SSDI $1-for-$2 Benefit Offset Pilot Demonstration

Vermont Pilot Final Report

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Executive Summary

Introduction

The return to work rate for Social Security Disability Insurance (SSDI) beneficiaries is less than one half of one percent. For decades advocates and beneficiaries have pointed to the "cash cliff" built into the SSDI program as a profound disincentive to work and a key factor behind this statistic. They have argued that a graduated benefit offset (similar to the Supplemental Security Income, or SSI, program) would act as an incentive to employment and encourage SSDI beneficiaries to work at higher levels and reduce their dependence on cash benefits.

The Vermont SSDI Benefit Offset Pilot was a small-scale test of the impact on beneficiary behavior of removing the "cash cliff," or threshold of abrupt benefit cessation. The pilot was designed primarily as a process test in preparation for the much larger Benefit Offset National Demonstration (BOND), funded by the Social Security Administration.[1] Participant outcomes data from the pilot, however, demonstrated that providing an offset can have statistically significant impacts on the earnings of beneficiaries, and relatively large and enduring impacts for certain subsets of beneficiaries.

Overview of Pilot Design

The Vermont Offset Pilot Demonstration was one of four small state pilots initiated as a first step in preparing for the Benefit Offset National Demonstration (BOND). It used a random-assignment, experimental design. The purpose was to test whether changing SSDI rules to provide a glide ramp off SSDI cash benefits (gradual reduction instead of the "cash cliff") would encourage more beneficiaries to work at a high enough level to reduce or eliminate cash benefit payments.

The Vermont pilot was implemented within the Vermont State Vocational Rehabilitation program in combination with intensive benefits counseling services. Approximately six full-time equivalent benefits counselors (ten staff) provided services and supports to all 577 pilot participants (both treatment and control group). Otherwise, the offset pilot was implemented within the standard set of services and employment supports available in the state. The goal was to determine the impact of the offset in combination with standard state services.

[1] For further information, please see **http://www.ssa.gov/disabilityresearch/offsetnational.htm**.

Table 1. Pilot Intervention Design

Treatment Group 284 Beneficiaries	Control Group 293 Beneficiaries
Current or recent enrollment in standard VR program services which may also include: Supported employment services through community DD/MH (Developmental Disabilities/Mental Health) providers. State One Stop services.	Current or recent enrollment in standard VR program services which may also include: Supported employment services through community DD/MH providers. State One Stop services.
Enrollment in benefits counseling services through DVR	Enrollment in benefits counseling services through DVR
Access to the state Medicaid Buy-In	Access to the state Medicaid Buy-In
SSDI Benefit Offset Pilot	Standard SSDI Benefit Provisions

Outreach and Recruitment

The Vermont pilot demonstrated considerable success with recruitment within a brief enrollment window of 15 months. The pilot enrolled 577 eligible beneficiaries, or conservatively 4.8% of the SSDI-only population in the state.[2] The factors that appeared to facilitate strong enrollment were:

- A narrowly targeted approach focused on beneficiaries already engaged in employment services.
- Utilization of beneficiaries' existing connections with state and local service systems and advocacy groups.
- Direct in-person engagement with benefits counselors to address fears and concerns about participation in the offset pilot.

Pilot Implementation

By a number of measures the Vermont pilot, as a demonstration and evaluation project, was implemented effectively. In addition to a high rate of enrollment, the pilot was able to maintain beneficiaries in the study. Only five participants withdrew from the study, one control and four treatment group members. Furthermore, participants demonstrated comparatively high rates of work participation and use of the offset provisions.

The Vermont pilot was effective because it was built on the strengths of the existing service system. All aspects of the pilot were administered by Division of Vocational Rehabilitation (DVR) staff including outreach, recruitment, implementation and evaluation. Administering the project within a single agency permitted close control over all aspects of administration. This allowed for a high level of consistency in management of wage estimates, wage reporting and annual reconciliations.

[2] The terms of the SSDI Waiver excluded a number of SSDI beneficiaries including dual eligibles, CDBs and beneficiaries who were more than 72 months beyond their TWP. Therefore, the enrollment rate is likely much higher than 4.8%

The two primary process findings from the implementation of the Vermont pilot were as follows:

Benefits counseling appeared to be a key support service for maintaining participation in the pilot and managing utilization of the offset provision.

The Vermont pilot design did not test the offset in the absence of intensive benefits counseling supports. However, field experience strongly suggests benefits counseling was a key factor in engaging and maintaining beneficiaries and most importantly supporting their use of the offset provisions. Benefits counselors provided the following key supports:

- Overcoming fears by providing a single responsive source of clear, consistent information to beneficiaries.
- Providing reassurances and resolving problems that occurred with a very high proportion of offset cases.
- Helping beneficiaries understand and manage the impact of earnings and the offset on other benefits (Medicaid, Medicare, Food Stamps, Housing Assistance, etc.)

Challenges with administration of the offset provisions threatened to undermine beneficiary efforts to increase their work activity.

The Social Security Administrations's (SSA's) early administrative procedures for implementation of the offset provision proved to be slow, unpredictable and frequently inaccurate. These problems were primarily the result of SSA attempting to implement the offset through a manual process. In addition, SSA did not adequately or consistently staff the operations unit responsible for implementing the offset provisions.

These difficulties resulted in frequent overpayments, inappropriate cessation of benefits, inaccurate calculation of benefits and extended delays in application of the offset (up to 18 months). It is important not to underestimate the distress and anxiety these issues caused the beneficiaries in the offset group. The benefits counselors spent considerable time and resources resolving these issues and reassuring beneficiaries. Without the intensive support of the benefits counselors there is no doubt that many beneficiaries who went into offset would have either dropped out of the pilot or reduced their earnings below Substantial Gainful Activity (SGA) to avoid further problems.

It is critical for the BOND that SSA develops an automated process to handle the offset provisions. It is also critical that SSA adequately and consistently staff this function. The problems in Vermont resulted from about sixty beneficiaries using the offset provisions. The BOND will involve thousands of beneficiaries using the offset provisions. If the BOND participants experience similar problems to the pilot states on a vastly larger scale it will quickly undermine the demonstration.

