this chapter, we compare pre- and post-regulation-change TTW participants on several employment-related outcomes. We first describe differences in the employment-related characteristics of pre- and post-regulation-change cohorts (Section A). We then present regression-adjusted means for selected employment outcomes and discuss differences between the two cohorts (Section B).

A. Descriptive Statistics

Although only about 40 percent of all SSI and DI beneficiaries report having work-related goals and expectations (Livermore 2011), about 90 percent of TTW participants report such goals (Table V.1). Significantly fewer post-regulation-change participants had work-related goals and expectations compared with their pre-regulation-change counterparts. The difference is driven by the statistically significant differences for traditional SVRA clients; members of the post-regulation-change cohort were significantly less likely to see themselves working for pay in the next year or next five years, and less likely to anticipate earning enough to stop receiving disability benefits in the next five years. The proportion of traditional SVRA clients who reported having any work-related goals or expectations decreased from 93 percent to 88 percent following the regulation changes. This decline is similar to the decline observed for all beneficiaries over the same period (from 44 percent to 41 percent) (Livermore et al. 2009a; Wright et al. 2011). This suggests that, to some extent, the decline in work-related goals and expectations among traditional SVRA participants is reflective of changes in the larger population of beneficiaries. The lower expectations might be due in part to the poorer economy in the post-regulation period, which made finding and retaining jobs more difficult especially for those with limited skills and education. Among those assigned under an EN payment system, there were no significant differences between the pre- and post-regulation change cohorts in their reported rates of having work-related goals and expectations. Thus, the statistically significant decline in reported work goals and expectations among all TTW participants (from 93 percent to 88 percent) is entirely due to the declines observed for those assigned under the traditional SVRA payment system.

Table V.1. Work-Related Goals and Expectations (%)

	Pre-Regulation-Change TTW Participants			Post-Regulation-Change TTW Participants (Difference)		
	All	EN	SVRA	All	EN	SVRA
Goals include work/career advancement	80.2	78.1	80.6	-4.2	-2.9	-4.4
Sees self working for pay in the next year	67.2	66.9	67.3	-7.2 ^a	-2.6	-8.3 ^a
Sees self working for pay in the next five years	78.4	71.5	79.6	-5.7 ^a	1.9	-7.0 ^a
Sees self working and earning enough to stop receiving disability benefits in the next five years	48.8	50.2	48.5	-8.0 ^a	-4.8	-8.8 ^a
Any of the above goals/expectations	92.7	89.2	93.3	-4.5 ^a	0.8	-5.6 ^a

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Note: Values shown for the post-regulation-change cohort represent differences from the analogous pre-regulation-change cohort values.

^aDifference is statistically significant at the 0.05 level, two-tailed t-test.

New TTW participants who assigned Tickets under the revised regulations appear to have weaker labor force attachments than new participants who assigned Tickets under the original legislation (Table V.2). Relative to pre-regulation-change participants, post-regulation-change participants were significantly less likely to have ever worked for pay (79 percent versus 94 percent); to have been employed in the previous year (37 percent versus 50 percent); and to be employed at interview (24 percent versus 35 percent). Despite having a higher proportion of jobless participants, the post-regulation-change cohort was not significantly more likely to report having looked for work in the past four weeks (26 percent versus 22 percent, but the difference is not statistically significant).

Table V.2. Employment Status

	Pre-Regulation-Change TTW Participants			Post-Regulation-Change TTW Participants (Difference)		
	All	EN	SVRA	All	EN	SVRA
Ever work for pay (%)	93.5	95.2	93.2	-14.4	-9.3 ^a	-15.8 ^a
Employed at interview or in previous year (%)	54.3	54.8	54.2	-11.9 ^a	-10.7 ^a	-12.2 ^a
Employed in previous year (%)	49.8	50.3	49.7	-12.4 ^a	-10.8 ^a	-12.8 ^a
Worked less than able (%) ^b	24.6	24.9	24.6	-2.4	0.5	-3.2
Employment Status at Interview (%)						
Employed at interview	35.2	34.0	35.4	-10.8 ^a	-6.0 ^a	-11.8 ^a
Not employed at interview	64.8	66.0	64.6	10.8 ^a	6.0 ^a	11.8 ^a
Sought work in past 4 weeks	21.8	23.1	21.6	4.6	4.4	4.5

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Note: Values shown for the post-regulation-change cohort represent differences from the analogous pre-regulation-change cohort values.

^aDifference is statistically significant at the 0.05 level, two-tailed t-test.

^bThis question was asked only of respondents who were working during the previous year.

Although most of these findings can be attributed to the poorer economic conditions experienced by the post-regulation-change cohort (discussed further in the next section), another explanation is that the regulation changes might have induced providers to accept Tickets from beneficiaries with lower employment potential or who are otherwise harder to serve than those typically served in the past. In particular, the significant decline in the percentage of participants who had ever worked for pay suggests that providers might be responding to the new regulations in this manner. Beneficiaries who have never worked before are likely to have significant employment barriers related to their health conditions and disabilities, education and skill levels, and lack of work experience. Although it is possible that the new regulations expanded service provision to a wider pool of beneficiaries, particularly those with less certain employment prospects, it is important to note that an even larger decline in the percentage with previous work experience is observed among traditional SVRA clients than among EN clients, and the payment system for the traditional SVRA clients did not change under revised regulations.

Among TTW participants who were employed at interview, there were a few significant differences in the job characteristics of the pre- and post-regulation-change cohorts (Table V.3). Post-regulation-change participants worked significantly fewer hours but were more likely to earn more than \$10 an hour compared with pre-regulation-change participants. The decline in hours appears to outweigh any increase in pay on average; a lower proportion of post-regulation-change TTW clients had earnings above SGA (18 percent versus 25 percent). Average monthly pay was also lower among post-regulation-change participants, but this difference is significant only among EN clients.

Table V.3 also presents information on occupation, industry, tenure, and rates of self-employment and sheltered employment among employed TTW participants. Post-regulation-change traditional SVRA clients were employed in different occupations than their pre-regulation-change counterparts (more likely to be employed in building and grounds cleaning/maintenance, office and administrative support, and sales occupations; less likely to be employed in food preparation/service and transportation/material moving). For EN clients, there were no significant differences in occupation. There also were no differences in industry of employment for all participants. Consistency in industry and occupation among EN clients might be related to the observed increase in job tenure among post-regulation-change EN clients; just over 30 percent of pre-regulation-change EN clients had been employed at their main job for over a year, compared with about 48 percent of their post-regulation-change counterparts. There were no significant differences in rates of self-employment or sheltered employment between the pre- and post-regulation change cohorts.

Table V.3. Job Characteristics of Employed TTW Participants

	Pre-Regulation-Change TTW Participants			Post-Regulation-Change TTW Participants		
	All	EN	SVRA	All	EN	SVRA
Working at Interview						
Unweighted number	812	503	309	768	597	171
Weighted number	17,601	2,578	15,022	19,864	4,475	15,592
Weighted percent	35.2	34.0	35.4	24.4 ^a	28.0 ^a	23.9 ^a
Job Characteristics						
				Difference		
Usual Hours Per Week (%)						
1-10	21.6	17.2	22.4	10.3 ^b	5.4 ^b	12.2 ^b
11-20	37.0	29.2	38.4	3.9 ^b	12.1 ^b	2.4 ^b
21-34	21.9	22.4	21.8	-4.4 ^b	0.5 ^b	-5.9 ^b
35+	19.5	31.2	17.5	-9.8 ^b	-18.0 ^b	-8.8 ^b
Average hours per week	21.6	24.9	21.0	-3.6 ^a	-4.6 ^a	-3.7 ^a
Average hours per month	95.3	109.0	92.9	-15.4 ^a	-18.4 ^a	-16.2 ^a
Hourly Wage (%)^c						
< \$5.00	11.9	5.8	12.9	-4.6 ^b	-0.7 ^b	-4.9 ^b
\$5.00-\$5.99	9.6	7.4	10.0	-6.9 ^b	-4.7 ^b	-7.3 ^b
\$6.00-\$7.24	15.2	16.9	15.0	-8.4 ^b	-12.1 ^b	-7.7 ^b
\$7.25-\$9.99	40.5	38.7	40.9	15.5 ^b	13.3 ^b	17.1 ^b
\$10.00-\$14.99	15.2	21.2	14.2	4.8 ^b	2.8 ^b	4.8 ^b
\$15.00 +	5.2	8.4	4.7	0.8 ^b	6.6 ^b	-1.6 ^b
Average monthly pay (\$) ^c	812	1,078	851	-66	-184 ^b	-148
Earning above substantial gainful activity level (>\$1,000/month)(%) ^c	24.9	37.9	22.7	-7.1 ^a	-13.1 ^a	-7.2 ^a
Occupation (%)						
Transportation and material moving	16.3	15.0	16.6	-3.9	-5.1	-3.4 ^b
Building and grounds cleaning/maintenance	14.6	11.8	15.0	2.8 ^b	-0.4	4.2 ^b
Office and administrative support	14.3	15.9	14.0	6.0 ^b	3.1	6.7 ^b
Food preparation/serving	13.7	13.8	13.7	-7.5 ^b	-7.2	-7.6 ^b
Sales and related	7.8	9.2	7.6	4.7 ^b	3.4	4.8 ^b
Production	6.8	6.1	6.9	-2.0 ^b	-2.9	-1.7 ^b
Personal care and service	4.4	5.4	4.2	-0.8 ^b	-0.7	-0.9 ^b
Other occupation	21.7	22.8	21.5	0.9 ^b	9.1	-1.7 ^b
Unknown	0.4	0.1	0.5	-0.2 ^b	0.6	-0.5 ^b
Industry (%)						
Health care and social assistance	50.9	48.3	51.4	2.1	-2.8	3.8
Retail	9.6	10.8	9.3	6.9	-0.3	9.0
Accommodation and food services	6.6	7.7	6.4	-1.8	-1.3	-2.1
Administrative and support and waste management/remediation	4.6	3.2	4.8	-0.7	3.8	-1.9
Educational services	4.5	6.0	4.2	-2.0	-0.8	-2.4
Other services (except public administration)	4.3	2.5	4.6	-0.7	0.1	-0.7
Other industry	19.1	21.3	18.7	-3.4	1.5	-5.1
Unknown	0.4	0.1	0.5	-0.4	-0.1	-0.5
Self-employed (%)	5.2	6.7	4.9	2.0	4.3	1.2
Sheltered employment (%)	38.0	31.0	39.2	5.4	0.7	7.6
Months at Current Main Job (%)						
< 6 months	29.7	35.9	28.6	2.9	-7.9 ^b	5.3
7-12 months	19.7	27.0	18.5	1.4	-6.8 ^b	2.9
13-24 months	25.0	19.3	26.0	-3.3	7.5 ^b	-5.8
25 months +	19.2	11.5	20.6	0.9	9.3 ^b	-0.7
Unknown	6.4	6.4	6.4	-1.9	-2.2 ^b	-1.8
Median months at current main job	12.0	9.0	12.0	-1.0	3.0 ^b	-1.0

Mean months at current main job	21.0	17.3	21.7	-0.6	5.7	-2.1
---------------------------------	------	------	------	------	-----	------

Table V.3 (continued)

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Notes: Values shown in the lower section of the table for the post-regulation-change cohort represent differences from the analogous pre-regulation-change cohort values.

The job characteristics reported in the table refer to the characteristics of jobs held by sample members who were employed at interview. Among those who held multiple jobs (1.5 percent of those employed at interview), the characteristics reported refer to those of the main job, as designated by the respondent.

^aDifference is statistically significant at the 0.05 level, two-tailed t-test.

^bDifference is statistically significant at the 0.05 level, chi-square test.

^c2005 and 2006 dollar values were converted to 2010 dollars based on the national average wage index.

Overall job satisfaction was higher in the post-regulation-change cohort than in the pre-regulation-change cohort, although the difference was not statistically significant for EN clients (Table IV.4). Among all post-regulation-change participants, the share that was very or somewhat satisfied was higher by a small but statistically significant amount (82 percent versus 80 percent).

Table V.4. Job Satisfaction of Employed TTW Participants

	Pre-Regulation-Change TTW Participants			Post-Regulation-Change TTW Participants		
	All	EN	SVRA	All	EN	SVRA
Nonproxy Respondent Working at Interview						
Unweighted number	685	445	240	629	507	122
Weighted number	13,939	2,208	11,732	14,903	3,905	10,998
Weighted percent	27.8	29.1	27.6	18.3 ^a	24.5 ^a	16.8 ^a
Job Satisfaction						
Overall Satisfaction with Job (%)				Difference		
Very/somewhat satisfied	80.0	72.3	81.4	1.9 ^b	3.4	2.7 ^b
Not very/not at all satisfied	19.4	26.9	18.0	-2.5 ^b	-3.1	-3.5 ^b
Unknown	0.6	0.7	0.6	0.6 ^b	-0.3	0.8 ^b

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Notes: Job satisfaction questions were asked of nonproxy respondents working at interview.

Values in the lower section of the table shown for the post-regulation-change cohort represent differences from the analogous pre-regulation-change cohort values.

^aSignificantly different from the analogous statistic for pre-regulation-change TTW participants at the 0.05 level, two-tailed t-test.

^bDifference is statistically significant at the 0.05 level, chi-square test.

B. Regression-Adjusted Estimates

The regression-adjusted mean values of selected employment outcomes differ substantially between the pre- and post-regulation-change cohorts, with those in the latter cohort experiencing worse employment outcomes (Table V.5). Holding constant the characteristics of the pre- and post-regulation-change samples at the mean values of the post-regulation-change cohort, the likelihood of

having ever worked for pay was about 14 percentage points lower (99 percent versus 85 percent), the likelihood of recent employment was about 6 percentage points lower (41 percent versus 47 percent), and the likelihood of employment at interview was about 4 percentage points lower (20 percent versus 24 percent); only the difference in the proportion who had ever worked for pay was statistically significant. The declines in these outcomes were larger for SVRA clients.

Among employed participants, the regression-adjusted means also differed between the two cohorts for several job characteristics. The findings indicate that all employment-related outcomes except job tenure were worse among post-regulation-change clients. All else held constant, post-regulation-change participants worked 19 fewer hours and earned \$120 less each month on average, compared with the pre-regulation-change cohort. The differences in these outcomes are large for both payment systems, but only the differences in hours worked are statistically significant.

The differences between the pre- and post-regulation-change regression-adjusted values presented in Table V.5 are generally smaller than the differences between unadjusted values shown in Table V.3. This is due in large part to the significant, negative relationship between the unemployment rate and most of the employment-related outcomes estimated in the regression models (Appendix Tables B.9–B.13, B.16, B.17). The regression-adjusted estimates account for the higher unemployment rate during the post-regulation-change period, and in all but two of the models, the unemployment rate variable was negative and statistically significant. The two exceptions are the hours worked and earnings models. This suggests that, among those who remained employed during an economic downturn, effort on the job was unaffected.

Table V.5. Regression-Adjusted Estimates of Employment-Related Outcomes Before and After the TTW Regulation Changes

	Regression-Adjusted Mean Generated from Pre- Regulation-Change Coefficients			Regression-Adjusted Mean Generated from Post- Regulation-Change Coefficients (Difference)		
	All	EN	SVRA	All	EN	SVRA
Likelihood ever worked for pay	98.9	99.5	98.7	-13.8 ^a	-8.6 ^a	-15.5 ^a
Likelihood of recent employment	46.7	47.5	46.6	-5.6	-4.4	-5.9
Likelihood of employment at interview	24.0	23.7	24.1	-3.8	0.3	-4.7
Worked less than able ^b	17.8	17.4	17.9	-2.6	-0.4	-3.1
Mean total hours worked per month ^c	98.6	108.1	95.8	-18.7 ^a	-17.5 ^a	-19.1 ^a
Monthly earnings ^c	711	849	672	-120	-77	-129
Job tenure (months) ^c	18.6	13.8	20.0	1.8	9.2 ^a	-0.4

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Notes: Values shown for the post-regulation-change cohort represent differences from the analogous pre-regulation-change cohort values.

See Appendix Tables B.9–B.13, B.16, B.17 for the regression estimates used to compute the adjusted means.

^aDifference is statistically significant at the 0.05 level, two-tailed t-test.

^bThis question was asked only of respondents who were working during the previous year.

^cJob characteristic questions were asked only of respondents who were working at interview.

VI. SATISFACTION WITH TTW

As discussed previously, if ENs anticipate higher TTW revenues under the revised regulations, they might be willing to provide more intensive or otherwise more expensive services. If ENs are providing these enhanced services under the revised regulations, then beneficiary satisfaction with TTW services might also improve. In this chapter, we compare levels of satisfaction with the TTW program for the pre- and post-regulation-change cohorts. We first present descriptive statistics on satisfaction with TTW and participants' assessments of the success they have had in achieving their work-related goals since the start of their participation in TTW (Section A). We then present regression-adjusted estimates of these measures (Section B).

A. Descriptive Statistics

In Table VI.1, we present descriptive statistics on satisfaction with TTW and respondents' assessments of the extent to which they have reached their employment goals since the start of their TTW participation. In the NBS, questions about experiences with TTW were asked only of respondents who acknowledged that they were TTW participants. If respondents were unaware that they were enrolled in TTW, they skipped all survey questions related to experiences with TTW participation. A higher share of post-regulation-change participants (43 percent) was aware of their TTW enrollment status relative to pre-regulation-change participants (35 percent). The increase among the post-regulation change cohort is due to the statistically significant increase in the share of traditional SVRA clients who reported being aware that they were enrolled in TTW. This increased awareness is somewhat surprising because the new process for assigning Tickets in use to SVRAs makes enrollment in TTW even more invisible to SVRA clients than it had been under the original regulations. The difference between the two cohorts might in part be due to the maturing of the TTW program and greater awareness of TTW among SVRA clients. But it is also likely that the change in the structure of the survey questions about TTW in the 2010 NBS played a large role. Relative to earlier rounds, the 2010 NBS has slightly different probes for ascertaining respondents' knowledge of their TTW participation status.³⁵ We do not believe that the TTW regulation changes themselves played a large role in the observed differences.

Reported experiences with the TTW program differ for the pre- and post-regulation-change cohorts (Table VI.1). Among traditional SVRA participants, the share reporting success reaching their work goals was lower in the post-regulation-change cohort; about 47 percent of post-regulation-change SVRA participants reported being somewhat or very successful in reaching their work goals since the start of participation in TTW, compared with 56 percent of their pre-regulation-change counterparts. We do not have information on survey respondents' specific goals, so it is not possible to discern whether post-regulation-change participants had loftier goals or had less success in achieving a similar set of goals than pre-regulation-change participants. The lower employment outcomes achieved by the post-regulation-change cohort due to the recession (discussed in Chapter V) likely contributed to the lower reported success in reaching employment goals.

³⁵ The changes were necessitated by the introduction of the Ticket in-use status under the revised regulations. Different language and probes were needed in the survey to capture individuals whose Tickets were in use with SVRAs, and these changes likely contributed to the large increase in the share of traditional SVRA participants who acknowledged their TTW participation during the survey interviews.

Table VI.1. Experiences with the TTW Program

	Pre-Regulation-Change TTW Participants			Post-Regulation-Change TTW Participants		
	All	EN	SVRA	All	EN	SVRA
Number acknowledging TTW participation at interview (unweighted)	938	668	270	1,229	913	316
Number acknowledging TTW participation at interview (weighted)	17,519	3,466	14,053	34,757	6,848	27,909
Percent (weighted)	35.0	45.7	33.1	42.8 ^a	42.9	42.7 ^a
TTW Success and Satisfaction						
Reported Success in Reaching Work Goals Since Start of Participation in TTW (%)						
				Difference		
Very successful	22.4	14.3	24.4	-8.5 ^b	-1.9	-10.1 ^b
Somewhat successful	30.8	27.0	31.7	0.5 ^b	-0.2	0.8 ^b
Not very successful	16.9	21.1	15.9	4.4 ^b	-0.2	5.5 ^b
Not at all successful	28.4	36.1	26.5	3.9 ^b	2.3	4.3 ^b
Don't know/refused	1.5	1.6	1.5	-0.3 ^b	-0.1	-0.4 ^b
Overall Satisfaction with TTW (%)						
Very satisfied	32.3	26.6	33.7	-2.0 ^b	0.3	-2.4 ^b
Somewhat satisfied	36.3	33.5	37.0	6.9 ^b	3.5	8.1 ^b
Not very satisfied	12.8	14.2	12.5	1.2 ^b	2.1	0.9 ^b
Not at all satisfied	16.0	24.4	13.9	-4.6 ^b	-5.8	-4.6 ^b
Don't know/refused	2.6	1.2	2.9	-1.6 ^b	-0.1	-1.9 ^b

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Notes: TTW experience questions were not asked of proxy respondents.

Values in the lower section of the table shown for the post-regulation-change cohort represent differences from the analogous pre-regulation-change cohort values.

^aSignificantly different from the analogous statistic for pre-regulation-change TTW participants at the 0.05 level, two-tailed t-test.

^bDifference is statistically significant at the 0.05 level, chi-square test.

Despite reporting less success at achieving employment goals, post-regulation-change traditional SVRA participants generally reported higher levels of satisfaction than their pre-regulation-change counterparts (for example, 76 percent were either somewhat or very satisfied with TTW, versus 71 percent for the earlier cohort). This increase contributed to the statistically significant increase in satisfaction among all TTW participants. Although those assigned under an EN payment system also experienced an increase in satisfaction, the difference between the pre- and post-regulation-change cohorts was not statistically significant; roughly 60 percent of both groups reported being very or somewhat satisfied with TTW.

B. Regression-Adjusted Estimates

Regression-adjusted means presented in Table VI.2 reveal that positive perceptions of the TTW program were more prevalent among post-regulation-change participants than among their pre-regulation-change counterparts. When evaluated at post-regulation-change mean values, the likelihood of reporting overall satisfaction with TTW was 18 percentage points higher among post-regulation change EN clients (68 percent versus 50 percent) and 10 percentage points higher for SVRA clients (80 percent versus 70 percent), although only the former difference is statistically

significant. Post-regulation change EN participants were also 8 percentage points more likely to report success in reaching work goals (37 percent versus 29 percent), a large but statistically insignificant difference. The findings suggest that, from the perspective of participants, the quality of the TTW program improved following the regulation changes.

For the pre-regulation-change cohort, the regression-adjusted mean values of the shares reporting success reaching work goals are substantially lower than the unadjusted values shown in Table VI.1, and the shares reporting satisfaction with TTW also are somewhat lower. In the regression models, the unemployment rate was a negative predictor of both outcomes, although it was significant only for the latter outcome (Appendix Tables B.14 and B.15). The regression-adjusted values, which were calculated based on the average economic conditions faced by the post-regulation-change cohort, are lower in large part because of these high unemployment rates. This suggests that, if the post-regulation-change economic conditions had been present for members of the pre-regulation-change cohort, they would have had reported lower success rates and satisfaction.

Table VI.2. Regression-Adjusted Estimates of Experiences with the TTW Program Before and After the TTW Regulation Changes

	Regression-Adjusted Mean Generated from Pre- Regulation-Change Coefficients			Regression-Adjusted Mean Generated from Post-Regulation-Change Coefficients (Difference)		
	All	EN	SVRA	All	EN	SVRA
Likelihood of success in reaching work goals	44.2	28.9	48.3	-0.4	7.7	-2.8
Likelihood of satisfaction with TTW	65.9	49.5	70.3	12.3	18.1 ^a	10.5

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Notes: Values shown for the post-regulation-change cohort represent differences from the analogous pre-regulation-change cohort values.