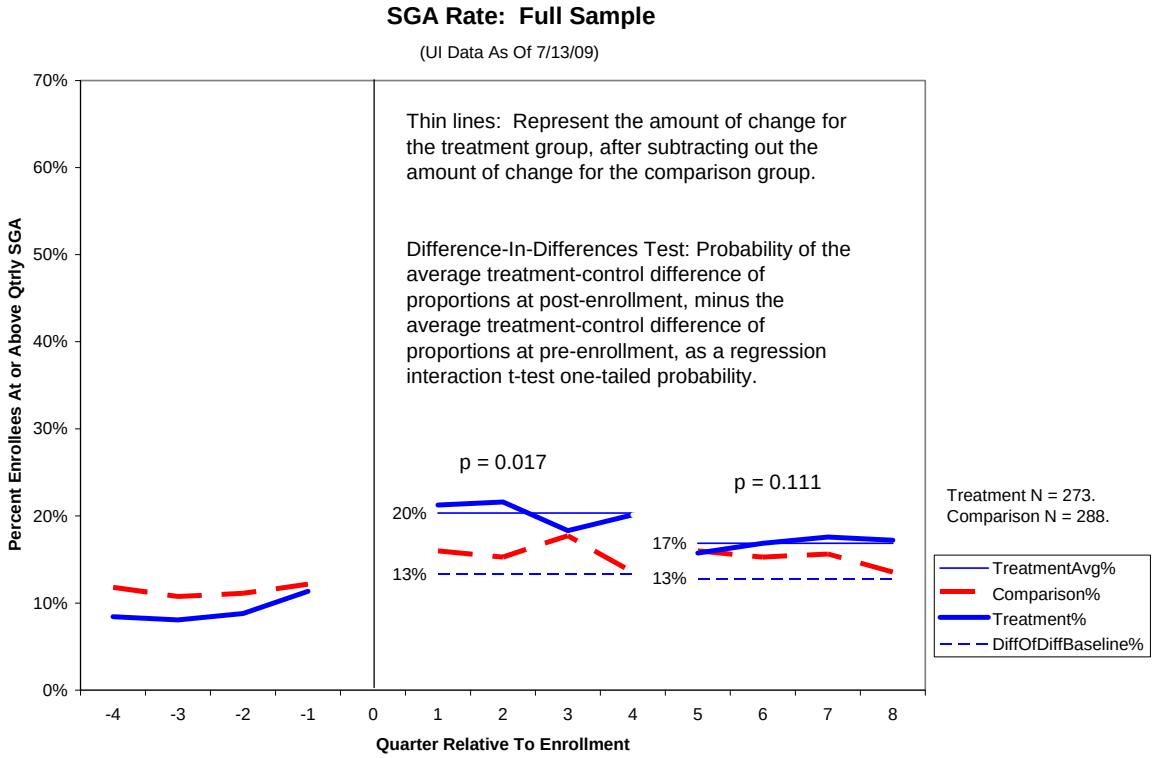
Pilot Earnings Outcomes

For the full sample of enrollees, 22% of the treatment group utilized the benefit offset by 1/1/2009, which was approximately 2 years post-enrollment for the majority of individuals. Among early enrollees, for whom we were able to observe 3 years post-enrollment, the offset utilization rate was 41%.

For the full sample of enrollees, there was a significant effect of the offset intervention on SGA rate in the first year following the quarter of enrollment, with a modest effect size of 7

percentage points[3], representing 35% of the post-enrollment SGA rate for the treatment group. Those results are displayed in Figure 1 below. There were only borderline-significant effects on average earnings or employment rate in the first year following enrollment, and there were no significant effects across any measure during the second year post-enrollment.

Figure 1.



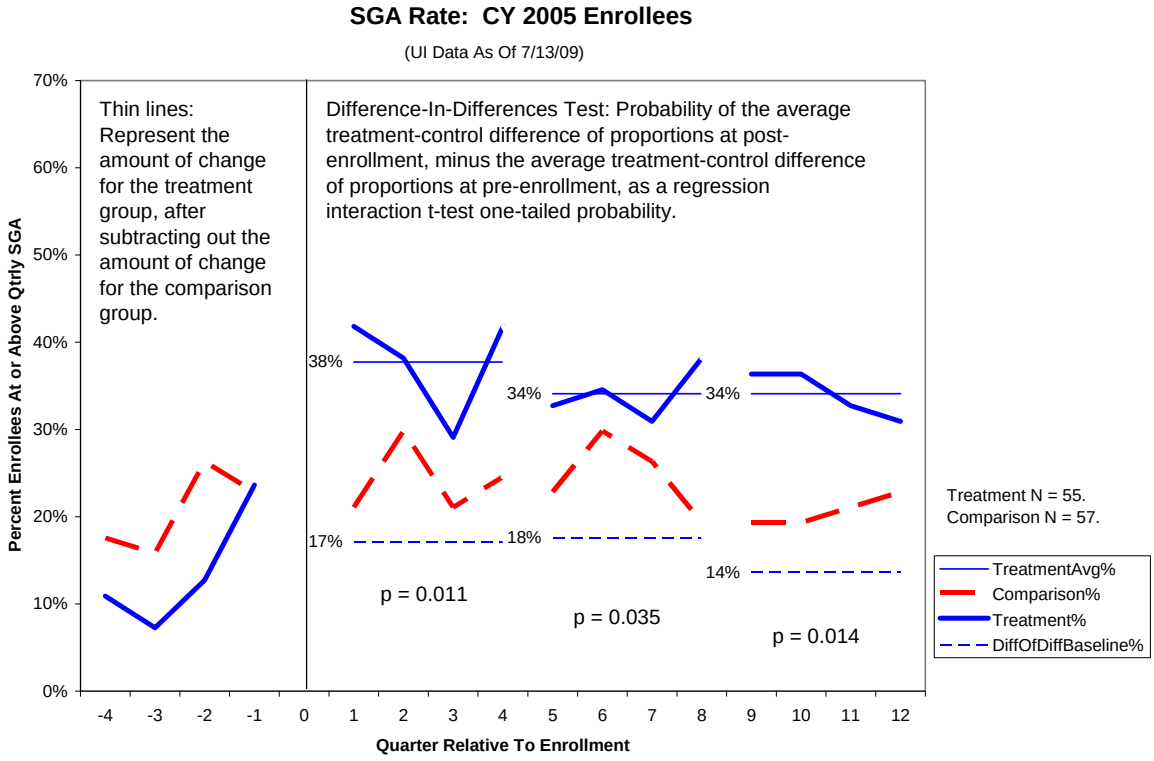
The baseline Medicaid Buy-In subgroup showed a similar pattern of results, but with almost twice the effect size of the full sample in the first year following enrollment. This finding suggests that enrollees who have been exposed to the healthcare safety net of the Medicaid Buy-In, in conjunction with benefits counseling, may be more prepared to utilize a benefit offset.

The baseline-Trial-Work-Period-completed subgroup, which might be expected to be the sample most sensitive to offset effects, showed a reversal pattern, with large positive effects on SGA rate in the first post-enrollment year, but negative effects on average earnings and employment rate in the second post-enrollment year. That reversal trend suggests a problem with the intervention itself, and may have resulted from the increased cumulative error rate for offset checks in the second post-enrollment year. It may also have been largely responsible for the elimination of positive treatment effects in the second post-enrollment year for the full sample.

[3] SSA-model analyses, which differed in that they included outcomes for individuals who died within the timeframe of the evaluation, and which used different statistical models, showed significant effect sizes in individual quarters up to 6 percentage points. Outcomes varied by quarter, relative to the quarter of enrollment.

There was a dramatic difference in employment-related outcomes between early enrollees into the Pilot and later enrollees. For calendar-year 2005 enrollees, who enrolled in the first two calendar quarters of the Pilot enrollment period, there were large, statistically significant treatment effects on SGA rate across not only the first and second years post-enrollment, but also the third year post-enrollment. The effects on SGA rate were 20.6 percentage points in the first year post-enrollment, 16.5 percentage points in the second year, and 20.5 percentage points in the third year (representing 55%, 48%, and 60% of the post-enrollment SGA rate for the treatment group, respectively)[4]. Those results are displayed in Figure 2 below.

Figure 2.



For early enrollees, there was also a borderline-significant effect on average earnings in the first year following enrollment, with an effect size of $823 in additional quarterly earnings (36% of post-enrollment mean earnings for the treatment group), and a fully significant effect in the third year following enrollment, with an effect size of $1,042 in additional quarterly earnings (47% of post-enrollment mean earnings for the treatment group). These findings were consistent with anecdotal reports from the Vermont Pilot's benefits counselors that early enrollees into the project tended to be more work-ready or more work-motivated than later enrollees, due to pent-up demand for an offset provision in the state. For this subgroup of enrollees, it may have been that greater work readiness and/or motivation overwhelmed whatever barriers were created by problems with implementation of the offset treatment.

[4] SSA-model analyses, which differed in that they included outcomes for individuals who died within the timeframe of the evaluation, and which used different statistical models, showed significant effect sizes in individual quarters up to 19 percentage points. Outcomes varied by quarter, relative to the quarter of enrollment.

In examining the baseline characteristics of this subgroup, we found that more of the early enrollees into the Pilot had completed their Trial Work Period (TWP) prior to enrollment than in the full sample, and the early-enrollees subgroup had higher average earnings and a higher SGA rate in the two quarters immediately prior to enrollment into the Pilot. Enrollment of less work-ready or less motivated individuals later in the Pilot may have suppressed treatment effects for the full sample of enrollees.

The outcomes for early enrollees show that an offset can have a significant, large, and enduring effect on the SGA rate of certain beneficiaries, but the effect may be limited to a subset of individuals who are more able and/or more motivated to work than the average SSDI beneficiary.

Limitations of This Study

There were several important limitations to this Pilot as a study of potential offset impacts. First, beneficiaries who were more than 72 months beyond the end of their Trial Work Period were excluded from enrollment, which may have eliminated the most persistent earners among SSDI beneficiaries. Second, beneficiaries knew that the Pilot was time-limited, and therefore may have been unwilling to commit to higher paying career paths knowing that the offset would end within a few years. Third, implementation of the offset treatment was hampered by technical issues, and beneficiaries may have avoided earning more due to fears of repeated errors which would endanger critical state and federal benefits on which they depend.

Implications for the BOND

The Vermont pilot was a very small-scale study, implemented within an established and experienced program infrastructure. The pilot provided far more intensive supports and controls than will be possible under a national demonstration. Despite these advantages, the Vermont pilot still experienced considerable challenges, as did the other state pilots. It is therefore crucial that the BOND use the pilot states' experiences to anticipate and plan for the inevitable difficulties and potential opportunities. Based on the Vermont pilot we see the following implications for BOND.

- If not planned for and resolved, operational issues in implementing the offset at SSA may prove to be the biggest threat to the implementation of BOND. Because of the much larger scale planned for BOND, we cannot overstate how critical this issue will be to that demonstration's implementation.
- Partnerships with state and local entities will be crucial for recruitment and implementation of BOND.
- Provision of benefits counseling supports will be a key factor in the recruitment and maintenance of BOND participants
- The BOND should seek partnerships with state and local entities around the provision of employment services.
- On average, across the general population of SSDI beneficiaries, changes in work behavior for offset participants may be small and incremental. However, targeted outreach to beneficiaries who demonstrate work readiness, who are enrolled in or eligible for the Medicaid Buy-In, or who are in their Extended Period of Eligibility may yield larger impacts on earnings.

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1. Introduction and Project Design

Introduction

The Problem

The return to work rate for Social Security Disability (SSDI) beneficiaries is less than one half of one percent. For decades, advocates and beneficiaries have pointed to the "cash cliff" built into the SSDI program as a profound disincentive to work and a key factor behind this statistic. They have argued that a graduated benefit offset (similar to the Supplemental Security Income, or SSI, program) would act as an incentive to employment and encourage SSDI beneficiaries to work at higher levels and reduce their dependence on cash benefits.

State Pilot Goals

The four-state Benefits Offset Pilot Demonstration was initiated as the first step in preparing for a national demonstration to test whether changing SSDI rules to provide a glide ramp off SSDI cash benefits (gradual reduction instead of abrupt cessation—the "cash cliff") would encourage more beneficiaries to work at a high enough level to reduce or eliminate cash benefit payments. The four-state pilot was intended primarily to test implementation issues in conducting a random assignment research project involving SSDI beneficiaries. The experiences of each state would provide the much larger Benefit Offset National Demonstration (BOND) with invaluable information on the practical and logistical issues of implementing such a complex federal project within widely variable state systems.