TTW experience questions were not asked of proxy respondents. See Appendix Tables B.14 and B.15 for the regression estimates used to compute the adjusted means.

^aDifference is statistically significant at the 0.05 level, two-tailed t-test.

This page has been left blank for double-sided copying.

VII. CONCLUSIONS

The primary objective of TTW is to expand access to and choice of rehabilitation and employment services for SSI and DI beneficiaries, with the ultimate goal of improving the employment outcomes of beneficiaries. Under the original TTW regulations, TTW participation was low (about 2 percent), and only 9 percent of TTW participants had assigned their Tickets under one of the EN payment systems (Altshuler et al. 2011). This suggests that TTW had little impact on the market for employment services for beneficiaries. To reinvigorate the program, modifications were enacted in July 2008. Particularly important were the changes made to the EN payment systems, which were intended to increase the willingness of providers to accept Tickets and provide services that would improve beneficiary employment outcomes.

Following the regulation changes, participation in TTW increased, particularly Ticket assignments under the milestone-outcome payment system. Our findings suggest that this increase was accompanied by some changes in the characteristics of TTW participants. Some key differences between the pre- and post-regulation-change cohorts include the following:

- **An increase in the share of participants age 18 to 24.** Compared with pre-regulation-change participants, a larger share of post-regulation-change participants was in the youngest age group. The difference was large and statistically significant for traditional SVRA clients. Congruent differences in other characteristics related to the larger portion of younger participants, such as lower levels of education and younger age of disability onset, were also evident.
- **An increase in the share of participants with psychiatric conditions.** Post-regulation-change participants were significantly more likely to report psychiatric conditions than their pre-regulation-change counterparts.
- **An increase in dependency on public assistance programs.** The post-regulation-change cohort members had significantly higher monthly benefits from non-SSA assistance programs and were significantly more likely to receive food stamps and unemployment insurance benefits.
- **A decline in labor force attachment.** Post-regulation-change participants were significantly less likely to have ever worked for pay, to have recent employment, or to have work-related goals and expectations compared with the pre-regulation change cohort.

Some of these characteristics suggest that, because of the enhanced payment systems under the revised regulations, ENs became more willing to accept Tickets from beneficiaries who appeared harder to serve, in particular the larger share of participants who never worked for pay. But some of these characteristics were significantly different only for SVRA clients (lower levels of education, younger age) and so might reflect changes to or the nature of SVRA services, such as the effects of introducing the Ticket in-use status, greater demand for the intensive services provided by SVRAs, or changes in the mix of clients being served by SVRAs if state agencies were more likely to be in

order of selection during the post-regulation period,³⁶ rather than a response to the changes in the EN payment system.

We developed regression-adjusted estimates for selected outcomes to control for differences in characteristics between the pre- and post-regulation-change cohorts. These estimates suggest that selected beneficiary experiences differed during the periods before and after the implementation of the revised regulations. Holding constant the individual characteristics and economic conditions at post-regulation-change mean values, we found that compared with the pre-regulation-change cohort, the post-regulation-change cohort had the following:

- **A lower likelihood of reporting unmet service needs.** Although we found no significant differences in the likelihood of using services, service types, or hours of service use, the likelihood of reporting unmet services needs was significantly lower among the post-regulation-change EN cohort. The difference could be due to unobserved improvements in the quality of services resulting from the enhanced TTW payment system. Among VR clients, the difference in reported unmet service needs was not statistically significant, providing further, support for this hypothesis.
- **Less employment-related activity.** The post-regulation-change SVRA cohort was 5 percentage points less likely to be employed at interview and earned \$129 less per month. These differences were statistically significant, and represent larger declines relative to those experienced by EN clients. All post-regulation-change participants worked significantly fewer hours, which likely reflects our limited ability to control for the effects of the economy in our models.
- **A higher likelihood of satisfaction with TTW.** Holding personal and economic characteristics constant, over 78 percent of the post-regulation-cohort reported being somewhat or very satisfied with TTW, compared with 66 percent among their pre-regulation-change counterparts. The differences were even greater for EN clients, who were also more likely to report success in reaching their work goals after the start of their participation in TTW. Like the reduction in unmet service needs noted above, these findings might suggest that the quality of TTW services improved in response to the enhanced EN payment system.

Although we found some significant differences between the pre- and post-regulation-change cohorts, the findings provide only limited evidence of changes that could be tied to the revised TTW regulations. The revised regulations appear to have increased participation in TTW. Satisfaction with TTW increased and unmet service needs were lower, even though service-use patterns remained the same and employment outcomes remained the same or declined—in large part due to the poor economy. The increase in satisfaction and lower unmet service needs might suggest an improvement in the quality of TTW services in response to the enhanced payment systems, but might also reflect a general maturing of the program and greater provider experience serving the beneficiary population.

³⁶ When SVRA resources are insufficient to provide services to all eligible applicants, SVRAs implement order of selection, under which applicants are prioritized and those with the most significant disabilities are given higher priority in the provision of services.

In interpreting the findings, it is important to keep in mind the study limitations. The analyses presented here were not designed to measure the impacts of the revised regulations. The comparisons are intended to highlight differences in the experiences of TTW participants before and after the revised regulations that might be suggestive of impacts; but any differences observed cannot be attributed with certainty to the regulation changes. Many factors external to the regulation changes likely contributed to the differences, and we were not able to control for these factors in our analyses. As noted previously, comparing the employment outcomes of the pre- and post-regulation-change cohorts is confounded by the significant economic recession that occurred from December 2007 through July 2009 and the persistently high unemployment rates that continued after the official end of the recession. Although we attempted to control for the high unemployment rates that occurred during the post-regulation-change period, our measure is unlikely to have adequately reflected the effects of the business cycle on individuals with significant disabilities.

This page has been left blank for double-sided copying.

REFERENCES

- Altshuler, Norma, Sarah Prenovitz, Bonnie O'Day, and Gina Livermore. "Provider Experiences Under the Revised Ticket to Work Regulations." Washington, DC: Mathematica Policy Research, 2011.
- Bethel, J., and David C. Stapleton. "Evaluation Design for the Ticket to Work Program: Final Survey Sample Design." Report submitted to the Social Security Administration. Falls Church, VA: The Lewin Group, July 2002.
- Duan, Naihua. "Smearing Estimate: A Nonparametric Retransformation Method." *Journal of the American Statistical Association*, vol. 78, no. 383, 1983, pp. 605–610.
- Livermore, Gina A. "Social Security Disability Beneficiaries with Work-Related Goals and Expectations." *Social Security Bulletin*, vol. 71, no. 3, August 2011, pp. 61–82.
- Livermore, Gina A., Mark W. Nowak, David C. Stapleton, John Kregel, Ellen Bouchery, and Asaph Glosser. "Evaluation Design for the Ticket to Work Program: Preliminary Process Evaluation." Falls Church, VA: Lewin Group, 2003.
- Livermore, Gina, Debra Wright, Allison Roche, and Eric Grau. "2006 National Beneficiary Survey: Methodology and Descriptive Statistics." Report No. 4. In *Work Activity and Use of Employment Supports Under the Original Ticket to Work Regulations*. Washington, DC: Mathematica Policy Research, 2009a.
- Livermore, Gina, Allison Roche, and Sarah Prenovitz. "SSI and DI Beneficiaries with Work-Related Goals and Expectations." Report No. 5. In *Work Activity and Use of Employment Supports Under the Original Ticket to Work Regulations*. Washington, DC: Mathematica Policy Research, 2009b.
- Livermore, Gina, Allison Roche, and Sarah Prenovitz. "Longitudinal Experiences of an Early Cohort of Ticket to Work Participants." Report No. 10. In *Work Activity and Use of Employment Supports Under the Original Ticket to Work Regulations*. Washington, DC: Mathematica Policy Research, 2010.
- Prenovitz, Sarah, Maura Bardos, and Bonnie O'Day. "Ticket to Work after the Revised Regulations: Progress and Prospects." Washington, DC: Mathematica Policy Research, 2012.
- Social Security Administration. "Chart of Key Changes to Ticket to Work Regulations." Washington, DC: SSA, May 29, 2008.
- Social Security Administration. "Vocational Rehabilitation Providers Handbook." Baltimore, MD: SSA Office of Employment Support Programs, April 15, 2010.
- Stapleton, David, Gina A. Livermore, Craig Thornton, Bonnie L. O'Day, Robert R. Weathers II, Krista Harrison, So O'Neil, Emily S. Martin, David C. Wittenburg, and Debra L. Wright. "Ticket to Work at the Crossroads: A Solid Foundation with an Uncertain Future." Report submitted to the Social Security Administration. Washington, DC: Mathematica Policy Research, September 2008.

- Stapleton, David, Cindy Gruman, and Sarah Prenovitz. "Participation in Ticket to Work Continues to Grow but Assignments Under the Traditional Payment System Still Dominate." Report No.3 in *Work Activity and Use of Employment Supports Under the Original Ticket to Work Regulations*. Washington, DC: Mathematica Policy Research, 2009.
- Thornton, Craig V. "Can the Ticket to Work Program Be Self-Financing?" Washington, DC: Mathematica Policy Research, 2011.
- Thornton, Craig V., Gina A. Livermore, David C. Stapleton, John Kregel, Timothy W. Silva, Bonnie L. O'Day, Thomas M. Fraker, W. G. Revell Jr., Heather Schroeder, and Meredith Edwards. "Evaluation of the Ticket to Work Program: Initial Evaluation Report." Washington, DC: Mathematica Policy Research, February 2004.
- Thornton, Craig V., Thomas M. Fraker, Gina A. Livermore, David C. Stapleton, Bonnie L. O'Day, Timothy W. Silva, Emily S. Martin, John Kregel, and Debra L. Wright. "Evaluation of the Ticket to Work Program: Implementation Experience During the Second Two Years of Operations (2003–2004)." Washington, DC: Mathematica Policy Research, January 2006.
- Thornton, Craig V., Gina A. Livermore, Thomas M. Fraker, David C. Stapleton, Bonnie L. O'Day, David C. Wittenburg, Robert R. Weathers II, Nanette J. Goodman, Timothy W. Silva, Emily Sama Martin, Jesse Gregory, Debra L. Wright, and Arif A. Mamun. "Evaluation of the Ticket to Work Program: Assessment of Post-Rollout Implementation and Early Impacts." Washington, DC: Mathematica Policy Research, June 2007.
- Wright, Debra, Gina Livermore, Denise Hoffman, Eric Grau, and Maura Bardos. "2010 National Beneficiary Survey: Methodology and Descriptive Statistics." Washington, DC: Mathematica, April 2012.
- U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics. "Labor Force Data by County, 2005 Annual Averages." Available at [<ftp://ftp.bls.gov/pub/special.requests/la/laucnty05.txt>]. Accessed February 23, 2012a.
- U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics. "Labor Force Data by County, 2006 Annual Averages." Available at [<ftp://ftp.bls.gov/pub/special.requests/la/laucnty06.txt>]. Accessed February 23, 2012b.
- U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics. "Labor Force Data by County, 2010 Annual Averages." Available at [<ftp://ftp.bls.gov/pub/special.requests/la/laucnty10.txt>]. Accessed February 23, 2012c.
- U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics. "Effects of Hurricane Katrina on Local Area Unemployment Statistics." Available at [<http://www.bls.gov/katrina/lausquestions.htm>]. Accessed February 23, 2012d.

APPENDIX A

DESCRIPTIVE STATISTICS FROM THE 2010 NBS

This page has been left blank for double-sided copying.

This appendix includes a set of data tables based on the national cross-sectional and TTW participant samples of the 2010 NBS. These tables provide a ready source of information about the characteristics and employment-related experiences of TTW participants in 2010. The statistics are comparable to those that have been presented in previous TTW evaluation reports based on earlier rounds the NBS (Thornton et al. 2004, 2006, and 2007; and Stapleton et al. 2008).

The tables that follow contain a variety of descriptive statistics pertaining to:

- Characteristics and health status (Tables A.2 through A.5)
- Sources of support (Tables A.6 and A.7)
- Service use (Tables A.8 and A.9)
- Employment-related characteristics, activities, and expectations (Tables A.10 through A.23)
- Awareness of Social Security work supports (Tables A.24 and A.25)

The statistics are shown for all TTW participants and for TTW participants by payment system (EN or traditional SVRA). To facilitate comparisons and provide context, analogous statistics are also shown for all beneficiaries and for all beneficiaries who reported work goals and expectations (referred to as work-oriented beneficiaries in the tables).³⁷ The weighted and unweighted sample sizes for these subgroups are shown in Table A.1. We used the imputed values for missing data, when available, and the appropriate survey weights. Statistics are not reported whenever the unweighted number of observations for a specific subgroup is 30 or fewer.

Table A.1. Subgroup Sample Sizes

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Number (unweighted)	2,298	2,755	2,027	728	1,156
Number (weighted)	11,102,096	81,273	15,965	65,308	4,251,249
Percent of sample (weighted)	100.0	100.0	19.6	80.4	38.3

Source: 2010 National Beneficiary Survey.

³⁷ Refer to Wright et al. (2012) for similar statistics on all beneficiaries disaggregated by program (SSI, DI, and concurrent) based on the 2010 NBS.

Table A.2. Sociodemographic Characteristics

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Sex (%)					
Male	50.2	53.5	50.4	54.2	53.6
Female	49.8	46.5	49.6	45.8	46.4
Missing					
Age in Years (%)					
18-24	4.6	21.7	10.4	24.5	7.8
25-29	4.8	8.8	8.2	8.9	7.3
30-34	4.8	8.1	8.0	8.1	7.4
35-39	5.8	9.8	9.3	9.9	8.0
40-44	7.9	10.6	13.0	10.0	10.4
45-49	10.9	12.1	12.9	11.9	12.8
50-54	15.1	12.2	16.1	11.2	14.5
55-59	18.0	10.8	12.7	10.3	18.0
60 and over	28.0	5.9	9.4	5.0	13.8
Mean age (years)	50.1	39.5	43.4	38.6	45.7
Race (%)					
White only	69.9	68.5	58.4	71.0	66.1
Black or African American only	22.6	24.9	35.1	22.4	25.7
Other	7.5	6.6	6.5	6.6	8.3
Ethnicity (%)					
Hispanic or Latino	12.3	12.6	10.5	13.2	12.8
Not Hispanic or Latino	87.7	87.4	89.5	86.8	87.2
Highest Grade in School (%)					
Did not complete high school or GED	34.3	16.3	18.0	15.9	30.9
High school	38.8	50.1	40.6	52.4	38.8
Diploma	28.6	35.3	29.4	36.7	28.0
GED	6.3	6.9	7.1	6.9	7.0
Certificate	3.9	7.9	4.1	8.8	3.8
Some college/postsecondary vocational	15.0	16.9	16.7	17.0	15.1
Associate's or vocational diploma	5.4	8.2	10.8	7.6	7.0
Bachelor's degree	4.3	5.9	9.6	5.0	5.0
Graduate or professional work/degree	2.2	2.4	4.2	2.0	3.2
Marital Status (%)					
Married	30.7	16.1	21.6	14.8	23.2
Divorced	22.0	20.6	25.1	19.5	21.8
Separated	6.5	4.7	6.3	4.3	5.4
Widowed	4.9	1.7	2.7	1.5	4.6
Never married	35.8	56.9	44.3	59.9	44.9
Household Income as a Percentage of Federal Poverty Level (%)					
Less than 100	48.2	50.7	49.7	51.0	50.3
100-299	41.5	40.8	41.7	40.6	41.7
300 and over	10.3	8.5	8.6	8.5	8.0

Source: 2010 National Beneficiary Survey.

Table A.3. Living Arrangements

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Living Arrangements (%)					
Lives alone	24.4	26.6	31.0	25.5	26.8
Lives with spouse, partner, or relatives	64.2	59.7	56.6	60.4	60.2
Lives with friends or roommates	4.1	5.8	6.7	5.5	5.9
Lives in group setting with nonrelatives	6.7	7.4	5.5	7.9	6.0
Other	0.6	0.5	0.2	0.6	1.0
Children (%)^a					
Has no children	81.3	76.3	75.2	76.5	76.1
Has children	17.5	22.6	23.4	22.4	22.5
Unknown	1.2	1.1	1.4	1.1	1.5
Child Living Arrangements (%)					
Lives with all or some of own children ^a	11.2	13.6	14.1	13.4	14.7
Does not live with any of own children ^a	6.2	9.0	9.2	9.0	7.6
Not applicable (no children)	81.3	76.3	75.2	76.5	76.1
Unknown	1.3	1.2	1.5	1.1	1.6
Children Under Age 6 (%)					
Has children under age 6	4.5	7.5	5.8	7.9	7.7
Has no children under age 6	13.0	15.1	17.5	14.5	14.8
Not applicable (no children)	81.3	76.3	75.2	76.5	76.1
Unknown	1.2	1.1	1.4	1.1	1.5

Source: 2010 National Beneficiary Survey.

^aOwn children are defined as biological, adoptive, or foster care children of the respondent.

Table A.4. Health Status

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Self-Reported Reason(s) for Limitation (%)^a					
Musculoskeletal disorders	39.0	23.3	30.9	21.4	37.4
Psychiatric disorders	33.7	42.7	43.9	42.4	41.9
Diseases of the circulatory system	22.4	9.8	13.2	9.0	13.6
Endocrine/nutrition disorders	18.3	9.3	11.0	8.9	13.1
Diseases of the nervous system	16.2	14.3	14.2	14.3	14.4
Injury or poisoning	13.9	10.3	11.1	10.1	11.3
Diseases of the respiratory system	9.5	6.7	6.6	6.7	6.4
Sensory disorders	8.6	8.3	6.8	8.7	5.6
Mental retardation	4.9	6.3	3.0	7.2	4.7
Other	33.6	30.6	31.3	30.5	35.0
No limitations	6.1	13.4	11.2	13.9	7.3
Number of Conditions Causing Limitation (%)					
0	6.1	13.4	11.2	13.9	7.3
1	30.0	37.9	35.5	38.5	33.2
2	33.2	27.8	30.5	27.2	33.8
3	17.4	13.8	13.1	14.0	17.1
4 or more	13.2	7.1	9.6	6.5	8.6
Substance Abuse (%)					
Indication of substance abuse	6.3	7.9	9.8	7.4	6.8
Age at Disability Onset (%)					
Under 18	22.2	41.1	26.1	44.7	26.3
18-24	9.5	14.1	15.1	13.9	12.5
25-39	25.9	22.9	26.8	22.0	29.2
40-54	30.5	18.4	26.5	16.5	21.6
55 and over	11.9	3.5	5.6	2.9	10.4
General Health (%)					
Excellent	3.0	10.1	8.5	10.5	4.9
Very good	7.0	13.8	8.3	15.2	9.5
Good	18.5	25.5	23.6	25.9	22.4
Fair	29.2	32.0	36.7	30.9	30.1
Poor	28.2	13.3	15.3	12.8	24.1
Very poor	14.2	5.3	7.5	4.8	9.0
Current Health Compared to Last Year (%)					
Much better	4.1	11.5	9.9	11.9	5.9
Somewhat better	9.5	17.3	17.9	17.2	12.2
About the same	43.6	46.3	43.2	47.0	45.8
Somewhat worse	26.2	18.2	20.1	17.8	22.9
Much worse	16.6	6.7	8.8	6.2	13.2
Body Mass Index (%)					
Less than 18.5 (underweight)	2.7	2.6	3.0	2.5	1.9
18.5-24.9 (normal weight)	22.8	29.0	25.6	29.9	25.4
25.0-29.9 (overweight)	30.3	29.5	28.8	29.7	28.8
30 or more (obese)	44.2	38.8	42.6	37.9	43.9

Source: 2010 National Beneficiary Survey.

^aMultiple responses possible.

Table A.5. Difficulties with Specific Activities

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Difficulty with Activities of Daily Living (ADL) (%)^a					
Getting into or out of bed	38.3	19.1	23.6	18.0	30.6
Bathing or dressing	29.3	14.0	15.6	13.6	20.1
Getting around inside the house	24.2	10.6	12.2	10.2	17.9
Eating	17.4	9.2	10.0	9.0	16.3
None of the above	45.6	68.3	63.9	69.4	56.8
Difficulty with Instrumental Activities of Daily Living (IADL)^a					
Getting around outside of the home	47.4	28.1	31.2	27.3	37.4
Shopping for personal items	36.1	27.0	19.2	28.9	28.3
Preparing meals	34.4	29.4	20.4	31.6	28.0
None of the above	40.3	54.2	57.7	53.3	48.4
Difficulty with Functional Activities^a					
Walking three blocks, climbing 10 steps, standing for one hour, and/or crouching	83.6	63.3	69.8	61.8	76.4
Grasping, reaching, and/or lifting 10 pounds	67.9	42.1	51.0	39.9	57.8
Speaking, hearing, and/or seeing	60.5	52.2	51.4	52.4	54.0
Coping with stress	59.2	53.7	56.5	53.0	60.1
Concentrating	55.9	53.1	50.3	53.8	54.0
Getting along with others	29.6	31.1	27.8	32.0	30.1
Number of ADL/IADL Difficulties (%)					
0	28.2	44.3	45.4	44.0	36.2
1	18.5	19.4	20.8	19.1	20.8
2	13.8	14.3	13.4	14.5	12.2
3	11.5	10.4	8.6	10.8	10.5
4	9.0	4.8	4.7	4.9	7.8
5	8.2	2.8	3.2	2.8	5.7
6	6.2	2.9	2.9	2.9	5.6
7	4.7	1.1	1.0	1.1	1.3

Source: 2010 National Beneficiary Survey.

^aMultiple responses possible.

Table A.6. Program Participation

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
SSA Program at Sampling (%)					
DI only	54.1	42.0	51.3	39.7	50.0
Concurrent	17.4	25.4	25.3	25.4	18.6
SSI only	28.6	32.6	23.4	34.8	31.4
Monthly SSA Benefit in Month Before Interview (%)					
Less than \$500	10.1	13.2	10.4	13.9	12.5
\$500-\$1,000	55.5	59.5	56.4	60.2	57.3
More than \$1,000	34.4	27.3	33.2	25.9	30.3
Mean Monthly SSA Benefit (\$)	941.6	867.4	931.6	851.7	877.2
Monthly Non-SSA Benefit (%)					
None	59.2	58.1	55.5	58.7	59.5
\$1-\$199	17.7	18.3	22.3	17.3	17.1
\$200-\$499	11.9	14.9	13.1	15.3	13.4
\$500 and over	11.2	8.8	9.1	8.7	9.9
Mean Monthly Non-SSA Benefits (\$)	181.7	142.0	149.6	140.1	158.4
Months Since Initial SSA Award (%)					
Fewer than 24	1.6	2.3	3.0	2.2	1.8
24-59	14.7	23.1	22.1	23.4	13.7
60-119	23.1	20.3	27.1	18.6	24.3
120 or more	60.5	54.1	47.6	55.7	60.1
Mean Months Since Initial SSA Award	176.2	0.2	0.1	0.2	0.0
Income and Assistance in Month Before Interview (%)^a					
SSA benefits	94.3	94.3	94.5	94.3	91.2
Food stamps (SNAP)	33.4	37.8	39.1	37.4	35.0
Earnings	6.1	20.9	24.5	20.0	14.5
Pensions	7.4	2.7	2.6	2.8	2.7
Veteran's benefits	3.1	1.1	1.0	1.1	2.0
Private disability insurance	2.7	2.1	1.9	2.1	1.9
Public cash assistance/welfare	3.8	3.3	4.0	3.1	4.4
Workers' Compensation	1.0	0.6	0.4	0.7	0.5
Unemployment Insurance	0.5	1.1	1.5	1.0	0.8
Other source	4.1	5.1	4.4	5.2	4.5

Source: 2010 National Beneficiary Survey.