The Social Security Administration (SSA) articulated four research questions the pilots were to address:

1. What are the most effective methods of keeping participants informed of project activities and of maintaining participation in the project?
2. What are the most effective methods of informing participants about the demonstration and obtaining their consent to participate in the project?
3. What are the most important problems and issues surrounding both the provision of the state-specific employment supports to project participants, i.e., benefits planning, and the integration of these services with the benefit offset, and the best solutions?
4. For whom does each of the State-specific employment support interventions appear to be the most effective?

Although the pilots were focused on uncovering implementation issues, there was clear interest in whether the pilots would be able to demonstrate that the policy change had an impact on beneficiary work behavior. The SSA contract specified outcome measurement as a requirement of the pilots, though it was questionable whether the design and timeframe for the four-state pilot (originally two years, including the one-year enrollment period) would support an analysis of the questions articulated by SSA:

- Do intervention group members attempt work at a higher rate than controls, and how much higher?
- Do intervention group members earn more than controls, and how much more?

- Do intervention group members sustain their work attempts longer, and how much longer?
- Do intervention group members leave cash benefits at a higher rate than controls, and how much higher?
- Are there differences in outcomes based on the service model?
- What is the interaction between the benefit offset and the Ticket program?

Pilot design was guided by SSA's interest in testing the added effect of a benefit offset on top of existing employment services, but each state had discretion to decide how to meet the condition that all enrollees— treatment or control—would have the same access to employment services. And while eligibility for the pilot was in some respects tightly defined in terms of participants' SSA beneficiary status—participants had to be SSDI-only beneficiaries on their own record (no childhood or widow disability beneficiaries) who were no more than 72 months past their ninth Trial Work Period (TWP) month—the pilot states had considerable latitude to target their recruitment and establish additional eligibility requirements that would shape the participant population. The states also had latitude to set their own target enrollment numbers, methods of random assignment, and research design.

Context of the Existing Vermont Service System

In Vermont, the pilot was undertaken by the Division of Vocational Rehabilitation (DVR), which is generally regarded as a progressive and well-coordinated public vocational service system. There are strong collaborative relationships between the DVR and the private non-profit community mental health and developmental service providers as well as local SSA offices. Thanks in part to these partnerships, the public vocational rehabilitation program serves a much higher proportion of SSI and SSDI beneficiaries than much larger Vocational Rehabilitation (VR) programs in neighboring states.

Vermont DVR has a strong historic commitment to supporting SSI and SSDI beneficiaries in returning to work. It has been the sponsor of many innovative programs promoting the use of SSA work incentives. Vermont was one of the first states to implement a Medicaid Buy-In in the country, an initiative that was led by DVR. Also, Vermont was an SSA State Partnership Initiative state and currently operates a Medicaid Infrastructure Grant project. Vermont also has a high rate of participation in the Ticket to Work program[5]. While the overwhelming majority of participants have assigned their Ticket to DVR, DVR shares reimbursements and Ticket Outcome payments through local agreements with community providers. Vermont DVR is also one of a very few public VR agencies to effectively bill the Ticket Outcome payment system (over $200,000 in 2007).

In Vermont, the Department of Labor One Stop system collaborates well with VR and other disability programs. However, as is typical in other states, the One Stops tend to refer SSI and SSDI beneficiaries to VR or community mental health providers. There are no large independent community rehabilitation programs such as Goodwill or Easter Seals.

Finally, Vermont has had in place since 1999 a strong infrastructure of benefits counseling services through DVR and the State Independent Living Center. In 2006 there were ten full-time and four part-time benefits counselors operating in Vermont. This system has served

[5] Vermont ranks number 1 in the percent of available Tickets that have been assigned to VR or an EN. As of 12/2/09, 1,422 out of 27,370 tickets had been assigned, yielding a participation rate of 5.2%. The next highest ranking state (South Dakota) has a rate of 2.3%. The average rate is 0.5%. Vermont only has one EN, which means our EN participation is low. Source: **http://www.socialsecurity.gov/work/tickettracker.html**.

well over 5,500 beneficiaries since 1999. As a result, it could be argued that both beneficiaries and service providers are better informed about SSI and SSDI work incentives than would typically be the case in most states.

Benefit Offset Pilot Design Features

Intervention Design

The Vermont pilot was implemented within the Vermont State Vocational Rehabilitation program in combination with intensive benefits counseling services. Approximately six full-time-equivalent benefits counselors (ten staff) provided services and supports to all 577 pilot participants (both treatment and control group). Otherwise, the offset pilot was implemented within the standard set of services and employment supports available in the state. The goal was to determine the impact of the offset in combination with standard state services.

SSA's specifications of work for the pilot required that participants be engaged in employment services, as a baseline for testing the added effect of the offset. Vermont chose to define engagement in employment services as current or recent participation in Vermont's public vocational rehabilitation system. This includes the Division of Vocational Rehabilitation (DVR) and its sister agency, the Division for the Blind and Visually Impaired (DBVI). Vermont DVR and DBVI (henceforth referred to collectively as VR) are by far the largest providers of employment services for people with disabilities in the state and annually serve about 10% of the working-age SSI and SSDI beneficiaries in the state. Furthermore, VR's reach into the disability service system in Vermont is so broad that we were unlikely to exclude any substantial group of beneficiaries thereby. Perhaps due to its small size, the Vermont system is very collaborative and beneficiaries are often served by multiple systems. For example, most individuals who receive supported employment services through the "designated agency" system providing developmental disability and mental health services are also enrolled in DVR, because the DVR program provides funding to these programs.

By testing the impact of the SSDI Benefit Offset within the standard public vocational service system, the Vermont pilot also secured a consistent data source for services that included standard VR services and supported employment services provided through the Developmental Disabilities/Mental Health (DD/MH) designated agency system.

The Vermont pilot also chose to require that all participants—treatment and control—enroll in DVR's benefits counseling service prior to random assignment. For treatment group members, benefits counselors would manage all aspects of the pilot-specific benefits, and provide traditional benefits counseling as usual. Control group members would receive initial benefits counseling as part of the enrollment process and could continue receiving the service as desired. In part, this required enrollment in benefits counseling was driven by wanting to ensure equal access to employment services for treatment and control, and consistent data sources for both groups. But it was also in response to SSA's requirement that no beneficiaries be harmed as a result of their enrollment in the pilot. Given the complexity of the pilot, Vermont felt there was considerable potential for misunderstanding, and we wanted to forestall the possibility that control group members might believe they were eligible for the benefit offset by ensuring thorough informed consent procedures and benefits counseling at the time of random assignment. There was, however, no requirement that control group members continue to work actively with benefits counselors or that the counselors follow up with them after assignment.

Table 1. Pilot Intervention Design

Treatment Group 284 Beneficiaries	**Control Group** 293 Beneficiaries
Current or recent enrollment in standard VR program services which may also include: Supported employment services through community DD/MH (Developmental Disabilities/Mental Health) providers. State One Stop services.	Current or recent enrollment in standard VR program services which may also include: Supported employment services through community DD/MH providers. State One Stop services.
Enrollment in benefits counseling services through DVR	Enrollment in benefits counseling services through DVR
Access to the state Medicaid Buy-In	Access to the state Medicaid Buy-In
SSDI Benefit Offset Pilot	Standard SSDI Benefit Provisions

Benefit Offset Rules Tested

The Four-State Benefit Offset Pilots were designed to test the impact of changing the rules applied to benefit check reductions when an SSDI beneficiary works at a level where benefit payments would normally be suspended. The standard rules and test rules, and their respective impacts on benefit payments, are summarized in Table 2 below.

Table 2. Comparison of SSDI Standard vs. Test Policies under SSDI Benefit Offset Pilot.

SSDI Work Incentive Period	**Standard Rules** (control group)	**Test Rules** (treatment group)
Trial Work Period (TWP) Allowed to work above TWP level ($670 in 2008) without any reduction in benefits for 9 months (not necessarily consecutive) within a rolling 5 year period (i.e., within 60 months prior to the current month).	Full benefit check	Full benefit check
Extended Period of Eligibility (EPE) Benefit period that starts the month after the 9th TWP month is used during which benefit check will be affected by earnings above SGA ($940 in 2008) as outlined below:	**36** month EPE duration **Monthly** accounting period based on actual reported earnings	**72** month EPE duration **Annual** accounting period based on estimated earnings for entire calendar year period (estimates can be adjusted if earnings change enough to affect offset determination)
Countable earnings < SGA before Cessation Month	Full benefit check	Full benefit check
Cessation Month First month where countable earnings > SGA	Full benefit check	Full benefit check
Grace Period Two months following Cessation Month, regardless of earnings	Full benefit check	Full benefit check
Countable monthly earnings > SGA after Cessation Month and Grace Period	$0 benefit	If earnings estimate shows annual earnings > SGA, offset applies for rest of calendar year. Benefit check reduced by $1 for every $2 earned above SGA for the prorated period of months in the calendar year following the Cessation and Grace Months.
Countable monthly earnings < SGA after Cessation Month and Grace Period	Full benefit check	If Offset has been applied, offset continues for remainder of calendar year, unless or until subsequent annual earnings estimate for that calendar year reflects earnings < SGA. Benefit check reduced by $1 for every $2 earned above SGA for the prorated period of months in the calendar year following the Cessation and Grace Months.
After Extended Period of Eligibility Period following end of EPE period during which benefit check (and eligibility) is affected by earnings above SGA as outlined below:	Begins **36** months after 9th TWP month which may occur before or after pilot enrollment	**Pilot participation ends** **72** months after 9th TWP month which may occur before or after pilot enrollment
Countable earnings < SGA	Full benefit check	↩
First month where countable earnings > SGA	Termination of eligibility	

Because the Social Security Administration had to conduct the pilots with a ground-rule of "do no harm", no benefit currently available to beneficiaries could be taken away from pilot participants randomly assigned to the control group. This meant that pilot participants continued to have available to them all existing work incentives that allow earnings above the SGA level without affecting benefit payments (Trial Work Period, Cessation Month, and Grace Period). This greatly increased the complexity of administering the pilot since the Social Security Administration had to complete work development (a time consuming process of collecting earnings data from beneficiaries and/or employers) to determine whether TWP months had been used up and Cessation had occurred. It also delayed the point at which offset rules would impact beneficiary behavior since the TWP, Cessation and Grace Period had to be exhausted before the test policy would have a differential effect on benefit payments for control and treatment group members.

Pilot Eligibility Criteria

The Social Security Administration could not adjust its automated payment and eligibility systems for these small pilots, and had to implement offset payment calculations and check adjustments manually. This meant some SSDI beneficiaries had to be excluded from eligibility for the pilot due to the complexities of adjusting their benefit checks—dual SSDI & SSI beneficiaries—or due to the risk that such adjustments might do harm to other beneficiaries—those receiving childhood disability or disabled widow benefits (CDB and DWB beneficiaries) who are paid based on another individual's work record. In addition, since pilot eligibility ended 72 months after completion of the TWP, prospective pilot enrollees were ineligible if they had used up their TWP months more than 72 months prior to pilot enrollment. Given these limitations, the following eligibility criteria were used for enrollment into the Pilot. To be eligible for the Pilot, at the time of enrollment a beneficiary must have been:

- A Vermont resident.
- Age 18 or older.
- An SSDI-only beneficiary. (No concurrent SSI eligibility.)
- SSDI-eligible on their own work record. (No childhood disability beneficiaries, or CDB/DAC, and no widow disability beneficiaries, or DWB.)
- Less than 72 months beyond their 9th and final Trial Work Period month.

Vermont Pilot Infrastructure

Vermont is a state of small rural communities where local service systems are closely interwoven and have a long history of successful collaboration. The structure through which the Vermont offset pilot was implemented is even more close-knit.

The Vermont pilot was staffed entirely by the benefits counseling program situated within the state's Division of Vocational Rehabilitation. Ten full-time benefits counselors sited in local DVR offices provided statewide service through the state's twelve Human Service Districts. Their integration into VR local offices afforded them daily access to VR counseling staff. They also had well-developed networks within the local community for outreach and service referrals. Most had regular outstation days at local "designated agencies", which provide mental health and developmental disability services under contract with the State. Both VR and the benefits counseling program are well-known and well-regarded in the state as credible and effective organizations.