^aMultiple responses possible.

Table A.7. Sources of Health Insurance

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Health Insurance at Interview (%)					
Insured	97.0	96.3	96.5	96.3	96.0
Not insured	2.3	3.2	2.9	3.3	3.0
Unknown	0.8	0.5	0.6	0.4	0.9
Sources of Health Insurance at Interview (%)^a					
Medicaid or Medicare	92.7	92.1	90.6	92.5	91.3
Private insurance	19.0	17.0	17.8	16.8	16.9
Other insurance	6.7	3.5	4.5	3.2	6.5
No insurance	2.3	3.2	2.9	3.3	3.0
Unknown	0.8	0.5	0.6	0.4	0.9
Private Insurance					
Number with private insurance (weighted)	2,107,253	13,828	2,837	10,991	720,025
Percentage with private insurance	19.0	17.0	17.8	16.8	16.9
Source of Private Insurance (% among those with private insurance)					
Through own employment	26.1	18.3	19.9	17.9	13.0
Through spouse	44.7	49.0	53.7	47.8	56.1
Self or family purchased	26.0	19.9	17.1	20.7	27.5
Other	2.4	11.9	8.1	12.8	3.4
Unknown	0.8	0.9	1.2	0.8	0.0

Source: 2010 National Beneficiary Survey.

^aMultiple responses possible.

Table A.8. Service Use

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Ever Used Services					
Unweighted number	1,282	2,162	1,580	582	717
Weighted number	6,139,854	63,955	12,190	51,765	2,699,840
Weighted percentage	55.3	78.7	76.4	79.3	63.5
Service Types Ever Used (% among those ever using services)^a					
Mental health therapy/counseling	56.0	52.6	56.7	51.7	62.0
Medical services to improve functioning	58.6	42.9	44.2	42.5	53.8
Education/schooling	15.0	34.6	29.1	35.9	21.2
Training for new skills/job/career	15.1	35.0	26.6	37.0	20.9
Unknown	2.9	1.6	0.5	1.8	2.9
Used Services in 2009					
Unweighted N	799	1,711	1,247	464	445
Weighted N	3,810,525	50,446	9,468	40,979	1,605,470
Weighted percentage	34.3	62.1	59.3	62.7	37.8
Reason(s) for Using Services in 2009 (% among users)^a					
To improve health/well-being	79.8	55.6	60.7	54.5	79.0
To improve ability to do daily activities	27.9	21.0	17.0	22.0	27.7
To find a job or to get a better job	7.2	43.3	41.5	43.7	11.2
To access specific services	6.2	9.0	9.7	8.8	5.1
Someone pressured respondent to use services	1.8	1.0	0.6	1.1	1.3
To increase income	2.3	7.3	8.5	7.0	3.0
To avoid a continuing disability review	0.4	0.5	0.8	0.4	0.6
Other	7.2	12.2	10.7	12.6	7.1
Unknown	1.4	1.6	1.4	1.6	2.3
Types of Services Used in 2009 (% among users)^a					
Medical services	74.2	50.3	59.0	48.2	71.6
Personal counseling/group therapy	60.8	63.8	65.0	63.5	70.3
Occupational/physical/speech therapy	31.5	31.5	33.0	31.2	34.6
Special equipment or devices	23.1	18.0	18.0	18.0	17.4
Training/job modification advice/on-the-job training	18.4	61.2	51.2	63.5	28.1
Work assessment/help to find a job	20.3	60.5	54.7	61.8	28.8
Other	6.6	7.9	7.1	8.1	7.5

Source: 2010 National Beneficiary Survey.

^aMultiple responses possible.

Table A.9. Services Needed but Not Received in 2009

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Services Needed in 2009 but Not Received (% among all beneficiaries)					
Yes	11.7	22.3	21.6	22.5	15.7
No	86.0	75.2	76.9	74.7	81.3
Unknown	2.3	2.5	1.4	2.8	2.9
Reason Why Services Were Not Received (% among those with unmet service needs)					
Could not afford services	17.0	10.6	9.7	10.8	15.5
Problems with services/agency	10.1	11.2	10.0	11.4	10.7
Wasn't eligible/request refused	11.3	10.2	10.4	10.1	2.9
Too difficult/confusing	2.4	4.4	2.9	4.8	3.3
Lack of information	12.5	16.1	17.1	15.8	16.7
Did not try to get services	2.2	1.4	3.0	1.1	3.3
Other	40.7	39.7	42.8	39.0	43.4
Unknown	3.8	6.4	3.9	7.0	4.2

Source: 2010 National Beneficiary Survey.

Table A.10. Employment Expectations

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Goals Include Work/Career Advancement (%)					
Yes	31.0	76.0	75.2	76.2	74.4
No	66.2	22.1	23.9	21.7	22.6
Unknown	2.9	1.8	0.9	2.1	2.9
Sees Self Working for Pay:					
In the next year (%)					
Agree/strongly agree	17.3	60.0	64.3	59.0	40.9
Disagree/strongly disagree	80.7	37.5	32.9	38.6	56.7
Unknown	2.0	2.4	2.8	2.4	2.5
In the next five years (%)					
Agree/strongly agree	26.5	72.7	73.4	72.6	63.7
Disagree/strongly disagree	71.0	24.5	22.8	24.9	33.3
Unknown	2.5	2.8	3.9	2.5	2.9
Sees Self Working and Earning Enough to Stop Receiving Disability Benefits:					
In the next year (%)					
Agree/strongly agree	5.8	18.1	24.3	16.6	13.7
Disagree/strongly disagree	10.6	40.4	37.8	41.0	25.3
Not applicable—does not see self working in next year	82.7	40.0	35.7	41.0	59.1
Unknown	0.9	1.5	2.1	1.4	1.9
In the next five years (%)					
Agree/strongly agree	15.8	40.8	45.4	39.7	37.9
Disagree/strongly disagree	9.4	28.8	25.0	29.7	23.0
Not applicable—does not see self working in next year	73.5	27.3	26.6	27.4	36.3
Unknown	1.2	3.1	2.9	3.2	2.8

Source: 2010 National Beneficiary Survey.

Table A.11. Employment

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Ever Work for Pay (%)					
Yes	82.0	79.1	85.9	77.4	83.4
No	17.3	20.6	13.6	22.3	16.1
Unknown	0.7	0.3	0.6	0.3	0.5
Employment in 2009					
Worked in 2009	9.9	37.4	39.5	36.9	19.5
Did not work in 2009	89.8	62.4	59.9	63.0	80.3
Unknown	0.3	0.2	0.6	0.1	0.1
Employment Status at Interview (%)					
Employed at interview	7.2	24.4	28.0	23.6	16.1
Not employed at interview	92.8	75.6	72.0	76.4	83.9
Did not seek work in past four weeks	87.8	49.2	44.4	50.3	73.4
Sought work in past four weeks	5.0	26.4	27.5	26.1	10.4
Unknown if sought work in past four weeks	0.0	0.0	0.1	0.0	0.0

Source: 2010 National Beneficiary Survey.

Table A.12. Employment Rates for Specific Beneficiary Subgroups

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
All	7.2	24.4	28.0	23.6	16.1
Age					
18-24	12.5	27.5	30.8	27.2	17.6
25-39	14.4	29.5	27.4	29.9	21.8
40-54	8.6	21.2	29.3	18.7	18.6
55 and over	3.1	19.0	25.1	16.9	8.6
General Health Status					
Excellent/very good	23.6	35.9	43.1	34.8	40.4
Good/fair	7.6	22.9	27.5	21.7	15.3
Poor/very poor	2.8	14.3	18.3	13.1	6.8
Education Level					
Less than high school	5.5	17.4	19.9	16.7	13.9
High school	8.7	26.4	27.9	26.1	19.4
More than high school	7.0	24.9	31.8	22.7	14.0
Selected Self-Reported Conditions Causing Limitation					
Mental retardation	15.7	41.7	49.8	40.9	43.0
Sensory disorder	6.8	24.7	36.2	22.5	19.3
Mental illness	7.9	21.4	27.2	20.0	13.3
Musculoskeletal disorder	4.8	13.7	23.0	10.4	10.9
Circulatory system disorder	2.6	19.9	23.4	18.7	9.8
Age at Disability Onset					
18-24	8.4	24.0	24.4	23.9	15.7
25-39	4.9	21.8	29.5	19.5	10.2
40-54	4.3	18.0	25.6	15.0	10.2
55 and over	2.3	14.3	24.9	9.5	7.0
Difficulty with Selected Activities					
Getting along with others	5.6	17.2	22.6	16.0	11.6
Concentrating	6.0	21.3	25.7	20.3	13.8
Coping with stress	5.8	20.7	25.0	19.5	12.4
Bathing or dressing	3.5	17.1	19.2	16.6	11.0
Getting around outside the home	3.5	16.7	19.9	15.8	8.5

Source: 2010 National Beneficiary Survey.

Table A.13. Reasons for Not Working

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Not Working at Interview					
Number (weighted)	10,305,939	61,409	11,489	49,920	3,567,518
Percentage	92.8	75.6	72.0	76.4	83.9
Reasons for Not Working (% among those not working at interview)^a					
Physical or mental condition prevents work	90.8	54.8	53.0	55.2	81.8
Discouraged by previous work attempts	26.0	27.6	26.3	27.9	35.6
Others do not think he/she can work	24.0	17.4	15.0	18.0	24.6
Workplaces not accessible to people with his/her disability	23.6	21.8	20.0	22.2	30.2
Cannot find a job he/she is qualified for	19.7	28.6	25.7	29.2	26.1
Lacks reliable transportation to/from work	15.3	15.6	16.8	15.4	19.1
Does not want to lose cash or health insurance benefits	13.8	14.6	13.7	14.8	18.5
Employers will not give him/her a chance	14.4	21.4	18.5	22.1	22.3
Cannot find a job he/she wants	8.7	17.1	17.4	17.1	16.4
Is caring for someone else	7.9	7.4	6.8	7.5	12.4
Is waiting to finish school/training program	3.0	12.7	9.7	13.3	7.1
Other	3.0	2.3	3.0	2.2	2.7

Source: 2010 National Beneficiary Survey.

^aMultiple responses possible.

Table A.14. Hourly Reservation Wages Among Nonworking Beneficiaries Seeking Employment or Reporting Reasons Other Than Their Health for Not Working

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Percentage Asked About Reservation Wage	50.0	54.8	56.2	54.4	62.0
Hourly Reservation Wage (% among those asked)					
Less than \$6.00	2.7	2.1	2.4	2.0	3.1
\$6.00-\$7.24	5.2	8.3	6.8	8.7	6.6
\$7.25-\$9.99	26.0	39.8	35.8	40.8	31.5
\$10.00-\$14.99	21.9	25.8	28.9	25.0	25.1
\$15.00 or more	16.4	12.0	13.3	11.6	13.8
Unknown	27.8	12.1	12.8	11.9	19.9
Median Reservation Wage (\$)	10.0	9.0	9.3	9.0	9.6
Average Reservation Wage (\$)	13.2	10.8	10.8	10.7	11.3

Source: 2010 National Beneficiary Survey.

Note: The hourly reservation wage is the lowest hourly wage for which the respondent would be willing to work. The reservation-wage questions were only asked of nonproxy respondents who were not working at interview and who were either seeking work or indicated a reason other than their health for not working.

Table A.15. Summary of Employment-Related Activities and Expectations

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Work-Related Activities (%)					
Working at interview	7.2	24.4	28.0	23.6	16.1
Worked during previous year	9.9	37.4	39.5	36.9	19.5
Looked for work in past four weeks	5.0	26.4	27.5	26.1	10.4
<i>Any of the above work-related activities</i>	<i>14.6</i>	<i>60.3</i>	<i>64.1</i>	<i>59.3</i>	<i>30.1</i>
Employment Service and Training-Related Activities (%)					
Not working because waiting to finish school/training program	2.8	9.6	7.0	10.2	6.0
Used employment-specific services in previous year	9.1	44.0	38.9	45.3	14.5
Used employment or other services in previous year to get a job or to increase income	2.9	27.8	25.9	28.3	4.4
<i>Any of the above employment/training-related activities</i>	<i>11.6</i>	<i>51.6</i>	<i>46.4</i>	<i>52.8</i>	<i>19.7</i>
Work-Related Goals and Expectations (%)					
Goals include getting a job/new skills/career advancement	31.0	76.0	75.2	76.2	74.4
Sees self working for pay in the next year	17.3	60.0	64.3	59.0	40.9
Sees self working for pay in the next five years	26.5	72.7	73.4	72.6	63.7
Sees self working and earning enough to stop receiving disability benefits in the next five years	15.8	40.8	45.4	39.7	37.9
<i>Any of the above goals/expectations</i>	<i>41.0</i>	<i>88.2</i>	<i>90.0</i>	<i>87.7</i>	<i>100.0</i>
Any of the Above (%)	44.9	92.9	93.9	92.7	100.0

Source: 2010 National Beneficiary Survey.

Table A.16. Work Activity Relative to Work Capacity and Supports That Would Improve Work Capacity Among Recently Employed Beneficiaries

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Employed at Interview or During Previous Year					
Number (weighted)	1,170,110	34,451	7,041	27,410	886,257
Percentage of all in subgroup	10.5	42.4	44.1	42.0	20.8
Worked Fewer Hours or Earned Less Than Was Able (%)					
Yes	23.2	27.3	30.5	26.5	20.4
No	64.2	62.7	61.3	63.1	73.0
Unknown	12.6	10.0	8.2	10.5	6.6
Reasons for Working/Earning Less Than Able Among Those Who Did So (%)					
Wanted to keep cash benefits	41.4	49.7	46.7	50.7	32.9
Wanted to keep Medicare/Medicaid	39.6	50.0	41.1	52.6	29.9
Health reasons	30.4	24.1	30.7	22.2	34.5
Taking care of children/others	18.1	17.5	19.5	16.9	16.9
Didn't want to work more	12.8	15.2	13.1	15.8	18.2
Enrolled in school/training	15.0	16.6	9.0	18.9	16.8
Other	14.3	22.6	17.3	24.1	14.0
No reasons indicated	8.6	5.4	14.4	2.7	12.3
Supports That Would Help Working Beneficiaries Work/Earn More (%)					
Better job skills	32.6	46.5	43.8	47.2	33.1
Help finding a better job	31.8	49.1	49.3	49.0	31.3
Flexible work schedule	23.1	35.8	35.0	36.0	24.5
Reliable transportation to/from work	16.9	25.4	23.1	26.0	17.6
Help with personal care	10.3	13.1	13.8	12.9	9.9
Help caring for children/others	9.6	8.8	7.8	9.1	10.8
Special equipment/devices	5.9	5.9	7.5	5.5	4.2
Other	6.7	7.8	9.6	7.3	7.3
No supports indicated	47.4	32.4	33.2	32.2	45.6

Source: 2010 National Beneficiary Survey.

Table A.17. Job Characteristics of Employed Beneficiaries

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Working at Interview					
Unweighted number	253	786	597	171	222
Weighted number	796,158	19,864	4,475	15,388	683,731
Weighted percentage	7.2	24.4	28.0	23.6	16.1
Usual Hours per Week (%)					
1-10	23.9	31.9	22.6	34.6	23.6
11-20	41.0	40.9	41.3	40.8	38.4
21-34	20.8	17.5	22.9	15.9	22.8
35 or more	14.3	9.7	13.2	8.7	15.2
Average Hours per Week	20.0	18.0	20.3	17.3	20.4
Hourly Wage (%)					
Less than \$5.00	20.8	7.3	5.1	8.0	23.5
\$5.00-\$5.99	4.6	2.7	2.7	2.7	5.3
\$6.00-\$7.24	6.3	6.8	4.8	7.3	6.5
\$7.25-\$9.99	42.9	56.7	52.0	58.1	39.9
\$10.00-\$14.99	18.0	20.5	24.8	19.3	16.4
\$15.00 or more	7.4	6.0	10.5	4.6	8.3
Average Hourly Wage (\$)	8.1	9.0	10.3	8.6	7.9
Average Monthly Pay (\$)	682.6	746.0	893.8	703.0	677.7
Earning Above Substantial Gainful Activity (\$1,000 or more per month) (%)					
	20.4	17.8	24.8	15.7	19.8
Occupation (%)					
Transportation and material moving	13.5	12.4	9.9	13.2	13.9
Production	6.7	4.8	3.2	5.2	7.9
Office and administrative support	11.0	20.3	19.0	20.7	8.0
Building and grounds cleaning/maintenance	13.4	17.4	11.4	19.2	13.3
Personal care and service	2.2	3.6	4.7	3.3	2.3
Sales	4.7	12.5	12.6	12.4	4.8
Food preparation/serving	8.8	6.2	6.6	6.1	9.5
Other occupation	38.9	22.6	31.9	19.8	39.4
Unknown	0.7	0.2	0.7	0.0	0.8
Industry (%)					
Health care and social assistance	54.9	53.0	45.5	55.2	53.1
Retail	9.3	16.5	10.5	18.3	9.0
Other services (except public administration)	3.1	3.6	2.6	3.9	3.6
Educational services	4.4	2.5	5.2	1.8	4.9
Accommodation and food services	8.7	4.8	6.4	4.3	9.8
Administration and support and waste management/remediation	2.5	3.9	7.0	2.9	2.6
Other industry	17.1	15.7	22.8	13.6	17.0
Unknown	0.0	0.0	0.0	0.0	0.0

Table A.17 (continued)

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Self-Employed (%)					
Yes	7.9	7.2	11.0	6.1	8.7
No	91.9	92.3	88.8	93.3	91.3
Unknown	0.2	0.5	0.2	0.6	0.0
Sheltered Employment (%)					
Yes	40.0	43.4	31.7	46.8	38.4
No	55.7	49.9	60.9	46.7	57.6
Unknown	4.2	6.7	7.4	6.5	4.0
Months at Current Main Job (%)					
Less than 1 month	1.4	2.9	3.4	2.7	0.7
1-6 months	16.2	29.7	24.6	31.2	15.0
7-12 months	7.5	21.1	20.2	21.4	4.7
13-24 months	11.0	21.7	26.8	20.2	11.5
25 months or more	55.3	20.1	20.8	19.9	60.0
Unknown	8.6	4.5	4.2	4.6	8.1
Median Months at Current Main Job	33	11.0	12.0	11.0	35

Source: 2010 National Beneficiary Survey.

Note: The job characteristics reported in the table refer to the characteristics of jobs held by sample members who were employed at interview. Among those who held multiple jobs (1.5 percent of those employed at interview), the characteristics reported refer to those of the main job, as designated by the respondent.

Table A.18. Job-Related Benefits

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Working at Interview					
Unweighted number	253	786	597	171	222
Weighted number	796,158	19,864	4,475	15,388	683,731
Weighted percentage	7.2	24.4	28.0	23.6	16.1
Health Insurance (%)					
Yes	15.7	20.4	25.7	19.0	14.8
No	81.8	77.3	72.5	78.6	83.2
Unknown	2.5	2.3	1.8	2.4	2.0
Dental Insurance (%)					
Yes	11.1	13.5	19.6	11.8	11.1
No	86.2	83.7	76.9	85.6	87.6
Unknown	2.7	2.8	3.4	2.6	1.4
Flexible Health/Dependent Care Spending Account (%)					
Yes	2.7	5.4	7.2	4.9	2.8
No	92.0	89.2	86.7	89.9	93.6
Unknown	5.3	5.4	6.1	5.2	3.6
Sick Days with Pay (%)					
Yes	23.6	17.8	19.4	17.4	25.2
No	73.6	76.7	78.4	76.2	73.5
Unknown	2.8	5.5	2.3	6.4	1.3
Paid Vacation (%)					
Yes	29.3	27.9	27.1	28.1	30.7
No	69.5	69.7	71.2	69.3	68.3
Unknown	1.2	2.4	1.7	2.5	0.9
Long-Term Disability Benefits (%)					
Yes	6.2	10.0	10.1	10.0	6.7
No	88.7	81.5	82.6	81.1	88.9
Unknown	5.0	8.5	7.3	8.8	4.5
Pension or Retirement Benefits (%)					
Yes	10.4	15.4	23.0	13.3	10.5
No	86.6	80.1	73.1	82.0	87.1
Unknown	3.0	4.5	3.9	4.7	2.4
Free or Low-Cost Child Care (%)					
Yes	1.8	1.1	1.0	1.1	2.1
No	93.1	91.6	93.3	91.2	93.4
Unknown	5.1	7.3	5.7	7.7	4.5
Transportation Allowance or Discounts (%)					
Yes	20.2	19.0	11.5	21.0	23.0
No	78.7	80.4	87.8	78.4	76.6
Unknown	1.1	0.6	0.8	0.6	0.5

Source: 2010 National Beneficiary Survey.

Note: Questions on job-related benefits were only asked of sample members who were working at interview and were not self-employed. The questions only refer to benefits associated with the main job (as designated by the respondent) among those with multiple jobs.

Table A.19. Job Satisfaction

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Nonproxy Respondents Working at Interview					
Unweighted number	158	629	507	122	137
Weighted number	523,474	14,903	3,905	10,998	431,433
Weighted percentage	4.7	18.3	24.5	16.8	10.1
Overall Satisfaction with Job (%)					
Very / somewhat satisfied	76.7	81.9	75.7	84.1	77.7
Not very / not at all satisfied	22.6	16.9	23.8	14.5	21.4
Unknown	0.7	1.2	0.4	1.4	0.9
Satisfaction with Specific Job Features (%)					
Pay is good (%)					
Agree/agree strongly	57.4	65.5	58.7	67.9	56.3
Disagree/disagree strongly	41.8	33.1	40.9	30.3	42.8
Unknown or not applicable	0.7	1.4	0.4	1.8	0.9
Benefits are good (%)					
Agree/agree strongly	25.7	35.1	27.6	37.8	26.2
Disagree/disagree strongly	45.5	50.0	57.9	47.2	41.1
Unknown or not applicable	28.7	14.9	14.5	15.0	32.7
Job security is good/work is steady (%)					
Agree/agree strongly	50.0	63.6	56.8	66.0	63.2
Disagree/disagree strongly	39.6	33.4	39.9	31.1	23.2
Unknown or not applicable	10.4	3.0	3.2	2.9	14.6
There are chances for promotion (%)^a					
Agree/agree strongly	28.8	37.9	31.4	40.1	62.2
Disagree/disagree strongly	63.3	55.4	63.7	52.6	30.0
Unknown or not applicable	7.8	6.7	5.0	7.3	8.9
There are chances to develop abilities (%)					
Agree/agree strongly	63.6	67.2	62.2	69.0	70.5
Disagree/disagree strongly	31.4	28.6	34.3	26.5	18.6
Unknown or not applicable	5.0	4.2	3.5	4.4	0.9
Receives recognition/respect from others (%)					
Agree/agree strongly	83.9	91.1	88.1	92.2	64.7
Disagree/disagree strongly	12.8	8.7	11.3	7.8	6.5
Unknown or not applicable	3.3	0.2	0.6	0.0	1.7
Can work on own if desired (%)					
Agree/agree strongly	68.9	81.3	83.5	80.6	57.4
Disagree/disagree strongly	28.6	17.7	15.0	18.7	11.7
Unknown or not applicable	2.4	1.0	1.5	0.8	30.1
Can work with others/team if desired (%)					
Agree/agree strongly	70.9	81.7	75.6	83.9	58.9
Disagree/disagree strongly	19.2	16.0	21.6	14.1	20.0
Unknown or not applicable	9.8	2.3	2.8	2.1	0.9

Table A.19 (continued)

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Work is interesting/enjoyable (%)					
Agree/agree strongly	84.1	83.4	78.0	85.4	65.6
Disagree/disagree strongly	15.1	16.3	20.9	14.6	3.8
Unknown or not applicable	0.7	0.3	1.1	0.0	30.6
Work gives feeling of accomplishment (%)					
Agree/agree strongly	89.0	85.7	84.5	86.2	87.2
Disagree/disagree strongly	9.9	14.2	15.3	13.8	11.4
Unknown or not applicable	1.1	0.1	0.3	0.0	0.5
Supervisor is supportive (%)^a					
Agree/agree strongly	88.9	86.4	88.7	85.6	89.7
Disagree/disagree strongly	9.6	11.7	10.7	12.0	8.4
Unknown or not applicable	1.5	1.9	0.6	2.4	0.9
Co-workers are friendly and supportive (%)					
Agree/agree strongly	83.7	91.3	89.6	91.9	84.4
Disagree/disagree strongly	8.5	4.5	5.5	4.2	6.0
Unknown or not applicable	7.8	4.2	4.9	4.0	9.5

Source: 2010 National Beneficiary Survey.

Note: Questions on job satisfaction were asked of nonproxy respondents working at interview.

^aQuestion was not asked of those who were self-employed.

Table A.20. Job Accommodations and Supports

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Working at Interview					
Unweighted number	253	786	597	171	222
Weighted number	796,158	19,864	4,475	15,388	683,731
Weighted percentage	7.2	24.4	28.0	23.6	16.1
Employer Made at Least One Accommodation (%)^a					
Yes	58.6	61.2	52.1	63.7	58.3
No	39.9	37.5	46.6	35.0	40.9
Unknown	1.6	1.3	1.4	1.2	0.8
Types of Accommodations Among Those Who Received Them (%)^{a,b}					
Arranged for co-worker/others to assist	66.1	60.8	61.1	60.8	5.8
Changes to work schedule	44.5	46.3	57.8	43.7	45.9
Changes to work tasks	47.2	42.5	40.7	42.9	46.1
Changes to the physical work environment	43.0	32.9	36.2	32.2	8.4
Provided special equipment	7.5	8.8	11.9	8.1	7.2
Other	3.5	5.6	3.4	6.1	6.0
Changes to Workplace Are Needed (%)					
Yes	3.4	3.8	8.6	2.3	3.2
No	95.9	95.1	90.4	96.5	96.8
Unknown	0.7	1.1	0.9	1.2	0.0
Uses Special Equipment at Work (%)					
Yes	19.3	16.9	21.2	15.7	15.4
No	80.0	83.1	78.8	84.3	83.8
Unknown	0.7	0.0	0.0	0.0	0.8
Types of Equipment Among Users (%)^b					
Cane/brace/wheelchair/walker	79.1	57.3	65.6	^c	75.6
Modified computer hardware/software	9.9	22.5	18.5	^c	7.3
Other equipment	29.4	48.3	37.3	^c	34.3
Uses Personal Assistance at Work (%)					
Yes	22.9	31.9	19.5	35.6	23.1
No	76.4	67.6	80.5	63.8	76.1
Unknown	0.6	0.5	0.0	0.6	0.8
Types of Personal Assistance Among Users (%)^b					
Job coach	76.1	90.1	78.5	91.9	77.8
Personal care assistance	17.2	5.8	15.6	4.2	14.5
Sign-language interpreter or reader for blind	3.1	5.9	2.3	6.5	3.6
Other	11.9	8.7	12.7	8.1	10.6

Source: 2010 National Beneficiary Survey.

^aQuestions were asked of employed sample members who were not self-employed.

^bMultiple responses possible.

^cStatistics not reported for subgroups with 30 or fewer observations.

Table A.21. SSA Notification of Work Activity Following Job Start Among Beneficiaries Employed at Interview

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Employed at Interview					
Number (weighted)	796,158	19,864	4,475	15,388	683,731
Percentage	7.2	24.4	28.0	23.6	16.1
Informed SSA When Started Current Job (%)					
Yes	71.4	83.2	82.9	83.3	70.8
No	20.5	14.3	14.4	14.2	20.3
Unknown	8.1	2.5	2.7	2.4	8.9
Of Those Who Informed SSA, How Soon After Job Start They Told SSA About Current Job (%)					
Less than 1 month after start	66.2	71.5	72.2	71.4	66.6
1-3 months after start	17.4	16.6	17.0	16.5	14.8
4-12 months after start	1.3	1.5	0.5	1.8	1.2
More than 12 months after start	0.8	0.6	0.0	0.7	0.9
Unknown	14.4	9.8	10.4	9.6	16.6

Source: 2010 National Beneficiary Survey.

Table A.22. Social Security Benefit Adjustment in Response to Work Activity Among Recently Employed Beneficiaries

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Employed at Interview or During the Previous Calendar Year					
Number	1,170,110	34,451	7,041	27,410	886,257
Percentage	10.5	42.4	44.1	42.0	20.8
Changes Needed to Benefits Due to Work (%)					
Yes	16.0	30.9	24.8	32.4	15.4
No	66.7	59.3	66.1	57.6	71.7
Unknown	17.3	9.8	9.2	10.0	12.9
Among Those Indicating Changes Needed, Social Security Paid Wrong Benefit Amount (%)					
Yes	44.5	41.1	36.2	42.0	43.2
No	51.6	52.0	56.1	51.2	54.5
Unknown	3.9	6.9	7.7	6.8	2.3
Beneficiary Was Asked to Repay Benefits Because of Overpayment (%)					
Yes, overpayment due to work	13.3	13.9	14.5	13.8	12.2
Yes, overpayment due to other reason	6.2	7.1	7.1	7.1	7.4
No	63.8	69.6	69.9	69.5	68.7
Unknown	16.7	9.3	8.5	9.5	11.7

Source: 2010 National Beneficiary Survey.

Table A.23. Benefits Reduced or Ended Due to Work Activity Among Recently Employed Beneficiaries

	All Beneficiaries	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Employed at Interview or During the Previous Year					
Number	1,170,110	34,451	7,041	27,410	886,257
Percentage	10.5	42.4	44.1	42.0	20.8
Disability-Related Benefits Reduced or Ended Due to Work (%)					
Yes	16.3	16.9	17.0	16.9	17.0
No	53.1	47.3	53.1	45.9	60.0
Unknown	30.6	35.7	29.9	37.2	23.0
Benefits Affected Among Those Indicating Reductions/Terminations (%)					
Social Security disability	77.6	85.8	79.7	87.3	73.0
Medicare	9.8	7.1	7.7	6.9	12.4
Food stamps	5.2	7.0	14.2	5.2	1.9
Medicaid	4.8	10.9	15.2	9.8	3.1
Other	12.7	12.0	13.2	11.7	13.1

Source: 2010 National Beneficiary Survey.

Table A.24. Percentage of Respondents Aware of Social Security Work Supports (among those eligible for each item)

	All Beneficiaries Eligible for the Work Support	All TTW	TTW EN	TTW SVRA Traditional	Work-Oriented and Not TTW
Trial Work Period	35.0	58.4	64.6	56.6	59.1
Ticket to Work	27.9	68.4	87.7	63.7	69.6
Extended Period of Medicare Eligibility	16.7	25.1	31.6	23.2	26.1
1619(b) Continued Medicaid Coverage	12.8	19.6	24.1	18.7	20.5
Expedited Reinstatement	10.3	23.4	33.7	20.8	23.9
Earned Income Exclusion	12.6	20.0	20.1	19.9	20.2
Plan for Achieving Self-Support	8.3	12.8	20.0	11.4	13.1
Benefits Specialist	16.2	38.6	53.3	35.0	39.9
Impairment-Related or Blind Work Expenses	7.9	11.8	15.2	10.9	11.9
Student Earned Income Exclusion ^a	8.2	13.1	11.9	13.2	13.7
Property Essential for Self Support	4.2	5.0	7.6	4.5	5.0

Source: 2010 National Beneficiary Survey.

^aAwareness rate was calculated as a percentage of SSI recipients age 25 and younger who began receiving benefits before age 22.

Table A.25. Awareness of the Ticket to Work Program by Time Since Ticket Mailing at Interview

	Number (unweighted)	Aware of TTW (weighted %)
All Beneficiaries	2,298	27.9
Time Since Most Recent Ticket Mailing at Interview		
Ticket mailed less than 12 months before interview	40	49.9
Ticket mailed 12 to 24 months before interview	304	41.9
Ticket mailed 25 to 36 months before interview	188	32.3
Ticket mailed 37 to 48 months before interview	190	32.8
Ticket mailed 49 to 60 months before interview	155	25.1
Ticket mailed 61 or more months before interview	1,356	24.0

Source: 2010 National Beneficiary Survey linked to the 2010 Ticket Research File.

Note: The Ticket mail date was missing or occurred after the NBS interview date for 65 respondents (1.7 percent of the weighted sample). These respondents were excluded from the calculation of awareness rates by time since Ticket mailing.

This page has been left blank for double-sided copying.

APPENDIX B

MULTIVARIATE REGRESSION MODEL ESTIMATES

This page has been left blank for double-sided copying.

Throughout this report, we discuss the findings from multivariate analyses using logistical and ordinary least squares regression models that were conducted to (1) assess the determinants of a Ticket assignment and to (2) produce regression-adjusted estimates for a number of employment-related outcomes for the pre- and post-regulation-change cohorts. In this appendix, we define the variables that were used in these analyses (Table B.1) and present the estimates from the regression models (Tables B.2–B.17).

Table B.1. Definitions and Mean Values of Variables Used in the Regression Analyses

Variable Name	Description	Pre-Regulation- Change TTW Participant Sample Mean (N = 2,283)	Post-Regulation- Change TTW Participant Sample Mean (N = 2,283)
Concurrent	= 1 if concurrent beneficiary at interview (or at sample date if not on the rolls at interview); 0 otherwise. Based on administrative data.	0.22	0.15
DI-only	= 1 if DI-only beneficiary at interview (or at sample date if not on the rolls at interview); 0 otherwise. Based on administrative data.	0.49	0.53
Omitted = SSI-only	SSI-only recipient at interview (or at sample date if not on the rolls at interview). Based on administrative data.	0.29	0.32
PIA > 1200 ^a	= 1 if primary insurance amount (PIA) is greater than 1,200; 0 otherwise. Based on administrative data. Proxy measure for high lifetime earnings.	0.15	0.15
SS benefits 500-1000 ^a	= 1 if total monthly Social Security disability benefits in the absence of earnings are \$500-\$1,000; 0 otherwise. Calculated based on benefit amounts due and countable earnings information obtained from administrative data. Includes all state, federal, and dependent SSI and SSDI benefits.	0.58	0.59
SS benefits > 1000 ^a	= 1 if total monthly Social Security disability benefits in the absence of earnings are greater than \$1,000; 0 otherwise. Calculated based on benefit amounts due and countable earnings information obtained from administrative data. Includes all state, federal, and dependent SSI and SSDI benefits.	0.28	0.29
Omitted = SS benefits <500 ^a	Total monthly Social Security disability benefits in the absence of earnings are less than \$500. Calculated based on benefit amounts due and countable earnings information obtained from administrative data. Includes all state, federal, and dependent SSI and SSDI benefits.	0.14	0.12
Other benefits 1-199 ^a	= 1 if total monthly dollar value of non-Social Security cash and in-kind benefits is \$1-\$199; 0 otherwise. Includes only the following other benefits that could be affected by earnings: food stamps; energy, housing, or other in-kind assistance; public assistance; workers' compensation; veterans' benefits; private disability insurance; unemployment insurance; and pension income among those under age 59.	0.17	0.18
Other benefits 200-499 ^a	= 1 if total monthly dollar value of non-Social Security cash and in-kind benefits is \$200-\$499; 0 otherwise. Includes only the following other benefits that could be affected by earnings: food stamps; energy, housing, or other in-kind assistance; public assistance; workers' compensation; veterans' benefits; private disability insurance; unemployment insurance; and pension income among those under age 59.	0.08	0.15

Table B.1 (continued)

Variable Name	Description	Pre-Regulation- Change TTW Participant Sample Mean (N = 2,283)	Post-Regulation- Change TTW Participant Sample Mean (N = 2,283)
Other benefits 500+ ^a	= 1 if total monthly dollar value of non-Social Security cash and in-kind benefits is \$500 or more; 0 otherwise. Includes only the following other benefits that could be affected by earnings: food stamps; energy, housing, or other in-kind assistance; public assistance; workers' compensation; veterans' benefits; private disability insurance; unemployment insurance; and pension income among those under age 59.	0.06	0.09
Omitted = other benefits=0 ^a	Total value of other non-SSA benefits is zero.	0.68	0.58
0-24 months on rolls	= 1 if start of most recent period of entitlement is 0 to 24 months ago; 0 otherwise. Based on administrative data. Time calculated as of date of interview.	0.02	0.03
25-60 months on rolls	= 1 if start of most recent period of entitlement is 25 to 60 months ago; 0 otherwise. Based on administrative data. Time calculated as of date of interview.	0.19	0.23
61-120 months on rolls	= 1 if start of most recent period of entitlement is 61 to 120 months ago; 0 otherwise. Based on administrative data. Time calculated as of date of interview.	0.23	0.20
Omitted = 121+ months on rolls	Start of most recent period of entitlement is more than 120 months ago. Based on administrative data. Time calculated as of date of interview.	0.56	0.54
Age 18-24	= 1 if age at interview is 18-24; 0 otherwise. Based on survey data.	0.15	0.22
Age 25-39	= 1 if age at interview is 25-39; 0 otherwise. Based on survey data.	0.33	0.27
Age 40-54	= 1 if age at interview is 40-54; 0 otherwise. Based on survey data.	0.40	0.35
Omitted = Age 55+	Age 55 or older at interview. Based on survey data.	0.12	0.17
Male	= 1 if male; 0 otherwise. Based on survey data.	0.52	0.53
Black or African American only	= 1 if self-reported race is black or African American; 0 otherwise.	0.26	0.25
Other race	= 1 if self-reported race is other than white, black, or African American; 0 otherwise.	0.06	0.07
Omitted = white only	Self-reported race is white.	0.67	0.69
Hispanic/Latino	1 if self-reported ethnicity is Hispanic or Latino; 0 otherwise.	0.09	0.13
Education = high school	= 1 if self-reported highest level of education is equal to high school diploma or GED; 0 otherwise.	0.41	0.50

Table B.1 (continued)

Variable Name	Description	Pre-Regulation- Change TTW Participant Sample Mean (N = 2,283)	Post-Regulation- Change TTW Participant Sample Mean (N = 2,283)
Education beyond high school	= 1 if self-reported highest level of education is beyond a high school diploma or GED; 0 otherwise.	0.40	0.34
Omitted = education < high school	Highest level of education is less than a high school diploma or GED.	0.19	0.16
Lives with spouse or relatives, no kids	= 1 if lives with spouse, partner, or other relatives but has no children living with him or her; 0 otherwise.	0.44	0.47
Married with kids	= 1 if married, living with spouse or partner in marriage-like relationship, and living with own children; 0 otherwise.	0.07	0.08
Unmarried with kids	= 1 if unmarried and living with own children; 0 otherwise.	0.09	0.06
Omitted = lives alone or with unrelated others	Lives alone or with unrelated others and has no own children living with him or her.	0.41	0.40
Lives with kids < age 6	= 1 if has own children under age 6 living with him or her; 0 otherwise.	0.04	0.05
Psychiatric	= 1 if a psychiatric condition is reported as a main reason for activity limitation; 0 otherwise.	0.38	0.43
Intellectual	= 1 if an intellectual disability is reported as a main reason for activity limitation; 0 otherwise.	0.07	0.06
Musculoskeletal	= 1 if a musculoskeletal condition is reported as a main reason for activity limitation; 0 otherwise.	0.20	0.23
Sensory	= 1 if a sensory disorder is reported as a main reason for activity limitation; 0 otherwise.	0.14	0.08
Other disorders of the nervous system	= 1 if a condition of the nervous system other than a sensory disorder is reported as a main reason for activity limitation; 0 otherwise.	0.18	0.14
Other condition causing limitation	= 1 if a condition other than those listed above is reported as a main reason for activity limitation; 0 otherwise.	0.45	0.48
No condition causing limitation	= 1 if no condition(s) that limit activities are reported.	0.12	0.13

Table B.1 (continued)

Variable Name	Description	Pre-Regulation- Change TTW Participant Sample Mean (N = 2,283)	Post-Regulation- Change TTW Participant Sample Mean (N = 2,283)
MCS = 44-51	= 1 if the SF-8 Mental Component Summary (MCS) health measure is 44-51; 0 otherwise. The MCS is a measure of mental health status where higher scores are associated with better mental health. A score of 44-51 corresponds approximately to the 25th to 50th percentiles for the general U.S. adult population.	0.16	0.14
MCS > 51	= 1 if the SF-8 MCS health measure is > 51; 0 otherwise. The MCS is a measure of mental health status where higher scores are associated with better mental health. A score of > 51 corresponds approximately to above the 50th percentiles for the general U.S. adult population.	0.54	0.53
Omitted = MCS < 44	SF-8 MCS health measure is < 44. The MCS is a measure of mental health status where higher scores are associated with better mental health. A score of < 44 corresponds approximately the lowest 25th percentile for the general U.S. adult population.	0.30	0.33
PCS = 44-51	= 1 if the SF-8 Physical Component Summary (PCS) health measure is 44-51; 0 otherwise. The PCS is a measure of physical health status where higher scores are associated with better physical health. A score of 44-51 corresponds approximately to the 25th to 50th percentiles for the general U.S. adult population.	0.18	0.20
PCS > 51	= 1 if the SF-8 PCS health measure is > 51; 0 otherwise. The PCS is a measure of physical health status where higher scores are associated with better physical health. A score of > 51 corresponds approximately to above the 50th percentiles for the general U.S. adult population.	0.54	0.52
Omitted = PCS < 44	SF-8 PCS health measure is < 44. The PCS is a measure of physical health status where higher scores are associated with better physical health. A score of < 44 corresponds approximately the lowest 25th percentile for the general U.S. adult population.	0.29	0.28
PCS51 * MCS51	Interaction of PCS >51 and MCS > 51. Indicator of higher than the U.S. population average for both physical and mental health status.	0.32	0.32
No ADL, IADL, or functional limitations	= 1 if no reported activities of daily living (ADL), instrumental activities of daily living (IADL), or functional limitations; 0 otherwise.	0.06	0.06
At least one ADL or IADL requiring assistance	= 1 if reported having at least one ADL or IADL difficulty for which assistance was required; 0 otherwise. ADLs include bathing or dressing, getting around the house, getting into or out of bed, and eating. IADLs include getting around outside of the home, shopping for personal items, and preparing meals.	0.53	0.56

Table B.1 (continued)

Variable Name	Description	Pre-Regulation- Change TTW Participant Sample Mean (N = 2,283)	Post-Regulation- Change TTW Participant Sample Mean (N = 2,283)
At least one severe physical limitation	= 1 if reported at least one severe physical limitation; 0 otherwise. A severe physical limitation is defined as the inability to walk, climb steps, lift 10 lbs., grasp, reach, stand, and/or crouch.	0.33	0.32
Obese	= 1 if body mass index (BMI) is 30 or greater; 0 otherwise. Calculated based on self-reported weight and height.	0.38	0.39
Substance abuse	= 1 if reported symptoms of substance abuse; 0 otherwise. Symptoms of substance abuse include a CAGE alcohol score of 2 or greater; being advised to stop using alcohol or drugs by a health professional in past 12 months; receiving treatment for alcohol or drug use in past 12 months; and/or indicating drug use in past 12 months AND the need for larger amounts to get an effect or emotional or physical problems from using drugs.	0.08	0.08
FPL 300+	= 1 if household income is 300% or more of the federal poverty level (FPL) for a family of the given household's size; 0 otherwise.	0.10	0.08
Unemployment rate	Continuous variable. FIPS codes collected for the NBS sample members were used to match NBS respondents with the average annual county unemployment rates produced by the Local Area Unemployment Statistics program within the Bureau of Labor Statistics. County-level unemployment rates were not available for seven New Orleans counties due to the severe population displacement associated with Hurricane Katrina. The MSA-level unemployment rate for New Orleans was used for the 93 observations from those areas.	0.05	0.10
Ticket assigned to EN	= 1 if Ticket was assigned to an SVRA or non-SVRA Employment Network operating under the outcome-only or milestone payment system; 0 otherwise. Based on administrative data.	0.15	0.20
Recent use of services	= 1 if reported using services in previous year; 0 otherwise.	0.61	0.62
Recent use of employment services	= 1 if reported any of the following activities related to employment services in the previous year: received work assessment, received job training, received help finding a job, received advice for finding a job, received job coaching, used services to find job, used services to increase income, or not working because finishing school; 0 otherwise.	0.55	0.52

Table B.1 (continued)

Variable Name	Description	Pre-Regulation- Change TTW Participant Sample Mean (N = 2,283)	Post-Regulation- Change TTW Participant Sample Mean (N = 2,283)
More than 50 hours of service in the year prior to NBS interview among TTW participants	= 1 if reported using more than 50 hours of services in the previous year; 0 if reported using 0-49 hours of services in the previous year.	0.40	0.36
Hours of service use ^b	Continuous variable. Number of service hours used in previous year.	168.84	174.04
Unmet need	= 1 if services needed in previous year but not received; 0 otherwise.	0.19	0.22
Employed at interview	= 1 if employed at time of NBS interview (imputed); 0 otherwise.	0.35	0.24
Employed at interview or during the previous year	= 1 if employed at time of NBS interview (imputed) or during the previous year; 0 otherwise.	0.54	0.42
Ever worked for pay	= 1 if reported working at interview, working in the previous year, or working for pay when first became limited; 0 otherwise.	0.93	0.79
Worked fewer hours than able ^c	= 1 if reported working fewer hours than able during the previous year; 0 otherwise.	0.25	0.22
Hours worked per month ^d	Continuous variable. Total hours worked per month at all current jobs (imputed).	95.51	79.87
Job tenure in months ^d	Continuous variable. Months at current main job.	21.03	20.40
Log of positive monthly earnings ^{a, d}	Continuous variable. Natural log of reported earnings for those earning more than \$1. The earnings variable is defined as follows: monthly earnings is equal to last month's pay (pretax). If last month's pay (pretax) is missing, monthly earnings is equal to total monthly salary from all current jobs.	6.17	6.06
Success in reaching work goals ^e	= 1 if reported being somewhat or very successful in reaching work goals; 0 otherwise.	0.53	0.45
Overall satisfaction with TTW ^f	= 1 if reported being somewhat or very satisfied with TTW; 0 otherwise.	0.63	0.60

Source: All variables are from the 2005, 2006, and 2010 National Beneficiary Surveys unless otherwise noted.

^a Inflation adjusted to 2010 dollars.