Table 3. Pilot Staffing

Role	Staff	Pilot FTE	Total FTEs
Project Director	1	.20	0.2
Project/Pilot Coordinator (main liaison with SSA)	1	.80	0.8
Project Coordinator	1	.50	0.5
DVR Benefits Counselors	10	.60	6.0
Contracted Benefits Counselor (MH center staff)	1	.30	0.3
Technical and Evaluation staff	3	.20	0.6
Administrative Support staff	1	.50	0.5
Total Staff and FTEs	18		8.9

All benefits counselors were supervised by two full-time work incentive project coordinators who served as lead benefit counselors to oversee case work and monitor pilot implementation. Management, administrative and program evaluation support was provided by staff at VR's central office, nearly all of whom had long histories working intensively with the benefits counseling program and with SSA pilots. As a state agency, VR and its benefits counseling program benefitted from access to administrative data that greatly facilitated benefits counseling services and the Vermont pilot outreach effort, eligibility determination, ongoing management and outcome evaluation.

In short, Vermont benefitted from an unusually strong infrastructure for implementing the offset. It was characterized by uninterrupted lines of supervision from management through to line staff, uninterrupted information flow of data used for both operational and evaluation aspects of the pilot, and uninterrupted communication between those in direct contact with pilot participants and with service providers in local communities, those acting as liaisons with SSA, and those responsible for maintaining the management information systems upon which other staff relied to implement the pilot.

Impact Evaluation Design

Overview

The Vermont pilot outcome evaluation design focused on the intervention's impact on employment rates and earnings[6] of participants, within a random-assignment experimental design. It relied almost entirely on administrative data, primarily Unemployment Insurance (UI) quarterly wage reports that the majority of employers are required to report to the Vermont Department of Labor. Additional topics of interest in the outcome evaluation included participation in other public cash and healthcare benefits, and use of employment services such as VR, supported employment, and benefits counseling. Our data sources for examining these topics were benefits and service data from our social welfare and vocational rehabilitation agencies, and encounter data collected within the database used by benefits counselors to track all their cases.

[6] A comprehensive evaluation of benefits outcomes for enrollees was not attempted by Vermont in this Pilot, due to concerns about the validity of benefit data available at this time, in view of the high error rate observed for offset implementation during the Pilot, as well as concerns about the limited timeframe available for the intervention to substantially affect benefits levels for the full sample of enrollees.

Unlike the other pilot states, Vermont chose not to collect any surveys. By relying on administrative data rather than surveys, the evaluation avoided the inherent problems associated with collecting direct report data from study subjects over a long period of time. In particular, it allowed the pilot to negate the possibility of a reporting bias for the participant group. Control group members had little or no incentive to provide direct data for the project after random assignment and therefore were less likely to report.

The only data directly collected from all enrollees was at the time of enrollment, when benefits counselors completed a profile of mostly demographic data in the benefits counseling program database. The availability of direct-collected data subsequent to random assignment varied depending on each participant's ongoing involvement with benefits counseling.

One implication of the Vermont research design is that there was no pilot-related burden on the control group. Once control members received their initial benefits counseling session, signed the consent, and were randomly assigned into the control group, there was no further contact required and no follow-up required on the part of the benefits counselor. This meant they had no reason to withdraw consent to be included in the research sample. This explains the distinct difference between Vermont and the other pilot states in the number of withdrawals in the control group. Vermont has had one, while the other states had many more.

But it also means there was no pilot-specific ongoing contact with the control group unless controls choose to work actively with the benefits counselor, and there was no necessity to track data such as earnings or use of work incentives or to prompt SSA to complete work development to determine Trial Work Period status or Cessation status. This introduced some disparities in data availability between treatment and control that limited the scope of the outcome evaluation. The availability of SSA administrative data at the end of the evaluation period did not address the issue of uneven work development between treatment and control groups.

Impact Evaluation Challenges

Beneficiary Experiences and Attitudes

SSDI beneficiaries have long-term, severe disabilities. Eleven enrollees in Vermont died within two years of enrollment in the Pilot. To make it through the SSDI application process and maintain their benefits for the first two years following the start of SSDI eligibility, beneficiaries have to vigorously demonstrate an incapacity to work at any meaningful level, and most likely break their ties to the workforce and employers. Surviving on an SSDI benefit—which for our enrollees averaged less than $1000 per month—renders them economically vulnerable. If we disrupt their cash benefits, their subsistence is at risk. Most work at a very low level, either because that is all they are able to do, or that is all they are willing to risk since the rules are very confusing and they don't know how much they can work without jeopardizing their benefits. Even with recruitment targeted to individuals with a demonstrated interest in working and some experience working with employment services like VR and benefits counseling, and even though this was a voluntary program likely to engage those most ready to take advantage of the pilot opportunity, Vermont had a sizable number of enrollees who thought they were unlikely to work enough to have an offset applied to their benefit, according to benefits counselor reports. At least collectively, those expectations appear to have been borne out in experience. In the 8 quarters following the quarter of enrollment, according to UI wage data, 32% of Vermont pilot participants never

achieved earnings greater than zero, and another 18% never had a quarter where wages were above 3 times the monthly TWP threshold. Those proportions were essentially the same for the treatment and control groups[7].

What this means for the outcome evaluation is that we have to anticipate that the group that is likely to respond will be a small subset of the entire population. This makes for either small effects within the whole population or larger effects within so small a sample that significance becomes harder to demonstrate.

Impact of Benefits Counseling on Work Incentive Usage

The benefit offset is one work incentive among many work incentives that are already available. Participation in these existing work incentives is very low, because they are not well understood and take some knowledge and skill to use and manage. For this reason, benefits counseling has been an integral feature of all four state offset pilots. Benefits counseling is an individualized intensive service designed to equip beneficiaries with knowledge of the work rules and work incentive features of SSDI and other public cash and healthcare benefits, and give them the tools and support they need to make manage their benefits and make decisions about work that are based on knowledge rather than fear. And lastly, benefits counselors are skilled intermediaries between the beneficiaries and SSA when problems arise. The effect of benefits counseling, for both treatment and control groups, is generally an increase in earnings[8][9] and use of work incentives. This further raises the bar for achieving a detectable difference between treatment and control groups.