Table B.1 (continued)

- ^b Means reported for TTW participants who used services during the previous year.
- ^c Means reported for TTW participants who were employed during the previous year.
- ^d Means reported for TTW participants who were employed at interview.
- ^e Means reported for TTW participants who acknowledged participation in the program.
- ^f Means reported for nonproxy TTW participants who acknowledged participation in the program.

Table B.2. Logit Model of the Likelihood of TTW Participation

	Pre-Regulation-Change Cohort (N = 6,175)					Post-Regulation-Change Cohort (N = 5,078)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Sample: All beneficiaries										
Dependent variable = Ticket participant					0.01					0.01
Constant	-5.90	0.96	0.00	0.00		-8.15	0.78	0.00	0.00	
Concurrent	0.02	0.26	1.02	0.93	0.14	0.33	0.34	1.40	0.33	0.14
DI-only	0.06	0.30	1.07	0.83	0.54	0.72	0.29	2.05	0.01	0.59
PIA > 1200	-0.33	0.38	0.72	0.38	0.23	-0.72	0.35	0.49	0.04	0.23
SS benefits 500-1000	-0.54	0.42	0.58	0.19	0.53	0.35	0.30	1.42	0.24	0.55
SS benefits > 1000	-0.40	0.37	0.67	0.28	0.34	0.89	0.37	2.42	0.02	0.36
Other benefits 1-199	-0.62	0.28	0.54	0.03	0.18	0.01	0.27	1.01	0.96	0.18
Other benefits 200-499	1.03	0.56	2.80	0.06	0.06	1.24	0.36	3.44	0.00	0.12
Other benefits 500+	-0.15	0.63	0.86	0.82	0.12	-0.12	0.19	0.88	0.51	0.11
0-24 months on rolls	1.08	0.85	2.95	0.21	0.04	1.28	0.59	3.61	0.03	0.02
25-60 months on rolls	-0.36	0.24	0.70	0.14	0.19	0.26	0.22	1.29	0.25	0.15
61-120 months on rolls	-0.08	0.29	0.92	0.79	0.25	-0.58	0.29	0.56	0.05	0.23
Age 18-24	1.30	0.50	3.67	0.01	0.05	3.14	0.40	23.21	0.00	0.05
Age 25-39	0.84	0.41	2.31	0.04	0.16	1.04	0.31	2.83	0.00	0.15
Age 40-54	-0.27	0.43	0.76	0.53	0.38	0.52	0.31	1.68	0.09	0.34
Male	-0.42	0.19	0.66	0.03	0.50	0.08	0.20	1.08	0.69	0.50
African American	-0.24	0.28	0.79	0.40	0.22	0.11	0.30	1.12	0.71	0.23
Other race	-0.38	0.28	0.69	0.18	0.08	-0.23	0.31	0.80	0.47	0.08
Hispanic/Latino	0.18	0.37	1.20	0.63	0.11	-0.09	0.21	0.92	0.68	0.12
Education = high school	1.45	0.35	4.25	0.00	0.35	0.75	0.23	2.11	0.00	0.39
Education beyond high school	1.27	0.20	3.57	0.00	0.25	1.44	0.28	4.21	0.00	0.27
Lives with spouse/other relatives, no kids	-0.30	0.26	0.74	0.24	0.48	-0.68	0.18	0.51	0.00	0.53
Married with kids	-0.97	0.37	0.38	0.01	0.09	-0.59	0.36	0.56	0.11	0.06
Unmarried with kids	-0.30	0.43	0.74	0.48	0.07	-0.93	0.28	0.40	0.00	0.05
Lives with kids < age 6	0.35	0.56	1.42	0.53	0.03	-0.64	0.31	0.53	0.04	0.04
Psychiatric	0.83	0.36	2.30	0.02	0.31	0.38	0.16	1.46	0.02	0.33
Intellectual	-0.04	0.30	0.96	0.90	0.07	-0.43	0.33	0.65	0.20	0.05
Musculoskeletal	-0.56	0.49	0.57	0.25	0.36	-0.65	0.22	0.52	0.00	0.39
Sensory	0.87	0.22	2.38	0.00	0.09	0.28	0.28	1.32	0.32	0.09
Other disorders of the nervous system	0.48	0.29	1.62	0.10	0.17	-0.57	0.25	0.56	0.02	0.16
Other condition causing limitation	0.29	0.23	1.33	0.21	0.61	-0.52	0.22	0.59	0.02	0.62
No condition causing limitation	0.21	0.36	1.23	0.56	0.07	0.57	0.30	1.76	0.06	0.06
MCS 44-51	-0.06	0.28	0.94	0.82	0.16	-0.70	0.21	0.50	0.00	0.20

Table B.2 (continued)

MCS > 51	0.06	0.36	1.07	0.86	0.42	-0.13	0.19	0.88	0.49	0.40
PCS 44-51	-0.69	0.28	0.50	0.02	0.18	0.89	0.29	2.43	0.00	0.17
PCS > 51	-0.65	0.34	0.52	0.06	0.28	1.41	0.44	4.10	0.00	0.27
MCS > 51 and PCS > 51	0.72	0.51	2.06	0.15	0.14	0.32	0.31	1.38	0.30	0.13
No ADL, IADL, or functional limitations	-0.09	0.34	0.91	0.79	0.03	-0.15	0.40	0.86	0.71	0.02
At least one ADL or IADL requiring assistance	-0.10	0.20	0.91	0.62	0.71	0.04	0.18	1.04	0.82	0.72
At least one severe physical limitation	-0.67	0.38	0.51	0.08	0.58	0.70	0.32	2.02	0.03	0.60
Obese	0.35	0.18	1.43	0.05	0.43	-0.25	0.17	0.78	0.13	0.44
Substance abuse	-0.75	0.27	0.47	0.01	0.06	-0.71	0.29	0.49	0.01	0.06
FPL 300+	-0.78	0.43	0.46	0.07	0.12	-0.07	0.33	0.94	0.84	0.10
Unemployment rate	-5.97	7.63	0.00	0.43	0.05	1.06	4.28	2.88	0.80	0.10
Ever worked for pay	1.39	0.30	4.01	0.00	0.88	0.83	0.26	2.30	0.00	0.82
R-squared	0.02					0.03				

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.3. Logit Model of the Likelihood of Ticket Assignment to an EN Conditional on TTW Participation

	Pre-Regulation-Change Cohort (N = 2,283)					Post-Regulation-Change Cohort (N = 2,755)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Sample: TTW participants Dependent variable = Ticket assigned to EN					0.15					0.20
Constant	-2.26	0.53	0.10	0.00		-2.14	0.64	0.12	0.00	
Concurrent	-0.06	0.15	0.94	0.68	0.22	0.30	0.18	1.35	0.09	0.15
DI-only	0.07	0.20	1.07	0.74	0.49	0.24	0.17	1.28	0.16	0.53
PIA > 1200	0.32	0.17	1.38	0.06	0.15	0.03	0.15	1.03	0.85	0.15
SS benefits 500-1000	-0.13	0.17	0.88	0.44	0.58	0.07	0.17	1.07	0.67	0.59
SS benefits > 1000	-0.18	0.18	0.83	0.32	0.28	0.16	0.22	1.17	0.47	0.29
Other benefits 1-199	0.18	0.17	1.20	0.28	0.17	0.11	0.15	1.12	0.45	0.18
Other benefits 200-499	0.33	0.18	1.39	0.07	0.08	-0.28	0.16	0.76	0.08	0.15
Other benefits 500+	-0.11	0.28	0.89	0.69	0.06	-0.19	0.18	0.83	0.29	0.09
0-24 months on rolls	0.44	0.33	1.55	0.19	0.02	0.54	0.26	1.71	0.04	0.03
25-60 months on rolls	-0.02	0.18	0.98	0.89	0.19	0.06	0.16	1.06	0.70	0.23
61-120 months on rolls	0.04	0.15	1.04	0.79	0.23	0.46	0.16	1.59	0.00	0.20
Age 18-24	-0.49	0.30	0.61	0.10	0.15	-0.80	0.21	0.45	0.00	0.22
Age 25-39	-0.30	0.20	0.74	0.13	0.33	-0.34	0.16	0.71	0.04	0.27
Age 40-54	0.02	0.19	1.02	0.93	0.40	-0.15	0.15	0.86	0.32	0.35
Male	0.18	0.10	1.20	0.08	0.52	-0.07	0.09	0.93	0.42	0.53
African American	0.40	0.20	1.50	0.05	0.26	0.75	0.18	2.12	0.00	0.25
Other race	0.49	0.27	1.63	0.07	0.06	0.22	0.21	1.25	0.29	0.07
Hispanic/Latino	-0.18	0.32	0.84	0.58	0.09	-0.03	0.24	0.97	0.89	0.13
Education = high school	0.06	0.16	1.06	0.71	0.41	-0.21	0.15	0.81	0.16	0.50
Education beyond high school	0.02	0.18	1.02	0.92	0.40	-0.01	0.16	0.99	0.95	0.34
Lives with spouse/other relatives, no kids	0.21	0.14	1.23	0.12	0.44	0.03	0.13	1.03	0.82	0.47
Married with kids	0.48	0.26	1.62	0.07	0.07	-0.32	0.25	0.72	0.21	0.08
Unmarried with kids	-0.10	0.25	0.90	0.69	0.09	0.28	0.26	1.32	0.27	0.06
Lives with kids < age 6	0.36	0.32	1.43	0.27	0.04	0.15	0.26	1.16	0.57	0.05
Psychiatric	0.02	0.14	1.02	0.89	0.38	0.10	0.13	1.10	0.46	0.43
Intellectual	-0.01	0.28	0.99	0.96	0.07	-0.49	0.29	0.61	0.09	0.06
Musculoskeletal	0.11	0.15	1.12	0.43	0.20	0.26	0.13	1.29	0.04	0.23
Sensory	-0.47	0.24	0.62	0.05	0.14	-0.17	0.19	0.84	0.38	0.08
Other disorders of the nervous system	-0.24	0.17	0.79	0.15	0.18	0.02	0.16	1.02	0.90	0.14
Other condition causing limitation	0.06	0.13	1.06	0.66	0.45	0.08	0.12	1.08	0.51	0.48
No condition causing limitation	-0.12	0.19	0.89	0.54	0.12	-0.12	0.19	0.88	0.51	0.13
MCS 44-51	-0.28	0.17	0.75	0.10	0.16	0.25	0.15	1.29	0.10	0.14

Table B.3 (continued)

	Pre-Regulation-Change Cohort (N = 2,283)					Post-Regulation-Change Cohort (N = 2,755)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
MCS > 51	-0.32	0.18	0.73	0.07	0.54	0.24	0.17	1.27	0.16	0.53
PCS 44-51	0.38	0.18	1.46	0.04	0.18	-0.05	0.15	0.95	0.75	0.20
PCS > 51	0.12	0.19	1.12	0.55	0.54	0.39	0.19	1.47	0.04	0.52
MCS > 51 and PCS > 51	-0.03	0.24	0.97	0.91	0.32	-0.41	0.21	0.66	0.05	0.32
No ADL, IADL, or functional limitations	0.17	0.23	1.18	0.47	0.06	0.27	0.24	1.31	0.27	0.06
At least one ADL or IADL requiring assistance	-0.09	0.12	0.91	0.47	0.53	-0.08	0.12	0.92	0.51	0.56
At least one severe physical limitation	0.17	0.14	1.19	0.22	0.33	0.08	0.12	1.08	0.53	0.32
Obese	0.02	0.15	1.03	0.86	0.38	0.10	0.10	1.10	0.32	0.39
Substance abuse	0.16	0.20	1.17	0.43	0.08	0.22	0.20	1.25	0.27	0.08
FPL 300+	-0.04	0.22	0.96	0.86	0.10	0.16	0.19	1.18	0.38	0.08
Unemployment rate	3.59	8.81	36.14	0.68	0.05	-1.43	4.66	0.24	0.76	0.10
Ever worked for pay	0.19	0.23	1.20	0.43	0.93	0.34	0.14	1.41	0.01	0.79
R-squared	0.02					0.06				

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.4. Logit Model of the Likelihood of Using Services in the Year Before the NBS Interview

	Pre-Regulation-Change Cohort (N = 2,283)					Post-Regulation-Change Cohort (N = 2,755)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Sample: TTW participants										
Dependent variable = used services in the previous year					0.61					0.62
Regression-adjusted estimated mean					0.62					0.64
Constant	-1.02	0.53	0.36	0.06		-0.42	0.62	0.66	0.50	
Concurrent	-0.06	0.21	0.94	0.77	0.22	0.03	0.23	1.03	0.90	0.15
DI-only	-0.17	0.19	0.85	0.38	0.49	0.29	0.22	1.33	0.20	0.53
PIA > 1200	-0.20	0.22	0.82	0.38	0.15	-0.17	0.24	0.84	0.48	0.15
SS benefits 500-1000	0.24	0.20	1.27	0.22	0.58	-0.05	0.23	0.95	0.82	0.59
SS benefits > 1000	0.52	0.26	1.68	0.05	0.28	0.02	0.30	1.02	0.93	0.29
Other benefits 1-199	0.50	0.19	1.65	0.01	0.17	0.22	0.18	1.24	0.23	0.18
Other benefits 200-499	-0.31	0.21	0.73	0.15	0.08	0.28	0.26	1.32	0.28	0.15
Other benefits 500+	0.41	0.30	1.50	0.17	0.06	0.06	0.24	1.06	0.81	0.09
0-24 months on rolls	0.52	0.39	1.69	0.17	0.02	0.58	0.39	1.78	0.14	0.03
25-60 months on rolls	0.24	0.19	1.27	0.21	0.19	0.20	0.16	1.22	0.21	0.23
61-120 months on rolls	0.33	0.16	1.39	0.04	0.23	0.12	0.16	1.12	0.45	0.20
Age 18-24	-0.23	0.29	0.79	0.42	0.15	-0.15	0.27	0.86	0.58	0.22
Age 25-39	0.23	0.25	1.26	0.37	0.33	-0.11	0.27	0.89	0.67	0.27
Age 40-54	0.20	0.22	1.22	0.36	0.40	0.20	0.24	1.22	0.41	0.35
Male	-0.03	0.14	0.97	0.83	0.52	-0.11	0.18	0.89	0.52	0.53
African American	-0.51	0.14	0.60	0.00	0.26	-0.59	0.19	0.55	0.00	0.25
Other race	-0.21	0.36	0.81	0.55	0.06	0.22	0.38	1.25	0.56	0.07
Hispanic/Latino	0.15	0.22	1.16	0.50	0.09	-0.58	0.23	0.56	0.01	0.13
Education = high school	0.20	0.20	1.22	0.31	0.41	-0.03	0.21	0.97	0.88	0.50
Education beyond high school	0.68	0.21	1.98	0.00	0.40	0.40	0.21	1.50	0.06	0.34
Lives with spouse/other relatives, no kids	-0.17	0.14	0.84	0.22	0.44	-0.03	0.17	0.97	0.86	0.47
Married with kids	-0.27	0.35	0.76	0.44	0.07	-0.20	0.34	0.82	0.56	0.08
Unmarried with kids	-0.21	0.32	0.81	0.52	0.09	-0.04	0.34	0.96	0.90	0.06
Lives with kids < age 6	0.36	0.47	1.44	0.44	0.04	-0.26	0.41	0.77	0.53	0.05
Psychiatric	1.20	0.22	3.31	0.00	0.38	0.73	0.18	2.07	0.00	0.43
Intellectual	0.33	0.33	1.40	0.31	0.07	-0.02	0.28	0.98	0.95	0.06
Musculoskeletal	0.14	0.19	1.15	0.44	0.20	0.26	0.19	1.30	0.16	0.23
Sensory	0.03	0.20	1.03	0.89	0.14	-0.70	0.30	0.50	0.02	0.08
Other disorders of the nervous system	-0.02	0.21	0.98	0.93	0.18	0.33	0.23	1.39	0.15	0.14
Other condition causing limitation	0.13	0.17	1.14	0.43	0.45	0.01	0.16	1.01	0.93	0.48
No condition causing limitation	0.84	0.27	2.33	0.00	0.12	0.05	0.24	1.05	0.85	0.13

Table B.4 (continued)

	Pre-Regulation-Change Cohort (N = 2,283)					Post-Regulation-Change Cohort (N = 2,755)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
MCS 44-51	0.05	0.22	1.06	0.81	0.16	0.46	0.22	1.59	0.03	0.14
MCS > 51	0.47	0.23	1.59	0.04	0.54	0.19	0.21	1.21	0.37	0.53
PCS 44-51	-0.01	0.18	0.99	0.94	0.18	0.03	0.22	1.03	0.87	0.20
PCS > 51	-0.02	0.25	0.98	0.95	0.54	0.29	0.24	1.33	0.24	0.52
MCS > 51 and PCS > 51	-0.50	0.25	0.60	0.05	0.32	-0.25	0.26	0.78	0.35	0.32
No ADL, IADL, or functional limitations	-0.34	0.31	0.71	0.28	0.06	0.11	0.30	1.12	0.71	0.06
At least one ADL or IADL requiring assistance	0.12	0.18	1.13	0.51	0.53	0.36	0.15	1.43	0.02	0.56
At least one severe physical limitation	-0.28	0.16	0.75	0.08	0.33	-0.28	0.17	0.76	0.11	0.32
Obese	0.01	0.16	1.01	0.94	0.38	0.07	0.15	1.07	0.64	0.39
Substance abuse	0.37	0.26	1.45	0.15	0.08	0.82	0.25	2.28	0.00	0.08
FPL 300+	0.41	0.21	1.50	0.06	0.10	0.11	0.30	1.11	0.72	0.08
Unemployment rate	-0.17	3.87	0.84	0.96	0.05	0.76	2.88	2.14	0.79	0.10
Assignment to an EN	-0.24	0.11	0.79	0.04	0.15	-0.32	0.11	0.73	0.00	0.20
Ever worked for pay	0.24	0.31	1.27	0.44	0.93	0.06	0.20	1.07	0.75	0.79
R-squared	0.14					0.12				

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.5. Logit Model of the Likelihood of Using Employment-Specific Services in the Year Before the NBS Interview

	Pre-Regulation-Change Cohort (N = 2,283)					Post-Regulation-Change Cohort (N = 2,755)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Sample: TTW participants										
Dependent variable = used employment services in the previous year					0.55					0.52
Regression-adjusted estimated mean					0.55					0.52
Constant	-0.23	0.38	0.79	0.55		-0.44	0.60	0.64	0.46	
Concurrent	0.07	0.19	1.07	0.72	0.22	0.06	0.21	1.06	0.77	0.15
DI-only	-0.24	0.22	0.78	0.26	0.49	0.29	0.21	1.34	0.16	0.53
PIA > 1200	-0.08	0.22	0.92	0.71	0.15	-0.09	0.26	0.92	0.74	0.15
SS benefits 500-1000	-0.03	0.18	0.98	0.89	0.58	-0.06	0.21	0.94	0.78	0.59
SS benefits > 1000	0.40	0.23	1.49	0.08	0.28	-0.31	0.28	0.73	0.27	0.29
Other benefits 1-199	0.19	0.18	1.21	0.31	0.17	0.06	0.20	1.06	0.75	0.18
Other benefits 200-499	-0.62	0.25	0.54	0.01	0.08	0.08	0.25	1.08	0.75	0.15
Other benefits 500+	-0.22	0.30	0.80	0.46	0.06	0.01	0.27	1.01	0.98	0.09
0-24 months on rolls	0.09	0.49	1.09	0.86	0.02	0.49	0.43	1.63	0.25	0.03
25-60 months on rolls	0.32	0.19	1.37	0.09	0.19	0.35	0.15	1.42	0.02	0.23
61-120 months on rolls	0.24	0.17	1.27	0.16	0.23	0.04	0.18	1.04	0.84	0.20
Age 18-24	0.34	0.27	1.41	0.21	0.15	0.07	0.26	1.07	0.80	0.22
Age 25-39	0.36	0.20	1.44	0.07	0.33	-0.25	0.21	0.78	0.24	0.27
Age 40-54	0.24	0.19	1.27	0.20	0.40	0.11	0.21	1.12	0.59	0.35
Male	-0.24	0.13	0.79	0.06	0.52	-0.05	0.17	0.95	0.77	0.53
African American	-0.34	0.15	0.71	0.03	0.26	-0.43	0.17	0.65	0.01	0.25
Other race	0.38	0.31	1.47	0.22	0.06	0.36	0.27	1.43	0.19	0.07
Hispanic/Latino	0.00	0.20	1.00	0.99	0.09	-0.17	0.23	0.84	0.45	0.13
Education = high school	0.13	0.19	1.14	0.49	0.41	0.04	0.18	1.05	0.80	0.50
Education beyond high school	0.70	0.21	2.01	0.00	0.40	0.59	0.20	1.81	0.00	0.34
Lives with spouse/other relatives, no kids	-0.24	0.14	0.79	0.09	0.44	-0.09	0.13	0.91	0.48	0.47
Married with kids	-0.30	0.29	0.74	0.30	0.07	-0.09	0.30	0.91	0.76	0.08
Unmarried with kids	-0.09	0.28	0.91	0.73	0.09	0.24	0.29	1.27	0.40	0.06
Lives with kids < age 6	0.29	0.37	1.34	0.43	0.04	-0.41	0.47	0.66	0.37	0.05
Psychiatric	0.68	0.19	1.97	0.00	0.38	0.55	0.16	1.73	0.00	0.43
Intellectual	0.36	0.32	1.43	0.26	0.07	0.31	0.30	1.37	0.30	0.06
Musculoskeletal	0.22	0.17	1.25	0.20	0.20	0.52	0.17	1.69	0.00	0.23
Sensory	0.10	0.20	1.10	0.63	0.14	-0.45	0.25	0.64	0.07	0.08
Other disorders of the nervous system	-0.02	0.17	0.98	0.91	0.18	0.42	0.20	1.53	0.03	0.14
Other condition causing limitation	0.11	0.15	1.12	0.45	0.45	0.05	0.16	1.05	0.78	0.48
No condition causing limitation	0.43	0.27	1.54	0.11	0.12	-0.03	0.28	0.97	0.92	0.13
MCS 44-51	0.22	0.20	1.25	0.27	0.16	0.20	0.20	1.22	0.32	0.14

Table B.5 (continued)

	Pre-Regulation-Change Cohort (N = 2,283)					Post-Regulation-Change Cohort (N = 2,755)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
MCS > 51	0.23	0.20	1.26	0.27	0.54	0.36	0.16	1.44	0.03	0.53
PCS 44-51	-0.08	0.17	0.92	0.63	0.18	-0.10	0.17	0.90	0.55	0.20
PCS > 51	-0.20	0.19	0.82	0.31	0.54	0.26	0.23	1.30	0.25	0.52
MCS > 51 and PCS > 51	0.00	0.24	1.00	0.99	0.32	-0.10	0.22	0.91	0.66	0.32
No ADL, IADL, or functional limitations	-0.18	0.31	0.83	0.56	0.06	0.34	0.28	1.41	0.22	0.06
At least one ADL or IADL requiring assistance	0.06	0.15	1.06	0.70	0.53	0.38	0.12	1.47	0.00	0.56
At least one severe physical limitation	-0.25	0.16	0.78	0.11	0.33	-0.38	0.15	0.69	0.01	0.32
Obese	0.09	0.13	1.10	0.48	0.38	0.12	0.15	1.13	0.41	0.39
Substance abuse	0.11	0.27	1.12	0.67	0.08	0.40	0.22	1.49	0.07	0.08
FPL 300+	0.22	0.24	1.24	0.36	0.10	0.07	0.28	1.07	0.81	0.08
Unemployment rate	-0.32	3.81	0.73	0.93	0.05	-6.21	2.66	0.00	0.02	0.10
Assignment to an EN	-0.37	0.12	0.69	0.00	0.15	-0.36	0.10	0.70	0.00	0.20
Ever worked for pay	-0.31	0.30	0.74	0.31	0.93	0.12	0.18	1.13	0.49	0.79
R-squared	0.09					0.11				