Complexity of Context for Interpreting Earnings Data

Yet another complication in the outcomes evaluation is that the earnings data can be difficult to interpret. The context in which individuals make earning decisions is extremely complex and specific to individual benefits situations and time frames for which data are hard to obtain.

The significance and implications of earnings above the Substantial Gainful Activity (SGA) threshold differs depending on whether someone has Trial Work Period (TWP) months remaining, or has exhausted them and moved into the 36-month Extended Period of Eligibility (EPE), or is past the EPE.

- While TWP months remain, there is little risk in earning above SGA. As long as the months haven't all been used up, the beneficiary experiences no loss of cash benefits, nor any loss of control over whether benefits will continue or not. They have simply to keep their earnings below the TWP income threshold for about 5 years, and they can start fresh with a new nine-month TWP.
- When they are in the EPE, earnings above SGA will mean that the beneficiary gives up a cash payment (after the Cessation month and two-month grace period), but the risk is short-term and easily controlled. They can readily change their behavior to get their full check back.

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[7] For control (n = 288), 34% were zero-earners and 17% were never-above-TWP-level positive earners. For treatment (n = 273), 30% were zero-earners and 19% were never-above-TWP-level positive earners.

[8] Tremblay T, Smith J, Xie H, et al: The impact of specialized benefits counseling services on Social Security Administration disability beneficiaries in Vermont. Journal of Rehabilitation 70(2):5–11, 2004.

[9] Tremblay, T., Smith, J., Xie, H., & Drake, R. (2006). Effect of Benefits Counseling Services on Employment Outcomes for People With Psychiatric Disabilities. Psychiatric Services, 57(6), 816-821.

- After the EPE ends, earning above SGA is a substantial risk, as it can trigger the loss of cash benefits and SSDI eligibility entirely, and getting benefits back requires expedited reinstatement, which doesn't always succeed[10].

What that means for the outcomes evaluation is that we have to have good data on whether someone is in their TWP, EPE, or post EPE in order to understand the context in which they are choosing to earn above SGA (if indeed they are even consciously making that choice), and that information is hard to obtain. It can also take a very long time before the offset provisions have any meaningful differential impact on the treatment and control group. Basically, they would all have to be in their EPE and past their Cessation month before the different rules matter at all. However, we could not design our recruitment or eligibility criteria to exclude those with TWP months remaining, and the majority of our enrollees (71%) had trial work months remaining at enrollment.

Study Population and Analysis Subgroups

Full Sample

The sample pool for this analysis was all eligible pilot enrollees, all of whom had at least eight valid quarters of post-enrollment Unemployment Insurance (UI) wage data, with the exclusion of those individuals who withdrew consent for data collection by the end of the timeframe of analysis (1 control and 4 treatment individuals). [11]

Subgroups

Baseline Medicaid Buy-In Participants. The "baseline Medicaid Buy-In" group consisted of all enrollees (treatment and control), who had ever been enrolled in the state's Medicaid Buy-In program, from the start of the Buy-In until the day before their date of enrollment into the Pilot[12]. The purpose of this subgroup was to examine effect sizes of the pilot among a sample of enrollees who had had any experience of enrollment in the state's Medicaid Buy-In program prior to enrollment in the Benefit Offset Pilot. Vermont's Medicaid Buy-In program provides healthcare coverage for people with disabilities who are working (current evidence of work is an eligibility requirement for the Buy-In) who would otherwise qualify for Medicaid coverage if it were not for their earnings from work. This subgroup is of particular interest to federal policy makers regarding potential interaction effects of a benefit offset and Medicaid Buy-In work incentive for people with disabilities.

Baseline Under-Age-45 and Baseline-Age-45-And-Older. Subgroups based on age at date of enrollment, divided at age 45 years, were examined to see if the response of younger beneficiaries to the offset intervention was different from that of older beneficiaries.

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[10] From experiences described to benefits counselors, some individuals attempting to utilize expedited reinstatement still experience delays in getting their benefits reinstated. Sometimes a new disability determination is not made within the six-month timeframe when benefits are payable pending the decision. To utilize expedited reinstatement provisions, the applicant still has to prove to SSA that they are unable to achieve SGA earnings due to their original disability or related medical conditions so the lack of employment itself is not a qualifying factor as in the EPE. The bottom line is that, for a beneficiary beyond EPE, there is an increased risk in earnings above SGA, in terms of benefit security.

[11] Outcomes for individuals who have been incarcerated or who have moved out of state were included in the analysis, as information on those conditions was not equally available and reliable across the treatment and control groups.

[12] Vermont's Medicaid Buy-In coverage periods are in increments of days, not months.

Males and Females. Separate analyses were conducted for male and female subgroups to examine the possibility of differential outcomes for men and women.

Baseline Trial Work Period Completed. The "baseline TWP completed" subgroup consisted of those enrollees for whom we had Benefits Planning Query (BPQY) documentation at the time of enrollment that they had completed their Trial Work Period.[13] This population was of particular interest in the analysis of earnings above SGA, since this group consisted of individuals for whom earnings over SGA had the potential to immediately reduce or eliminate the benefit check in that month. (For all enrollees assigned to the treatment group, this meant that they were within the 72-month Extended Period of Eligibility, or EPE, used in this Pilot.) Our data for identifying the baseline-TWP-completed subgroup were limited by our use of "provisional eligibility", which was necessitated by the time required by SSA to conduct work CDRs to determine eligibility. A total of 117 individuals were determined "provisionally eligible" (68 treatment, 49 control). For the treatment group, CDRs had been pursued subsequent to enrollment. For the control group, however, CDRs were not obtained after enrollment as there was no compelling need for this information for pilot operations, and the administrative burden on SSA would have been high. As a result, our data on TWP status at enrollment was uneven for treatment and control group. We eliminated this group difference, however, by limiting ourselves to selecting the baseline-TWP-completed subgroup from those determined fully eligible at enrollment. That is, the baseline-TWP-completed subgroup did not include those individuals who were enrolled into the project under a "provisional" eligibility status, where we did not have sufficient information at the time of enrollment to determine with confidence the person's TWP status.