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.6. Logit Model of the Likelihood of Using More Than 50 Hours of Service in the Calendar Year Before the NBS Interview

	Pre-Regulation-Change Cohort (N = 1,300)					Post-Regulation-Change Cohort (N = 1,611)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Sample: TTW participants										
Dependent variable = hours of service					0.40					0.36
Regression-adjusted estimated mean					0.37					0.35
Constant	-1.55	0.94	0.21	0.10		-1.08	0.88	0.34	0.22	
Concurrent	0.26	0.25	1.29	0.30	0.21	-0.34	0.25	0.71	0.18	0.14
DI-only	0.04	0.26	1.04	0.89	0.53	-0.24	0.25	0.79	0.34	0.58
PIA > 1200	0.38	0.30	1.47	0.20	0.15	-0.45	0.30	0.64	0.13	0.16
SS benefits 500-1000	0.21	0.30	1.23	0.49	0.56	-0.33	0.28	0.72	0.25	0.57
SS benefits >1000	0.24	0.34	1.26	0.49	0.33	0.10	0.38	1.10	0.79	0.31
Other benefits 1-199	0.09	0.22	1.10	0.67	0.20	0.11	0.28	1.11	0.71	0.19
Other benefits 200-499	-0.24	0.34	0.78	0.48	0.08	-0.24	0.29	0.78	0.40	0.16
Other benefits 500+	0.12	0.33	1.13	0.71	0.07	-0.10	0.34	0.90	0.76	0.09
0-24 months on rolls	-0.27	0.56	0.77	0.64	0.03	0.29	0.48	1.34	0.54	0.04
25-60 months on rolls	0.23	0.30	1.26	0.45	0.20	-0.11	0.23	0.90	0.65	0.25
61-120 months on rolls	0.16	0.17	1.17	0.36	0.27	0.15	0.21	1.16	0.47	0.20
Age 18-24	1.02	0.50	2.79	0.04	0.10	0.91	0.35	2.49	0.01	0.19
Age 25-39	0.64	0.41	1.89	0.13	0.34	0.93	0.34	2.53	0.01	0.26
Age 40-54	0.70	0.38	2.02	0.06	0.43	0.52	0.29	1.69	0.07	0.38
Male	-0.08	0.18	0.93	0.67	0.51	0.09	0.17	1.09	0.60	0.54
African American	-0.06	0.27	0.94	0.81	0.22	-0.36	0.20	0.70	0.07	0.20
Other race	0.96	0.34	2.61	0.00	0.06	0.07	0.40	1.07	0.87	0.08
Hispanic/Latino	0.35	0.44	1.42	0.43	0.08	0.14	0.27	1.16	0.59	0.10
Education = high school	0.23	0.30	1.26	0.45	0.37	0.03	0.30	1.03	0.92	0.45
Education beyond high school	0.34	0.26	1.41	0.18	0.48	0.35	0.35	1.42	0.31	0.40
Lives with spouse/other relatives, no kids	-0.18	0.19	0.83	0.33	0.40	-0.28	0.21	0.75	0.18	0.45
Married with kids	-0.14	0.42	0.87	0.75	0.07	-0.05	0.39	0.95	0.90	0.07
Unmarried with kids	-0.13	0.37	0.88	0.74	0.09	0.05	0.48	1.05	0.92	0.06
Lives with kids < age 6	-1.19	0.63	0.30	0.06	0.04	-0.22	0.48	0.81	0.65	0.04
Psychiatric	0.57	0.24	1.77	0.02	0.49	0.32	0.22	1.37	0.15	0.50
Intellectual	0.33	0.44	1.39	0.45	0.06	0.08	0.37	1.09	0.82	0.05
Musculoskeletal	0.44	0.23	1.55	0.06	0.21	-0.22	0.25	0.80	0.39	0.25
Sensory	-0.20	0.28	0.82	0.47	0.13	-0.15	0.36	0.86	0.68	0.07
Other disorders of the nervous system	0.27	0.24	1.31	0.26	0.17	0.08	0.21	1.08	0.72	0.16
Other condition causing limitation	0.37	0.19	1.44	0.06	0.45	0.26	0.21	1.29	0.21	0.47
No condition causing limitation	0.43	0.40	1.54	0.29	0.10	-0.02	0.41	0.98	0.95	0.11
MCS 44-51	0.27	0.29	1.31	0.34	0.16	0.08	0.25	1.09	0.74	0.17
MCS > 51	0.26	0.26	1.29	0.34	0.51	0.43	0.27	1.54	0.11	0.47
PCS 44-51	-0.33	0.30	0.72	0.27	0.19	-0.31	0.24	0.73	0.20	0.20

Table B.6 (continued)

	Pre-Regulation-Change Cohort (N = 1,300)					Post-Regulation-Change Cohort (N = 1,611)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
PCS > 51	-0.37	0.29	0.69	0.20	0.52	-0.31	0.32	0.74	0.34	0.50
MCS > 51 and PCS > 51	0.03	0.34	1.04	0.92	0.28	-0.25	0.41	0.78	0.54	0.27
No ADL, IADL, or functional limitations	-0.66	0.47	0.51	0.16	0.05	0.29	0.47	1.33	0.54	0.05
At least one ADL or IADL requiring assistance	0.18	0.23	1.20	0.42	0.53	0.35	0.18	1.43	0.05	0.59
At least one severe physical limitation	-0.05	0.19	0.95	0.79	0.30	0.30	0.19	1.35	0.11	0.31
Obese	-0.10	0.20	0.90	0.61	0.39	0.11	0.18	1.12	0.52	0.40
Substance abuse	-0.44	0.28	0.64	0.11	0.09	0.31	0.29	1.36	0.28	0.10
FPL 300+	0.40	0.26	1.50	0.12	0.12	0.36	0.28	1.43	0.20	0.09
Unemployment rate	-2.53	6.62	0.08	0.70	0.05	-3.39	3.85	0.03	0.38	0.10
Assignment to an EN	-0.28	0.16	0.76	0.09	0.15	-0.17	0.14	0.84	0.21	0.19
Ever worked for pay	-0.52	0.47	0.60	0.27	0.95	0.06	0.26	1.06	0.81	0.81
R-squared	0.10					0.08				

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.7. Ordinary Least Squares Model of Hours of Service Use Among Those Who Used Services in the Calendar Year Before the NBS Interview

	Pre-Regulation-Change Cohort (N = 1,300)				Post-Regulation-Change Cohort (N = 1,611)			
	Coefficient	Std. Error	P > t	Variable Mean	Coefficient	Std. Error	P > t	Variable Mean
Sample: TTW participants								
Dependent variable = hours of service				168.84				174.04
Regression-adjusted estimated mean				165.42				174.04
Constant	102.5	118.3	0.39		78.5	120.7	0.52	
Concurrent	32.3	37.8	0.39	0.21	97.2	86.1	0.26	0.14
DI-only	10.4	38.6	0.79	0.53	-75.7	39.2	0.05	0.58
PIA > 1200	68.5	46.0	0.14	0.15	-72.3	38.7	0.06	0.16
SS benefits 500-1000	101.2	31.1	0.00	0.56	-10.3	58.3	0.86	0.57
SS benefits > 1000	65.1	38.7	0.09	0.33	54.5	70.1	0.44	0.31
Other benefits 1-199	-36.3	39.5	0.36	0.20	-11.5	35.2	0.74	0.19
Other benefits 200-499	-90.2	29.2	0.00	0.08	-29.7	42.4	0.48	0.16
Other benefits 500+	27.0	62.7	0.67	0.07	100.8	78.5	0.20	0.09
0-24 months on rolls	-27.7	61.0	0.65	0.03	59.9	71.5	0.40	0.04
25-60 months on rolls	-48.3	37.6	0.20	0.20	-7.3	38.5	0.85	0.25
61-120 months on rolls	60.7	36.9	0.10	0.27	71.0	47.1	0.13	0.20
Age 18-24	105.5	57.3	0.07	0.10	172.2	64.8	0.01	0.19
Age 25-39	55.0	43.7	0.21	0.34	18.0	45.5	0.69	0.26
Age 40-54	59.4	39.1	0.13	0.43	34.8	37.8	0.36	0.38
Male	11.2	38.5	0.77	0.51	44.8	30.2	0.14	0.54
African American	-73.3	29.9	0.01	0.22	35.2	41.2	0.39	0.20
Other race	175.2	77.6	0.02	0.06	122.4	81.2	0.13	0.08
Hispanic/Latino	-36.6	56.0	0.51	0.08	-16.7	45.0	0.71	0.10
Education = high school	-4.1	41.9	0.92	0.37	9.2	38.7	0.81	0.45
Education beyond high school	-7.5	43.4	0.86	0.48	60.0	41.7	0.15	0.40
Lives with spouse/other relatives, no kids	34.5	37.2	0.35	0.40	-21.8	34.3	0.53	0.45
Married with kids	-36.7	39.7	0.36	0.07	40.4	48.2	0.40	0.07
Unmarried with kids	46.8	67.7	0.49	0.09	40.5	77.2	0.60	0.06
Lives with kids < age 6	-107.5	41.7	0.01	0.04	-173.2	53.0	0.00	0.04
Psychiatric	-14.3	24.5	0.56	0.49	-11.7	46.6	0.80	0.50
Intellectual	88.2	95.7	0.36	0.06	110.6	83.8	0.19	0.05
Musculoskeletal	9.9	40.2	0.81	0.21	-74.2	49.0	0.13	0.25
Sensory	-109.2	29.8	0.00	0.13	-69.7	61.5	0.26	0.07
Other disorders of the nervous system	-10.0	43.0	0.82	0.17	3.6	44.5	0.94	0.16
Other condition causing limitation	-29.7	31.1	0.34	0.45	-16.3	41.5	0.70	0.47
No condition causing limitation	-19.5	67.5	0.77	0.10	-71.1	64.0	0.27	0.11
MCS 44-51	26.7	61.2	0.66	0.16	39.8	35.6	0.26	0.17

Table B.7 (continued)

	Pre-Regulation-Change Cohort (N = 1,300)				Post-Regulation-Change Cohort (N = 1,611)			
	Coefficient	Std. Error	P > t	Variable Mean	Coefficient	Std. Error	P > t	Variable Mean
MCS > 51	7.3	47.2	0.88	0.51	56.3	55.5	0.31	0.47
PCS 44-51	-69.4	47.3	0.14	0.19	34.5	54.1	0.52	0.20
PCS > 51	-15.5	59.1	0.79	0.52	-34.6	49.6	0.49	0.50
MCS > 51 and PCS > 51	-39.5	53.3	0.46	0.28	-11.5	74.4	0.88	0.27
No ADL, IADL, or functional limitations	-24.8	55.3	0.65	0.05	60.0	104.0	0.56	0.05
At least one ADL or IADL requiring assistance	3.9	47.8	0.94	0.53	76.1	31.8	0.02	0.59
At least one severe physical limitation	35.6	34.5	0.30	0.30	21.7	37.1	0.56	0.31
Obese	42.4	29.8	0.16	0.39	-56.0	31.3	0.07	0.40
Substance abuse	3.4	54.2	0.95	0.09	112.9	51.6	0.03	0.10
FPL 300+	-6.7	35.3	0.85	0.12	-2.1	50.1	0.97	0.09
Unemployment rate (multiplied by 100)	-1.4	10.9	0.89	5.18	-1.8	6.6	0.79	9.71
Assignment to an EN	-33.5	28.6	0.24	0.15	-15.6	24.4	0.52	0.19
Ever worked for pay	-49.7	86.4	0.57	0.95	-1.5	41.9	0.97	0.81
R-squared	0.08				0.10			

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.8. Logit Model of the Likelihood of Reporting Unmet Service Needs

	Pre-Regulation-Change Cohort (N = 2,283)					Post-Regulation-Change Cohort (N = 2,755)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Sample: TTW participants										
Dependent variable = unmet need					0.19					0.22
Regression-adjusted estimated mean					0.27					0.19
Constant	-3.26	0.77	0.04	0.00		-1.93	0.76	0.15	0.01	
Concurrent	-0.59	0.26	0.55	0.02	0.22	-0.36	0.28	0.70	0.20	0.15
DI-only	-0.50	0.26	0.61	0.06	0.49	-0.31	0.18	0.74	0.10	0.53
PIA > 1200	-0.18	0.28	0.84	0.53	0.15	-0.28	0.28	0.75	0.31	0.15
SS benefits 500-1000	-0.09	0.23	0.91	0.69	0.58	-0.47	0.28	0.63	0.10	0.59
SS benefits > 1000	0.15	0.31	1.16	0.64	0.28	-0.03	0.38	0.97	0.94	0.29
Other benefits 1-199	0.59	0.24	1.81	0.01	0.17	0.13	0.25	1.14	0.61	0.18
Other benefits 200-499	-0.23	0.30	0.80	0.46	0.08	0.71	0.27	2.03	0.01	0.15
Other benefits 500+	0.09	0.32	1.09	0.79	0.06	0.36	0.27	1.43	0.18	0.09
0-24 months on rolls	-0.53	0.49	0.59	0.28	0.02	-0.14	0.36	0.87	0.69	0.03
25-60 months on rolls	-0.11	0.26	0.90	0.68	0.19	-0.38	0.23	0.69	0.11	0.23
61-120 months on rolls	0.18	0.23	1.20	0.43	0.23	0.30	0.22	1.35	0.17	0.20
Age 18-24	-0.04	0.39	0.97	0.93	0.15	0.46	0.37	1.58	0.22	0.22
Age 25-39	-0.14	0.32	0.87	0.66	0.33	0.14	0.37	1.16	0.70	0.27
Age 40-54	0.27	0.29	1.30	0.36	0.40	-0.05	0.26	0.95	0.85	0.35
Male	0.05	0.21	1.05	0.81	0.52	0.08	0.16	1.09	0.61	0.53
African American	-0.01	0.18	0.99	0.95	0.26	-0.29	0.18	0.75	0.11	0.25
Other race	-0.07	0.36	0.93	0.85	0.06	0.39	0.31	1.47	0.21	0.07
Hispanic/Latino	0.01	0.26	1.01	0.97	0.09	-0.23	0.26	0.80	0.39	0.13
Education = high school	0.11	0.28	1.12	0.69	0.41	-0.15	0.22	0.86	0.51	0.50
Education beyond high school	0.91	0.26	2.50	0.00	0.40	0.22	0.22	1.24	0.33	0.34
Lives with spouse/other relatives, no kids	0.23	0.24	1.26	0.34	0.44	-0.22	0.17	0.80	0.18	0.47
Married with kids	-0.12	0.35	0.88	0.72	0.07	0.45	0.38	1.57	0.23	0.08
Unmarried with kids	-0.16	0.33	0.86	0.64	0.09	0.45	0.35	1.58	0.19	0.06
Lives with kids < age 6	0.56	0.45	1.75	0.21	0.04	0.54	0.44	1.71	0.22	0.05
Psychiatric	0.73	0.19	2.08	0.00	0.38	0.15	0.19	1.16	0.43	0.43
Intellectual	-0.04	0.37	0.96	0.90	0.07	0.24	0.38	1.27	0.53	0.06
Musculoskeletal	0.08	0.21	1.08	0.72	0.20	0.24	0.21	1.27	0.26	0.23
Sensory	0.10	0.30	1.11	0.73	0.14	0.43	0.27	1.54	0.11	0.08
Other disorders of the nervous system	0.19	0.20	1.21	0.36	0.18	0.23	0.21	1.26	0.27	0.14
Other condition causing limitation	0.12	0.17	1.13	0.48	0.45	0.34	0.19	1.41	0.08	0.48
No condition causing limitation	-0.39	0.49	0.68	0.43	0.12	0.31	0.38	1.36	0.42	0.13
MCS 44-51	-0.25	0.31	0.78	0.41	0.16	-0.21	0.23	0.81	0.36	0.14
MCS > 51	-0.03	0.26	0.97	0.89	0.54	-0.38	0.24	0.68	0.11	0.53
PCS 44-51	0.16	0.22	1.17	0.48	0.18	-0.13	0.22	0.87	0.54	0.20

Table B.8 (continued)

	Pre-Regulation-Change Cohort (N = 2,283)					Post-Regulation-Change Cohort (N = 2,755)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
PCS > 51	-0.13	0.30	0.88	0.67	0.54	0.15	0.22	1.16	0.50	0.52
MCS > 51 and PCS > 51	-0.13	0.32	0.88	0.68	0.32	-0.64	0.34	0.53	0.06	0.32
No ADL, IADL, or functional limitations	-0.91	0.57	0.40	0.11	0.06	-0.85	0.57	0.43	0.14	0.06
At least one ADL or IADL requiring assistance	0.50	0.21	1.65	0.02	0.53	0.82	0.17	2.27	0.00	0.56
At least one severe physical limitation	0.21	0.20	1.24	0.29	0.33	-0.17	0.17	0.84	0.33	0.32
Obese	-0.19	0.19	0.82	0.31	0.38	0.02	0.19	1.02	0.93	0.39
Substance abuse	0.12	0.37	1.13	0.74	0.08	0.03	0.34	1.03	0.92	0.08
FPL 300+	-0.35	0.34	0.71	0.30	0.10	0.11	0.31	1.12	0.71	0.08
Unemployment rate (multiplied by 100)	0.15	0.04	1.16	0.00	5.21	0.04	0.03	1.04	0.15	9.80
Assignment to an EN	0.31	0.15	1.36	0.05	0.15	-0.02	0.12	0.98	0.85	0.20
Ever worked for pay	0.07	0.41	1.08	0.86	0.93	-0.01	0.22	0.99	0.95	0.79
R-squared	0.11					0.11				

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.9. Logit Model of the Likelihood of Employment at Interview

	Pre-Regulation-Change Cohort (N = 2,283)					Post-Regulation-Change Cohort (N = 2,755)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Sample: TTW participants										
Dependent variable = employed at interview					0.35					0.24
Regression-adjusted estimated mean					0.24					0.20
Constant	-0.03	0.47	0.97	0.94		-0.10	0.80	0.90	0.90	
Concurrent	0.30	0.20	1.36	0.14	0.22	0.12	0.29	1.12	0.69	0.15
DI-only	1.01	0.18	2.75	0.00	0.49	0.56	0.25	1.76	0.02	0.53
PIA > 1200	0.02	0.22	1.02	0.92	0.15	0.03	0.24	1.03	0.90	0.15
SS benefits 500-1000	-1.11	0.22	0.33	0.00	0.58	-0.76	0.26	0.47	0.00	0.59
SS benefits > 1000	-1.50	0.27	0.22	0.00	0.28	-0.93	0.35	0.40	0.01	0.29
Other benefits 1-199	-0.29	0.21	0.75	0.17	0.17	-0.91	0.26	0.40	0.00	0.18
Other benefits 200-499	-0.24	0.30	0.78	0.41	0.08	-0.69	0.19	0.50	0.00	0.15
Other benefits 500+	-0.69	0.37	0.50	0.06	0.06	-0.82	0.30	0.44	0.01	0.09
0-24 months on rolls	-0.15	0.47	0.86	0.76	0.02	-0.38	0.49	0.68	0.44	0.03
25-60 months on rolls	-0.25	0.17	0.78	0.14	0.19	0.18	0.22	1.19	0.41	0.23
61-120 months on rolls	-0.02	0.17	0.98	0.93	0.23	0.03	0.23	1.03	0.90	0.20
Age 18-24	-0.23	0.29	0.80	0.43	0.15	0.28	0.34	1.32	0.41	0.22
Age 25-39	0.09	0.22	1.09	0.69	0.33	0.43	0.26	1.53	0.10	0.27
Age 40-54	0.09	0.21	1.10	0.66	0.40	0.10	0.21	1.10	0.64	0.35
Male	0.21	0.14	1.24	0.13	0.52	0.13	0.20	1.14	0.52	0.53
African American	-0.10	0.18	0.91	0.59	0.26	-0.14	0.24	0.87	0.56	0.25
Other race	-0.25	0.26	0.78	0.34	0.06	0.47	0.30	1.61	0.12	0.07
Hispanic/Latino	-0.12	0.21	0.88	0.55	0.09	-0.06	0.24	0.94	0.79	0.13
Education = high school	-0.10	0.21	0.90	0.63	0.41	0.39	0.25	1.47	0.12	0.50
Education beyond high school	0.02	0.22	1.02	0.93	0.40	0.55	0.27	1.73	0.05	0.34
Lives with spouse/other relatives, no kids	-0.23	0.18	0.80	0.21	0.44	-0.65	0.18	0.52	0.00	0.47
Married with kids	-0.50	0.29	0.61	0.09	0.07	-0.17	0.31	0.84	0.59	0.08
Unmarried with kids	-0.05	0.34	0.95	0.89	0.09	-0.16	0.40	0.85	0.70	0.06
Lives with kids < age 6	-0.20	0.37	0.82	0.60	0.04	-0.21	0.44	0.81	0.64	0.05
Psychiatric	-0.27	0.17	0.76	0.12	0.38	-0.35	0.19	0.71	0.07	0.43
Intellectual	0.58	0.27	1.79	0.03	0.07	0.69	0.31	2.00	0.02	0.06
Musculoskeletal	0.08	0.18	1.08	0.65	0.20	-0.61	0.18	0.54	0.00	0.23
Sensory	0.04	0.23	1.04	0.85	0.14	-0.07	0.29	0.93	0.81	0.08
Other disorders of the nervous system	-0.23	0.18	0.79	0.19	0.18	-0.16	0.20	0.85	0.41	0.14
Other condition causing limitation	-0.15	0.18	0.86	0.42	0.45	-0.12	0.21	0.88	0.55	0.48

Table B.9 (continued)

	Pre-Regulation-Change Cohort (N = 2,283)					Post-Regulation-Change Cohort (N = 2,755)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
No condition causing limitation	0.28	0.28	1.32	0.33	0.12	0.13	0.29	1.14	0.65	0.13
MCS 44-51	0.42	0.20	1.52	0.04	0.16	0.22	0.20	1.24	0.28	0.14
MCS > 51	0.39	0.28	1.47	0.17	0.54	0.34	0.27	1.41	0.21	0.53
PCS 44-51	0.19	0.23	1.21	0.40	0.18	0.30	0.26	1.34	0.26	0.20
PCS > 51	0.58	0.25	1.78	0.02	0.54	0.37	0.27	1.45	0.17	0.52
MCS > 51 and PCS > 51	0.19	0.29	1.21	0.51	0.32	0.06	0.29	1.06	0.84	0.32
No ADL, IADL, or functional limitations	-0.23	0.25	0.80	0.37	0.06	0.11	0.27	1.12	0.68	0.06
At least one ADL or IADL requiring assistance	0.05	0.17	1.06	0.75	0.53	0.09	0.19	1.10	0.63	0.56
At least one severe physical limitation	-0.31	0.21	0.73	0.13	0.33	-0.39	0.18	0.68	0.03	0.32
Obese	-0.25	0.15	0.78	0.11	0.38	0.04	0.16	1.04	0.79	0.39
Substance abuse	-0.08	0.29	0.92	0.78	0.08	-0.22	0.32	0.81	0.50	0.08
FPL 300+	0.39	0.26	1.48	0.13	0.10	0.77	0.28	2.15	0.01	0.08
Unemployment rate	-6.66	3.94	0.00	0.09	0.05	-11.62	3.55	0.00	0.00	0.10
Assignment to an EN	0.02	0.12	1.02	0.85	0.15	0.47	0.12	1.60	0.00	0.20
R-squared	0.14					0.14				

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.10. Logit Model of the Likelihood of Reporting Working Fewer Hours Than Able Among Those Who Were Employed in the Year Before NBS Interview

	Pre-Regulation-Change Cohort (N = 524)					Post-Regulation-Change Cohort (N = 546)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Sample: TTW participants employed in the previous year										
Dependent variable = worked fewer hours in previous year					0.25					0.22
Regression-adjusted estimated mean					0.18					0.15
Constant	-0.94	1.80	0.39	0.60		-0.74	1.72	0.48	0.67	
Concurrent	-0.84	0.55	0.43	0.13	0.24	-0.55	0.56	0.58	0.32	0.16
DI-only	-0.46	0.42	0.63	0.28	0.47	-0.15	0.43	0.86	0.73	0.56
PIA > 1200	-0.12	0.65	0.88	0.85	0.10	-0.51	0.71	0.60	0.47	0.14
SS benefits 500-1000	0.87	0.45	2.39	0.06	0.58	1.10	0.71	3.00	0.12	0.62
SS benefits > 1000	0.60	0.45	1.82	0.18	0.23	1.29	0.99	3.63	0.20	0.26
Other benefits 1-199	0.71	0.58	2.04	0.22	0.15	1.13	0.42	3.10	0.01	0.15
Other benefits 200-499	0.38	0.64	1.46	0.55	0.08	0.75	0.57	2.12	0.19	0.14
Other benefits 500+	1.70	0.97	5.47	0.08	0.06	0.67	0.49	1.95	0.18	0.09
0-24 months on rolls	-0.70	1.22	0.50	0.57	0.01	-2.67	1.76	0.07	0.13	0.02
25-60 months on rolls	0.37	0.47	1.44	0.44	0.17	0.46	0.52	1.58	0.37	0.23
61-120 months on rolls	0.79	0.44	2.21	0.07	0.23	-0.32	0.52	0.73	0.53	0.19
Age 18-24	-0.60	0.91	0.55	0.51	0.19	0.45	0.81	1.57	0.58	0.22
Age 25-39	0.09	0.66	1.09	0.89	0.33	0.51	0.48	1.67	0.29	0.25
Age 40-54	0.01	0.71	1.01	0.99	0.39	0.50	0.45	1.65	0.27	0.33
Male	-0.17	0.34	0.84	0.61	0.52	0.50	0.35	1.66	0.16	0.53
African American	0.39	0.50	1.47	0.44	0.29	0.91	0.49	2.49	0.06	0.19
Other race	0.91	0.92	2.48	0.33	0.06	-0.42	0.58	0.66	0.48	0.08
Hispanic/Latino	0.22	0.73	1.25	0.76	0.09	0.72	0.44	2.05	0.11	0.12
Education = high school	0.00	0.42	1.00	1.00	0.44	-0.59	0.49	0.55	0.23	0.49
Education beyond high school	-0.20	0.50	0.82	0.69	0.39	-0.52	0.48	0.60	0.28	0.35
Lives with spouse/other relatives, no kids	0.53	0.40	1.71	0.18	0.44	-0.21	0.41	0.81	0.61	0.49
Married with kids	1.56	0.70	4.74	0.03	0.06	-1.40	0.71	0.25	0.05	0.07
Unmarried with kids	-1.05	0.74	0.35	0.15	0.07	-0.44	0.77	0.64	0.57	0.02
Lives with kids < age 6	-1.42	0.95	0.24	0.14	0.03	-4.32	1.93	0.01	0.03	0.03
Psychiatric	-0.20	0.61	0.82	0.74	0.40	0.52	0.59	1.68	0.38	0.48
Intellectual	-4.96	1.28	0.01	0.00	0.08	0.56	1.12	1.75	0.62	0.06
Musculoskeletal	0.17	0.46	1.18	0.72	0.21	-0.24	0.51	0.78	0.63	0.22
Sensory	-1.10	0.82	0.33	0.18	0.11	0.05	0.72	1.05	0.95	0.04
Other disorders of the nervous system	0.06	0.61	1.06	0.92	0.14	-0.03	0.75	0.97	0.97	0.12

Table B.10 (continued)

	Pre-Regulation-Change Cohort (N = 524)					Post-Regulation-Change Cohort (N = 546)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Other condition causing limitation	-0.08	0.41	0.92	0.84	0.43	0.04	0.53	1.04	0.93	0.49
No condition causing limitation	0.68	0.55	1.97	0.22	0.13	0.59	0.93	1.81	0.52	0.15
MCS 44-51	0.10	0.49	1.11	0.83	0.14	0.02	0.56	1.02	0.97	0.16
MCS > 51	0.05	0.67	1.05	0.94	0.54	0.57	0.53	1.77	0.28	0.51
PCS 44-51	-0.64	0.62	0.53	0.30	0.19	-1.15	0.52	0.32	0.03	0.21
PCS > 51	-0.75	0.70	0.47	0.29	0.58	-0.78	0.56	0.46	0.16	0.52
MCS > 51 and PCS > 51	-0.06	0.74	0.94	0.94	0.38	-0.94	0.79	0.39	0.23	0.33
No ADL, IADL, or functional limitations	-0.99	0.73	0.37	0.18	0.09	0.56	0.58	1.75	0.33	0.10
At least one ADL or IADL requiring assistance	-0.14	0.44	0.87	0.75	0.45	-0.41	0.51	0.66	0.42	0.57
At least one severe physical limitation	-0.89	0.48	0.41	0.07	0.28	0.40	0.50	1.50	0.42	0.26
Obese	0.67	0.35	1.95	0.06	0.42	-0.48	0.33	0.62	0.15	0.36
Substance abuse	-0.09	0.61	0.91	0.88	0.11	1.47	0.80	4.36	0.06	0.09
FPL 300+	-0.46	0.58	0.63	0.42	0.10	1.41	0.67	4.08	0.04	0.08
Unemployment rate	-5.67	14.06	0.00	0.69	0.05	-19.62	9.80	0.00	0.05	0.09
Assignment to an EN	-0.18	0.33	0.84	0.60	0.16	0.07	0.41	1.07	0.86	0.20
R-squared	0.20					0.18				

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.11. Ordinary Least Squares Model of Hours Worked per Month Among TTW Participants Who Were Employed at NBS Interview

	Pre-Regulation-Change Cohort (N = 812)				Post-Regulation-Change Cohort (N = 768)			
	Coefficient	Std. Error	P > t	Variable Mean	Coefficient	Std. Error	P > t	Variable Mean
Sample: TTW participants employed at NBS interview								
Dependent variable = hours worked per month				95.51				79.87
Regression-adjusted estimated mean				98.61				79.87
Constant	90.6	16.8	0.00		79.9	23.7	0.00	
Concurrent	14.5	7.2	0.04	0.21	-12.5	7.9	0.11	0.14
DI-only	2.6	7.1	0.71	0.56	0.5	7.9	0.95	0.57
PIA > 1200	12.6	7.7	0.10	0.16	-7.2	11.2	0.52	0.17
SS benefits 500-1000	-35.0	7.6	0.00	0.53	-1.9	8.3	0.82	0.53
SS benefits > 1000	-39.5	10.0	0.00	0.24	14.9	9.9	0.13	0.29
Other benefits 1-199	-15.3	6.7	0.02	0.14	-28.6	7.0	0.00	0.10
Other benefits 200-499	10.3	12.2	0.40	0.07	-12.1	9.9	0.22	0.10
Other benefits 500+	16.3	18.0	0.36	0.03	-15.2	8.7	0.08	0.06
0-24 months on rolls	-10.8	11.7	0.36	0.02	29.4	13.6	0.03	0.03
25-60 months on rolls	-4.4	7.2	0.54	0.17	6.3	7.5	0.40	0.27
61-120 months on rolls	-1.9	5.5	0.72	0.24	-1.0	8.9	0.91	0.18
Age 18-24	-14.6	10.4	0.16	0.15	-24.7	12.1	0.04	0.24
Age 25-39	5.7	8.2	0.49	0.35	-8.1	11.9	0.49	0.32
Age 40-54	15.9	9.2	0.08	0.38	-15.1	8.8	0.08	0.30
Male	6.0	5.0	0.24	0.58	10.9	5.6	0.05	0.59
African American	11.1	5.9	0.06	0.23	13.6	5.4	0.01	0.20
Other race	4.9	8.7	0.58	0.05	10.5	7.5	0.16	0.08
Hispanic/Latino	14.3	8.5	0.09	0.08	-3.2	8.9	0.72	0.12
Education = high school	16.8	7.2	0.02	0.41	-4.0	6.9	0.57	0.54
Education beyond high school	20.9	7.4	0.00	0.39	0.6	7.5	0.94	0.34
Lives with spouse/other relatives, no kids	4.0	6.8	0.56	0.44	5.6	6.1	0.35	0.44
Married with kids	24.6	13.6	0.07	0.05	49.1	30.6	0.11	0.08
Unmarried with kids	-5.5	11.8	0.64	0.06	-2.7	11.9	0.82	0.04
Lives with kids < age 6	11.7	20.6	0.57	0.03	-16.9	27.9	0.55	0.05
Psychiatric	-14.3	6.2	0.02	0.33	-6.6	6.2	0.29	0.37
Intellectual	-9.2	7.7	0.23	0.11	-18.5	8.9	0.04	0.11
Musculoskeletal	-2.4	6.8	0.72	0.17	6.8	8.7	0.43	0.13
Sensory	1.0	7.4	0.90	0.15	-1.5	10.4	0.89	0.08
Other disorders of the nervous system	3.7	7.9	0.64	0.16	6.5	9.0	0.47	0.12
Other condition causing limitation	-12.6	6.1	0.04	0.39	-0.1	8.2	0.99	0.42
No condition causing limitation	2.4	9.4	0.80	0.16	6.8	10.5	0.52	0.19
MCS 44-51	-2.2	7.5	0.77	0.17	8.5	6.6	0.20	0.13
MCS > 51	11.5	10.2	0.26	0.62	-7.0	8.8	0.43	0.64

Table B.11 (continued)

	Pre-Regulation-Change Cohort (N = 812)				Post-Regulation-Change Cohort (N = 768)			
	Coefficient	Std. Error	P > t	Variable Mean	Coefficient	Std. Error	P > t	Variable Mean
PCS 44-51	-3.1	8.1	0.70	0.15	-0.7	7.6	0.92	0.18
PCS > 51	-0.7	9.9	0.94	0.67	-3.8	10.1	0.71	0.66
MCS > 51 and PCS > 51	-15.3	10.8	0.15	0.44	29.5	9.5	0.00	0.47
No ADL, IADL, or functional limitations	1.9	10.3	0.85	0.08	-8.1	8.8	0.36	0.09
At least one ADL or IADL requiring assistance	-6.5	5.8	0.26	0.47	-8.2	5.8	0.16	0.50
At least one severe physical limitation	-1.2	6.0	0.84	0.25	-4.1	5.8	0.48	0.20
Obese	6.7	5.4	0.21	0.35	-0.8	4.7	0.87	0.36
Substance abuse	0.0	8.8	1.00	0.08	4.6	7.4	0.54	0.06
FPL 300+	10.8	8.9	0.22	0.13	-12.2	7.7	0.11	0.15
Unemployment rate	120.0	146.3	0.41	0.05	11.8	120.2	0.92	0.09
Assignment to an EN	11.2	4.9	0.02	0.15	10.2	4.2	0.02	0.23
R-squared	0.25				0.24			

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.12. Ordinary Least Squares Model of Job Tenure (in Months) Among Those Who Were Employed at NBS Interview

	Pre-Regulation-Change Cohort (N = 772)				Post-Regulation-Change Cohort (N = 727)			
	Coefficient	Std. Error	P > t	Variable Mean	Coefficient	Std. Error	P > t	Variable Mean
Sample: TTW participants employed at NBS interview								
Dependent variable = job tenure (in months)				21.03				20.40
Regression-adjusted estimated mean				18.58				20.38
Constant	40.46	15.08	0.01		38.60	14.02	0.01	
Concurrent	3.49	5.28	0.51	0.20	10.68	6.11	0.08	0.15
DI-only	-2.36	6.11	0.70	0.56	17.91	6.25	0.00	0.57
PIA>1200	3.33	7.88	0.67	0.16	-5.45	5.43	0.32	0.16
SS benefits 500-1000	1.14	4.32	0.79	0.53	-18.83	8.52	0.03	0.54
SS benefits >1000	-0.58	5.84	0.92	0.24	-14.27	9.35	0.13	0.28
Other benefits 1-199	-11.76	3.98	0.00	0.14	-6.94	4.19	0.10	0.09
Other benefits 200-499	-2.40	5.28	0.65	0.07	6.44	5.81	0.27	0.11
Other benefits 500+	-11.89	4.30	0.01	0.04	4.69	5.89	0.43	0.06
0-24 months on rolls	-15.95	5.36	0.00	0.02	-8.28	6.28	0.19	0.03
25-60 months on rolls	-13.08	4.03	0.00	0.18	-9.51	3.47	0.01	0.26
61-120 months on rolls	-13.60	3.75	0.00	0.24	-2.49	3.87	0.52	0.18
Age 18-24	-17.74	8.92	0.05	0.16	-3.92	6.90	0.57	0.24
Age 25-39	-10.10	9.98	0.31	0.36	-1.58	6.84	0.82	0.33
Age 40-54	-7.95	9.93	0.42	0.38	3.09	5.22	0.55	0.30
Male	-0.18	3.22	0.96	0.59	-0.11	3.25	0.97	0.59
African American	-5.90	3.10	0.06	0.22	-7.91	3.36	0.02	0.20
Other race	-1.66	8.26	0.84	0.06	3.32	8.49	0.70	0.07
Hispanic/Latino	-10.82	5.90	0.07	0.08	-0.48	4.89	0.92	0.12
Education = high school	0.55	4.58	0.90	0.42	-8.31	9.02	0.36	0.54
Education beyond high school	-2.25	5.37	0.68	0.41	-8.44	8.22	0.30	0.35
Lives with spouse/other relatives, no kids	-2.22	4.29	0.61	0.45	3.34	3.79	0.38	0.45
Married with kids	-2.45	6.59	0.71	0.06	-5.22	5.86	0.37	0.09
Unmarried with kids	2.11	4.99	0.67	0.06	4.69	6.07	0.44	0.04
Lives with kids < age 6	-0.28	7.06	0.97	0.03	-6.08	7.05	0.39	0.05
Psychiatric	3.63	3.79	0.34	0.33	-7.56	3.70	0.04	0.38
Intellectual	-5.46	5.78	0.35	0.10	20.79	9.36	0.03	0.11
Musculoskeletal	-8.78	4.10	0.03	0.18	-7.79	4.84	0.11	0.13
Sensory	5.33	5.12	0.30	0.14	13.58	6.47	0.04	0.08
Other disorders of the nervous system	4.88	6.18	0.43	0.16	4.23	5.93	0.48	0.12
Other condition causing limitation	0.01	3.74	1.00	0.40	4.46	4.47	0.32	0.41
No condition causing limitation	-0.49	6.20	0.94	0.16	-2.97	4.54	0.51	0.18
MCS 44-51	9.39	4.98	0.06	0.17	0.48	5.17	0.93	0.14
MCS > 51	-0.65	8.94	0.94	0.62	-9.45	5.35	0.08	0.65

Table B.12 (continued)

	Pre-Regulation-Change Cohort (N = 772)				Post-Regulation-Change Cohort (N = 727)			
	Coefficient	Std. Error	P > t	Variable Mean	Coefficient	Std. Error	P > t	Variable Mean
PCS 44-51	8.81	7.36	0.23	0.14	-4.07	4.21	0.33	0.18
PCS > 51	-9.50	6.50	0.14	0.67	-0.35	5.28	0.95	0.66
MCS > 51 and PCS > 51	14.35	9.11	0.12	0.45	2.30	6.33	0.72	0.47
No ADL, IADL, or functional limitations	-3.94	4.66	0.40	0.08	3.97	4.41	0.37	0.09
At least one ADL or IADL requiring assistance	3.30	4.19	0.43	0.47	4.93	3.66	0.18	0.49
At least one severe physical limitation	4.47	4.64	0.34	0.25	-5.62	3.60	0.12	0.19
Obese	-5.76	2.94	0.05	0.35	2.97	4.12	0.47	0.36
Substance abuse	-0.16	5.23	0.98	0.08	-5.32	4.59	0.25	0.06
FPL 300+	3.85	6.53	0.56	0.14	3.57	5.01	0.48	0.15
Unemployment rate	-23.52	90.60	0.80	0.05	-29.59	76.76	0.70	0.09
Assignment to an EN	-5.33	3.21	0.10	0.15	3.04	3.12	0.33	0.23
R-squared	0.13				0.19			

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.13. Log Ordinary Least Squares Model of Monthly Earnings Among Those Who Were Employed at NBS Interview

	Pre-Regulation-Change Cohort (N = 721)				Post-Regulation-Change Cohort (N = 599)			
	Coefficient	Std. Error	P > t	Variable Mean	Coefficient	Std. Error	P > t	Variable Mean
Sample: TTW participants employed at NBS interview								
Dependent variable = Log of positive monthly earnings				6.17				6.06
Regression-adjusted estimated mean				6.22				6.06
Constant	5.93	0.32	0.00		5.33	0.51	0.00	
Concurrent	0.22	0.13	0.10	0.21	0.27	0.23	0.25	0.12
DI-only	0.24	0.13	0.06	0.54	0.50	0.16	0.00	0.62
PIA > 1200	0.19	0.12	0.12	0.16	0.06	0.15	0.68	0.18
SS benefits 500-1000	-0.70	0.11	0.00	0.52	-0.51	0.16	0.00	0.53
SS benefits > 1000	-0.73	0.14	0.00	0.23	-0.45	0.21	0.03	0.30
Other benefits 1-199	-0.24	0.11	0.03	0.14	-0.61	0.21	0.00	0.10
Other benefits 200-499	0.11	0.16	0.50	0.07	-0.29	0.17	0.09	0.11
Other benefits 500+	0.12	0.22	0.57	0.03	-0.06	0.22	0.77	0.06
0-24 months on rolls	-0.17	0.29	0.56	0.02	0.17	0.27	0.52	0.03
25-60 months on rolls	0.04	0.14	0.76	0.17	0.33	0.13	0.01	0.27
61-120 months on rolls	0.00	0.10	0.98	0.25	0.11	0.14	0.41	0.17
Age 18-24	-0.07	0.20	0.71	0.15	-0.55	0.27	0.04	0.20
Age 25-39	0.26	0.14	0.07	0.36	-0.27	0.20	0.17	0.31
Age 40-54	0.47	0.13	0.00	0.36	-0.09	0.15	0.55	0.36
Male	0.18	0.09	0.05	0.58	0.05	0.13	0.72	0.60
African American	0.33	0.10	0.00	0.23	0.40	0.12	0.00	0.19
Other race	0.15	0.16	0.34	0.06	0.13	0.27	0.64	0.07
Hispanic/Latino	0.46	0.12	0.00	0.08	0.20	0.16	0.22	0.12
Education = high school	0.25	0.12	0.04	0.41	0.17	0.18	0.36	0.51
Education beyond high school	0.68	0.13	0.00	0.38	0.51	0.19	0.01	0.37
Lives with spouse/other relatives, no kids	0.01	0.10	0.93	0.45	0.17	0.14	0.23	0.43
Married with kids	0.62	0.22	0.01	0.05	0.37	0.22	0.09	0.09
Unmarried with kids	0.08	0.23	0.72	0.06	0.48	0.26	0.07	0.04
Lives with kids < age 6	0.07	0.26	0.78	0.03	0.09	0.25	0.73	0.05
Psychiatric	-0.27	0.10	0.01	0.33	0.05	0.13	0.73	0.40
Intellectual	-0.56	0.15	0.00	0.10	-0.31	0.16	0.05	0.10
Musculoskeletal	-0.14	0.11	0.22	0.18	-0.01	0.21	0.94	0.14
Sensory	-0.20	0.12	0.09	0.14	0.09	0.18	0.61	0.11
Other disorders of the nervous system	0.16	0.12	0.16	0.16	0.07	0.19	0.70	0.13
Other condition causing limitation	-0.09	0.08	0.26	0.39	-0.19	0.12	0.13	0.41
No condition causing limitation	-0.07	0.15	0.62	0.15	0.05	0.22	0.81	0.16
MCS 44-51	-0.07	0.12	0.57	0.17	0.13	0.16	0.40	0.12

Table B.13 (continued)

	Pre-Regulation-Change Cohort (N = 721)				Post-Regulation-Change Cohort (N = 599)			
	Coefficient	Std. Error	P > t	Variable Mean	Coefficient	Std. Error	P > t	Variable Mean
MCS > 51	0.17	0.14	0.25	0.61	0.03	0.17	0.84	0.65
PCS 44-51	-0.11	0.14	0.41	0.15	0.16	0.16	0.32	0.18
PCS > 51	-0.17	0.18	0.33	0.67	0.07	0.23	0.75	0.63
MCS > 51 and PCS > 51	-0.18	0.17	0.28	0.44	0.07	0.20	0.72	0.45
No ADL, IADL, or functional limitations	0.17	0.15	0.27	0.07	0.05	0.23	0.83	0.07
At least one ADL or IADL requiring assistance	-0.17	0.10	0.09	0.47	-0.01	0.15	0.94	0.57
At least one severe physical limitation	-0.03	0.09	0.73	0.25	0.01	0.10	0.94	0.22
Obese	0.04	0.10	0.69	0.34	0.17	0.10	0.11	0.34
Substance abuse	0.01	0.14	0.97	0.07	0.01	0.21	0.96	0.07
FPL 300+	0.26	0.11	0.03	0.13	0.09	0.13	0.49	0.16
Unemployment rate	1.07	2.31	0.64	0.05	2.72	2.60	0.30	0.09
Assignment to an EN	0.14	0.09	0.11	0.15	0.18	0.09	0.03	0.24
R-squared	0.42				0.36			

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.14. Logit Model of the Likelihood of Reporting Being Very or Somewhat Successful in Reaching Work Goals Since Participating in TTW

	Pre-Regulation-Change Cohort (N = 938)					Post-Regulation-Change Cohort (N = 1,299)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Sample: TTW participants aware of Ticket participation										
Dependent variable = success in reaching goals since participating in TTW					0.53					0.45
Regression-adjusted mean					0.44					0.44
Constant	1.44	1.09	4.22	0.19		0.49	1.06	1.64	0.64	
Concurrent	0.51	0.34	1.67	0.13	0.18	0.06	0.36	1.06	0.87	0.15
DI-only	0.53	0.31	1.70	0.09	0.61	-0.21	0.30	0.81	0.49	0.57
PIA > 1200	0.62	0.42	1.86	0.14	0.20	0.47	0.31	1.61	0.13	0.17
SS benefits 500-1000	-0.72	0.38	0.49	0.06	0.52	0.52	0.38	1.68	0.17	0.57
SS benefits > 1000	-1.12	0.53	0.33	0.03	0.37	-0.12	0.45	0.89	0.79	0.32
Other benefits 1-199	-0.20	0.27	0.82	0.45	0.16	-0.09	0.29	0.91	0.74	0.20
Other benefits 200-499	0.05	0.35	1.05	0.89	0.10	-0.41	0.36	0.66	0.25	0.13
Other benefits 500+	-0.33	0.48	0.72	0.50	0.07	-0.36	0.39	0.70	0.36	0.10
0-24 months on rolls	-0.97	0.61	0.38	0.12	0.03	-0.56	0.55	0.57	0.30	0.03
25-60 months on rolls	0.17	0.35	1.18	0.64	0.23	-0.48	0.30	0.62	0.12	0.26
61-120 months on rolls	-0.07	0.31	0.94	0.83	0.26	0.11	0.27	1.12	0.68	0.20
Age 18-24	0.92	0.72	2.52	0.20	0.05	1.02	0.55	2.77	0.06	0.19
Age 25-39	0.44	0.45	1.56	0.33	0.29	0.32	0.39	1.37	0.42	0.27
Age 40-54	0.22	0.43	1.25	0.60	0.49	0.12	0.32	1.13	0.70	0.38
Male	-0.62	0.32	0.54	0.05	0.50	-0.11	0.22	0.90	0.63	0.53
African American	0.17	0.25	1.19	0.50	0.26	-0.56	0.26	0.57	0.03	0.25
Other race	0.29	0.38	1.34	0.45	0.06	-0.07	0.42	0.94	0.87	0.08
Hispanic/Latino	0.48	0.42	1.62	0.25	0.08	-0.22	0.41	0.80	0.59	0.09
Education = high school	-0.27	0.46	0.77	0.56	0.31	-0.17	0.36	0.84	0.63	0.49
Education beyond high school	-0.34	0.46	0.71	0.46	0.53	0.52	0.37	1.69	0.16	0.37
Lives with spouse/other relatives, no kids	-0.24	0.29	0.78	0.40	0.38	-0.15	0.25	0.86	0.56	0.49
Married with kids	0.98	0.52	2.66	0.06	0.08	-0.26	0.40	0.77	0.51	0.07
Unmarried with kids	-0.24	0.43	0.79	0.58	0.10	-0.66	0.45	0.52	0.14	0.06
Lives with kids < age 6	-1.31	0.82	0.27	0.11	0.03	-0.78	0.80	0.46	0.33	0.04
Psychiatric	-0.48	0.31	0.62	0.13	0.42	-0.13	0.28	0.88	0.64	0.45
Intellectual	1.19	0.74	3.29	0.11	0.04	-0.95	0.45	0.39	0.04	0.07
Musculoskeletal	-0.14	0.25	0.87	0.58	0.28	-0.09	0.22	0.92	0.69	0.27
Sensory	-0.34	0.38	0.71	0.38	0.12	-0.34	0.36	0.71	0.34	0.08

Table B.14 (continued)

	Pre-Regulation-Change Cohort (N = 938)					Post-Regulation-Change Cohort (N = 1,299)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Other disorders of the nervous system	0.10	0.34	1.11	0.76	0.19	-0.23	0.28	0.79	0.40	0.15
Other condition causing limitation	-0.14	0.24	0.87	0.58	0.52	0.04	0.27	1.04	0.90	0.48
No condition causing limitation	-0.34	0.58	0.71	0.56	0.08	0.22	0.42	1.25	0.60	0.09
MCS 44-51	0.93	0.38	2.54	0.02	0.15	0.57	0.32	1.76	0.08	0.15
MCS > 51	0.71	0.40	2.04	0.08	0.53	0.48	0.38	1.62	0.20	0.52
PCS 44-51	0.03	0.35	1.03	0.92	0.19	-0.25	0.29	0.78	0.38	0.19
PCS > 51	0.49	0.46	1.64	0.28	0.45	-0.42	0.36	0.66	0.24	0.52
MCS > 51 and PCS > 51	-0.38	0.49	0.68	0.44	0.26	0.31	0.44	1.37	0.48	0.30
No ADL, IADL, or functional limitations	0.01	0.64	1.01	0.99	0.04	-0.25	0.51	0.78	0.62	0.05
At least one ADL or IADL requiring assistance	-0.48	0.32	0.62	0.14	0.53	-0.24	0.23	0.79	0.31	0.56
At least one severe physical limitation	-0.44	0.23	0.64	0.06	0.36	-0.39	0.24	0.68	0.11	0.33
Obese	0.09	0.29	1.09	0.77	0.41	0.20	0.22	1.23	0.35	0.41
Substance abuse	0.32	0.32	1.38	0.32	0.08	-0.08	0.39	0.93	0.84	0.08
FPL 300+	0.20	0.32	1.22	0.55	0.13	-0.13	0.38	0.88	0.73	0.09
Unemployment rate	-9.51	7.00	0.00	0.17	0.05	-12.24	4.20	0.00	0.00	0.10
Assignment to EN	-0.59	0.17	0.55	0.00	0.20	-0.39	0.17	0.68	0.02	0.20
Ever worked for pay	-0.13	0.81	0.88	0.87	0.98	0.85	0.31	2.34	0.01	0.82
R-square	0.18					0.14				

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.15. Logit Model of the Likelihood of Reporting Being Very or Somewhat Satisfied with TTW Overall

	Pre-Regulation-Change Cohort (N = 874)					Post-Regulation-Change Cohort (N = 1,101)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Sample: Nonproxy TTW participants aware of Ticket participation										
Dependent variable = very or somewhat satisfied with TTW overall					0.69					0.74
Regression-adjusted estimated mean					0.66					0.78
Constant	0.01	1.27	1.01	0.99		3.54	1.05	0.00	34.41	
Concurrent	0.17	0.36	1.18	0.64	0.18	-0.36	0.44	0.42	0.70	0.14
DI-only	0.93	0.32	2.53	0.00	0.63	-0.45	0.35	0.20	0.64	0.65
PIA > 1200	0.48	0.41	1.62	0.23	0.20	0.92	0.41	0.02	2.50	0.18
SS Benefits 500-1000	0.39	0.40	1.48	0.33	0.51	0.40	0.40	0.32	1.49	0.56
SS Benefits > 1000	-0.17	0.49	0.85	0.73	0.39	-0.07	0.46	0.88	0.93	0.36
Other Benefits 1-199	-0.27	0.37	0.76	0.47	0.17	0.35	0.33	0.29	1.42	0.23
Other Benefits 200-499	-0.20	0.38	0.82	0.59	0.10	-0.27	0.38	0.49	0.77	0.15
Other Benefits 500+	0.57	0.49	1.76	0.25	0.07	-0.13	0.38	0.74	0.88	0.11
0-24 Months on rolls	-0.45	0.58	0.64	0.43	0.03	-0.37	0.49	0.45	0.69	0.04
25-60 Months on rolls	-0.20	0.32	0.82	0.55	0.24	0.32	0.34	0.34	1.38	0.27
61-120 Months on rolls	-0.32	0.33	0.73	0.34	0.26	-0.03	0.29	0.92	0.97	0.22
Age 18-24	3.22	1.00	24.94	0.00	0.04	-0.31	0.64	0.62	0.73	0.12
Age 25-39	0.54	0.46	1.71	0.24	0.28	-0.85	0.46	0.06	0.43	0.28
Age 40-54	-0.17	0.38	0.84	0.65	0.50	-0.26	0.42	0.54	0.77	0.44
Male	-0.50	0.29	0.60	0.09	0.50	-0.19	0.29	0.51	0.82	0.49
African American	-0.06	0.27	0.94	0.82	0.25	-0.85	0.32	0.01	0.43	0.27
Other race	0.19	0.45	1.21	0.68	0.06	-0.90	0.53	0.09	0.41	0.08
Hispanic/Latino	-0.34	0.50	0.71	0.50	0.08	-1.21	0.57	0.04	0.30	0.08
Education = high school	0.52	0.47	1.68	0.27	0.29	0.55	0.37	0.14	1.73	0.44
Education beyond high school	-0.15	0.41	0.86	0.72	0.57	0.39	0.39	0.31	1.48	0.43
Lives with spouse/other relatives, no kids	-0.07	0.30	0.93	0.81	0.36	-0.15	0.27	0.58	0.86	0.44
Married with kids	0.67	0.55	1.96	0.22	0.09	0.09	0.62	0.88	1.10	0.08
Unmarried with kids	-0.31	0.41	0.74	0.46	0.11	-0.66	0.45	0.14	0.52	0.07
Lives with kids < age 6	-0.85	0.77	0.43	0.27	0.03	-0.59	0.66	0.37	0.56	0.04
Psychiatric	0.26	0.31	1.30	0.40	0.42	-0.19	0.29	0.50	0.82	0.43
Intellectual	1.50	1.51	4.48	0.32	0.01	-1.27	0.91	0.17	0.28	0.01
Musculoskeletal	0.04	0.30	1.05	0.88	0.30	-0.57	0.35	0.10	0.56	0.31
Sensory	0.23	0.56	1.26	0.68	0.11	0.25	0.66	0.71	1.28	0.07
Other disorders of the nervous system	0.07	0.36	1.07	0.85	0.19	0.31	0.34	0.37	1.36	0.15

Table B.15 (continued)

	Pre-Regulation-Change Cohort (N = 874)					Post-Regulation-Change Cohort (N = 1,101)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Other condition causing limitation	-0.06	0.27	0.94	0.82	0.53	-0.79	0.28	0.00	0.45	0.47
No condition causing limitation	0.23	0.54	1.26	0.67	0.08	0.08	0.51	0.87	1.09	0.11
MCS 44-51	0.76	0.39	2.13	0.05	0.15	0.37	0.42	0.37	1.45	0.15
MCS > 51	-0.14	0.37	0.87	0.71	0.51	0.32	0.38	0.40	1.37	0.48
PCS 44-51	-0.06	0.36	0.95	0.87	0.20	0.26	0.34	0.45	1.30	0.21
PCS > 51	0.02	0.46	1.02	0.97	0.44	-0.48	0.47	0.31	0.62	0.46
MCS > 51 and PCS > 51	0.99	0.52	2.69	0.06	0.24	0.43	0.47	0.36	1.54	0.24
No ADL, IADL, or functional limitations	1.18	0.72	3.24	0.10	0.04	-0.18	0.52	0.73	0.83	0.05
At least one ADL or IADL requiring assistance	0.04	0.30	1.04	0.90	0.53	-0.71	0.28	0.01	0.49	0.52
At least one severe physical limitation	-0.29	0.31	0.75	0.36	0.37	0.01	0.26	0.96	1.01	0.38
Obese	0.08	0.26	1.08	0.76	0.43	0.26	0.25	0.30	1.30	0.42
Substance abuse	0.78	0.47	2.18	0.10	0.09	0.35	0.48	0.46	1.42	0.09
FPL 300+	0.35	0.42	1.42	0.41	0.13	0.06	0.48	0.91	1.06	0.08
Unemployment rate	-13.99	6.77	0.00	0.04	0.05	-12.18	5.02	0.02	0.00	0.10
Assignment to EN	-0.49	0.17	0.61	0.00	0.20	-0.53	0.22	0.02	0.59	0.23
Ever worked for pay	0.64	0.91	1.89	0.48	0.98	0.21	0.41	0.60	1.24	0.86
R-square	0.16					0.18				

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.16. Logit Model of the Likelihood of Having Ever Worked for Pay

	Pre-Regulation-Change Cohort (N = 2,283)					Post-Regulation-Change Cohort (N = 2,755)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Sample: TTW participants										
Dependent variable = ever worked for pay					0.93					0.79
Constant	3.64	1.04	38.26	0.00		1.27	0.77	3.55	0.10	
Concurrent	0.27	0.31	1.31	0.38	0.22	0.22	0.30	1.25	0.46	0.15
DI-only	1.62	0.45	5.06	0.00	0.49	0.49	0.23	1.63	0.04	0.53
PIA > 1200	-1.39	0.63	0.25	0.03	0.15	-0.65	0.40	0.52	0.10	0.15
SS benefits 500-1000	-1.29	0.50	0.28	0.01	0.58	0.24	0.23	1.27	0.30	0.59
SS benefits > 1000	-1.53	0.58	0.22	0.01	0.28	0.69	0.39	1.99	0.08	0.29
Other benefits 1-199	0.28	0.55	1.32	0.61	0.17	-0.72	0.22	0.49	0.00	0.18
Other benefits 200-499	-0.68	0.61	0.51	0.26	0.08	-0.18	0.24	0.83	0.44	0.15
Other benefits 500+	0.36	0.87	1.44	0.68	0.06	-0.41	0.32	0.66	0.20	0.09
0-24 months on rolls	2.55	1.40	12.83	0.07	0.02	0.35	0.50	1.41	0.49	0.03
25-60 months on rolls	0.92	0.37	2.51	0.01	0.19	1.07	0.23	2.92	0.00	0.23
61-120 months on rolls	1.06	0.38	2.90	0.01	0.23	0.62	0.24	1.86	0.01	0.20
Age 18-24	-2.97	0.71	0.05	0.00	0.15	-1.02	0.26	0.36	0.00	0.22
Age 25-39	-1.41	0.58	0.25	0.01	0.33	-0.20	0.27	0.82	0.46	0.27
Age 40-54	-0.17	0.60	0.85	0.78	0.40	0.33	0.25	1.39	0.20	0.35
Male	0.31	0.33	1.37	0.34	0.52	0.35	0.21	1.42	0.10	0.53
African American	-0.29	0.25	0.75	0.24	0.26	-0.19	0.23	0.83	0.42	0.25
Other race	-0.68	0.40	0.51	0.09	0.06	0.49	0.37	1.63	0.19	0.07
Hispanic/Latino	-0.38	0.55	0.69	0.49	0.09	-0.32	0.31	0.73	0.31	0.13
Education = high school	0.68	0.32	1.96	0.04	0.41	0.49	0.26	1.63	0.06	0.50
Education beyond high school	1.26	0.43	3.53	0.00	0.40	0.96	0.31	2.61	0.00	0.34
Lives with spouse/other relatives, no kids	0.15	0.42	1.16	0.72	0.44	-0.04	0.20	0.96	0.84	0.47
Married with kids	0.40	0.85	1.49	0.64	0.07	1.00	0.66	2.71	0.13	0.08
Unmarried with kids	-0.09	0.68	0.92	0.90	0.09	0.34	0.53	1.40	0.53	0.06
Lives with kids < age 6	-0.14	0.98	0.87	0.89	0.04	-1.14	0.52	0.32	0.03	0.05
Psychiatric	0.35	0.37	1.41	0.34	0.38	-0.24	0.21	0.79	0.27	0.43
Intellectual	0.66	0.57	1.93	0.25	0.07	-0.15	0.34	0.86	0.65	0.06
Musculoskeletal	1.70	0.74	5.49	0.02	0.20	0.25	0.23	1.28	0.29	0.23
Sensory	-0.08	0.46	0.92	0.86	0.14	0.23	0.37	1.25	0.54	0.08
Other disorders of the nervous system	-0.25	0.36	0.78	0.50	0.18	-0.28	0.27	0.75	0.29	0.14
Other condition causing limitation	0.53	0.31	1.69	0.09	0.45	0.05	0.22	1.06	0.80	0.48
No condition causing limitation	0.55	0.47	1.73	0.24	0.12	0.13	0.32	1.14	0.68	0.13
MCS 44-51	0.63	0.47	1.87	0.18	0.16	0.24	0.27	1.27	0.38	0.14

Table B.16 (continued)

	Pre-Regulation-Change Cohort (N = 2,283)					Post-Regulation-Change Cohort (N = 2,755)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
MCS > 51	0.17	0.53	1.18	0.75	0.54	-0.22	0.30	0.80	0.46	0.53
PCS 44-51	-1.27	0.47	0.28	0.01	0.18	-0.05	0.34	0.95	0.88	0.20
PCS > 51	-0.46	0.62	0.63	0.46	0.54	-1.04	0.34	0.35	0.00	0.52
MCS > 51 and PCS > 51	0.27	0.58	1.31	0.64	0.32	0.93	0.35	2.53	0.01	0.32
No ADL, IADL, or functional limitations	-0.23	0.68	0.79	0.73	0.06	0.45	0.35	1.57	0.19	0.06
At least one ADL or IADL requiring assistance	-0.54	0.30	0.58	0.07	0.53	0.13	0.16	1.13	0.44	0.56
At least one severe physical limitation	-1.04	0.31	0.35	0.00	0.33	0.02	0.24	1.02	0.94	0.32
Obese	0.06	0.31	1.06	0.85	0.38	-0.08	0.19	0.93	0.68	0.39
Substance abuse	0.31	0.66	1.37	0.64	0.08	-0.25	0.30	0.78	0.40	0.08
FPL 300+	0.36	0.56	1.44	0.52	0.10	0.52	0.37	1.68	0.16	0.08
Unemployment rate (percent)	0.10	0.11	1.11	0.33	5.21	-0.06	0.04	0.94	0.12	9.80
Assignment to an EN	0.26	0.29	1.30	0.36	0.15	0.39	0.14	1.48	0.00	0.20
R-squared	0.15					0.17				

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

Table B.17. Logit Model of the Likelihood of Employment at Interview or in the Previous Year

	Pre-Regulation-Change Cohort (N = 2,283)					Post-Regulation-Change Cohort (N = 2,755)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
Sample: TTW participants Dependent variable = employed at interview or in the previous year					0.54					0.42
Constant	1.00	0.53	2.73	0.06		1.20	0.70	3.33	0.09	
Concurrent	0.52	0.24	1.69	0.03	0.22	0.17	0.28	1.19	0.54	0.15
DI-only	0.84	0.21	2.32	0.00	0.49	0.36	0.23	1.43	0.12	0.53
PIA > 1200	-0.29	0.24	0.75	0.23	0.15	0.03	0.20	1.03	0.90	0.15
SS benefits 500-1000	-1.16	0.24	0.31	0.00	0.58	-0.50	0.24	0.61	0.04	0.59
SS benefits > 1000	-1.40	0.26	0.25	0.00	0.28	-0.53	0.33	0.59	0.11	0.29
Other benefits 1-199	-0.44	0.18	0.64	0.02	0.17	-0.70	0.18	0.50	0.00	0.18
Other benefits 200-499	-0.20	0.26	0.82	0.44	0.08	-0.41	0.18	0.66	0.03	0.15
Other benefits 500+	-0.30	0.28	0.74	0.28	0.06	-0.64	0.27	0.53	0.02	0.09
0-24 months on rolls	-0.34	0.31	0.71	0.27	0.02	-0.80	0.47	0.45	0.09	0.03
25-60 months on rolls	-0.24	0.18	0.79	0.18	0.19	-0.06	0.15	0.94	0.67	0.23
61-120 months on rolls	-0.02	0.18	0.98	0.90	0.23	-0.05	0.14	0.95	0.74	0.20
Age 18-24	0.07	0.28	1.08	0.80	0.15	0.21	0.30	1.23	0.49	0.22
Age 25-39	0.04	0.22	1.04	0.86	0.33	0.31	0.24	1.37	0.20	0.27
Age 40-54	0.19	0.22	1.21	0.38	0.40	0.07	0.21	1.08	0.73	0.35
Male	0.12	0.15	1.12	0.43	0.52	0.12	0.14	1.13	0.39	0.53
African American	0.10	0.20	1.10	0.62	0.26	-0.21	0.17	0.81	0.22	0.25
Other race	-0.13	0.28	0.88	0.63	0.06	0.21	0.33	1.23	0.52	0.07
Hispanic/Latino	-0.12	0.27	0.88	0.65	0.09	-0.24	0.26	0.79	0.37	0.13
Education = high school	-0.03	0.17	0.97	0.85	0.41	0.21	0.24	1.24	0.37	0.50
Education beyond high school	0.07	0.19	1.07	0.71	0.40	0.41	0.25	1.50	0.10	0.34
Lives with spouse/other relatives, no kids	-0.19	0.18	0.83	0.31	0.44	-0.43	0.14	0.65	0.00	0.47
Married with kids	-0.36	0.29	0.70	0.23	0.07	-0.14	0.26	0.87	0.57	0.08
Unmarried with kids	-0.28	0.32	0.75	0.38	0.09	-0.44	0.36	0.65	0.22	0.06
Lives with kids < age 6	-0.43	0.35	0.65	0.22	0.04	-0.57	0.38	0.57	0.13	0.05
Psychiatric	-0.19	0.19	0.82	0.30	0.38	-0.03	0.17	0.97	0.87	0.43
Intellectual	0.63	0.33	1.87	0.06	0.07	0.59	0.34	1.80	0.08	0.06
Musculoskeletal	0.17	0.17	1.18	0.34	0.20	-0.34	0.17	0.71	0.05	0.23
Sensory	-0.17	0.25	0.84	0.49	0.14	-0.17	0.28	0.85	0.55	0.08
Other disorders of the nervous system	-0.13	0.20	0.88	0.52	0.18	-0.14	0.19	0.87	0.45	0.14
Other condition causing limitation	-0.06	0.13	0.94	0.65	0.45	0.05	0.20	1.05	0.82	0.48
No condition causing limitation	0.13	0.29	1.14	0.65	0.12	0.42	0.30	1.52	0.16	0.13
MCS 44-51	0.16	0.19	1.17	0.41	0.16	0.07	0.20	1.07	0.72	0.14

Table B.17 (continued)

	Pre-Regulation-Change Cohort (N = 2,283)					Post-Regulation-Change Cohort (N = 2,755)				
	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean	Coefficient	Std. Error	Odds Ratio	P > t	Variable Mean
MCS > 51	-0.06	0.22	0.94	0.80	0.54	-0.11	0.23	0.90	0.63	0.53
PCS 44-51	0.31	0.20	1.36	0.12	0.18	0.05	0.21	1.06	0.80	0.20
PCS > 51	0.32	0.24	1.38	0.18	0.54	-0.17	0.24	0.84	0.48	0.52
MCS > 51 and PCS > 51	0.44	0.27	1.55	0.11	0.32	0.51	0.27	1.66	0.06	0.32
No ADL, IADL, or functional limitations	0.08	0.23	1.08	0.72	0.06	0.07	0.28	1.07	0.82	0.06
At least one ADL or IADL requiring assistance	-0.21	0.17	0.81	0.22	0.53	0.11	0.16	1.12	0.50	0.56
At least one severe physical limitation	-0.28	0.17	0.76	0.11	0.33	-0.44	0.16	0.64	0.00	0.32
Obese	-0.03	0.12	0.97	0.83	0.38	-0.12	0.13	0.89	0.38	0.39
Substance abuse	0.19	0.27	1.21	0.48	0.08	-0.14	0.29	0.87	0.62	0.08
FPL 300+	0.46	0.24	1.59	0.06	0.10	0.43	0.29	1.54	0.14	0.08
Unemployment rate	-5.12	4.78	0.01	0.28	0.05	-11.73	2.95	0.00	0.00	0.10
Assignment to an EN	0.08	0.13	1.09	0.53	0.15	0.26	0.12	1.29	0.03	0.20
R-squared	0.12					0.12				

Source: 2005, 2006, and 2010 National Beneficiary Surveys.

Bold type indicates statistical significance at the 0.05 level.

This page has been left blank for double-sided copying.

MATHEMATICA
Policy Research

www.mathematica-mpr.com

Improving public well-being by conducting high-quality, objective research and surveys

Princeton, NJ ■ Ann Arbor, MI ■ Cambridge, MA ■ Chicago, IL ■ Oakland, CA ■ Washington, DC

Mathematica® is a registered trademark of Mathematica Policy Research