Baseline Earners. The "baseline earners" subgroup consisted of all enrollees (treatment and control) who had at least $1,200 in inflation-adjusted UI earnings during at least one quarter in the year prior to the enrollment quarter. This subgroup was inspired by Connecticut's decision to initially target recruitment to those earning roughly half of the SGA rate prior to enrollment. It allowed us to examine whether participants fitting this profile would show different earning patterns after enrollment—the theory being that these individuals might be parking earnings and would therefore be more likely to take advantage of the offset. A function of this subgroup was to examine effect sizes in the absence of enrollees who had zero or negligible earnings throughout the year prior to enrollment, which might reduce effect sizes for the full sample.

Calendar Year 2005 Enrollees and Calendar Year 2006 Enrollees. The CY 2005 and CY 2006 enrollees subgroups allowed us to examine the possibility of differential outcomes for early enrollees into the project compared to later enrollees. Anecdotally, reports from our benefits counselors suggested that early enrollees in the Vermont Pilot may have been more work-ready and/or motivated to utilize an offset provision than later enrollees.

Outcome Measures: SGA Rate, Average Earnings, and Employment Rate

To compare the earnings patterns of treatment and control groups, this evaluation utilized wage records from the state's Unemployment Insurance (UI) program that were equally available and reliable for the two groups, treatment and control. Earnings were adjusted for inflation.

[13] Social Security Administration BPQY documentation contemporaneous with the date of enrollment was used as the data source, as it represents the best information available to both enrollees and service providers at the time of enrollment regarding the likely impact of above-SGA-earnings on an individual's future SSDI benefits.

Data Sources

Outcome measures for employment and earnings for this analysis were derived from administrative wage records of the state's Unemployment Insurance (UI) program, as of July 13, 2009.[14] This information is submitted by employers to the state as quarterly wage reports, which are subject to state unemployment insurance laws and the federal employees program. Both public- and private-sector workers are included in this system. Omissions include earnings from self-employment or from out-of-state work (constituting the largest categories of non-covered earnings), and the following employee groups: elected officials, religious nonprofit organizations, charitable and educational organizations, unpaid family members, farm workers (with some exceptions), and some railroad employees. Because the UI system is mandated to collect data on all earnings directly from employers it is a highly reliable source of employment data. And to the extent it omits data, these omissions would apply equally to both the treatment and control groups and therefore should not affect the validity of the employment outcome evaluation.

Although UI data does not include all earnings, it covers a large majority of wage earnings in each state[15] and was used in this study as an economic indicator variable for group comparisons.

Time lags in UI wage reporting by employers mean that the data is not considered complete, reliable, or valid until at least six months have elapsed past each quarter reported.

Time Conversion

The earnings obtained from state UI records are in quarterly increments. Prior to analysis, calendar dates associated with each earnings record were converted on a person-by-person basis to time relative to the individual's date of enrollment in the Benefit Offset Pilot. Thus, for an individual with an enrollment date of August 20, 2006, earnings reports for the second, third, and fourth calendar quarters of 2006 were translated into reports for the first quarter before the quarter of enrollment, the quarter of enrollment, and the first quarter after the quarter of enrollment, respectively. For the group comparisons, all records for the first quarter after the quarter of enrollment were compared with other records for the first quarter after the quarter of enrollment, and so on. This temporal conversion allowed for group comparisons of intervention effects over time for a program with rolling enrollments and in which the intervention started at different points of calendar time for different individuals.

Inflation Adjustment

All dollar values were adjusted for inflation using the Consumer Price Index for Urban consumers (CPI-U)[16], with Calendar Quarter 3 of 2005 as the 100% reference value. That is, to keep outcome comparisons equivalent over time, all dollar amounts were converted into 2005 dollars, for the 3rd calendar quarter of that year, which was the first calendar quarter of enrollments for the Pilot.

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[14] No outlier records or other data points were removed from the analysis, given that no single UI quarterly report record was for an amount higher than $27,000, and no quarterly total for an individual was greater than $32,000. No other information suggested that particular wage reports were in error.

[15] Self-reports from Vermont benefits counseling enrollees have indicated that non-UI earnings were split roughly evenly between self-employment and out-of-state earnings. A 2004 comparison of UI data with aggregate earnings statistics from the Social Security Administration and Internal Revenue Service found that approximately 83% of earnings were represented by UI data for disabled enrollees in Vermont's Medicaid Buy-In program.

[16] As of July 14, 2009.

Dependent Variables

We derived 3 dependent variables from quarterly UI wage data: SGA rate, average earnings, and employment rate. Average earnings were calculated across time and across individuals from the sum of reported UI earnings for each individual for each quarter. To obtain an SGA measure, for each quarter where UI earnings equaled or exceeded the standard monthly SGA level multiplied by 3, the quarter was coded as 1, and as 0 otherwise. Similarly, to obtain an employment measure, for each quarter where UI earnings exceeded $0, the quarter was coded as 1, and as 0 otherwise. Averages of SGA quarters and employment quarters provided SGA rate and employment rate as a percent of quarters.

Analysis Timeframe

The timeframe of analysis for the primary impact evaluation was from four quarters prior to the quarter of enrollment through eight quarters following the quarter of enrollment, for each individual. This time-range represents the maximum timeframe of valid UI data available for all participants in Vermont's Demonstration, as of the date of this report. Additionally, for the subgroup of early enrollees into the project (Calendar Year 2005 enrollees), for whom further additional post-enrollment data was available, we examined outcomes from four quarters prior to the quarter of enrollment through twelve quarters following the quarter of enrollment. The earliest baseline outcomes included in the analyses were from the 3rd calendar quarter of 2003, and the latest post-enrollment outcomes included in the analyses were from the fourth calendar quarter of 2008.

Data Analysis Methods

We evaluated employment and earnings outcomes for the SSDI Benefit Offset Demonstration within a random-assignment experimental design. (Following informed consent, each enrollee was randomly assigned to a treatment or control group.) The demonstration sought to test whether the availability of a cash benefit offset resulted in differences in work-related outcomes, such the probability of employment, mean earnings, and the probability of earnings above SGA.

Social Security Administration Net-Impact Evaluation Model

For the final net-impact evaluation, the Social Security Administration asked the four states to address the following two questions:

- What was the effect of the benefit offset on employment, SGA, and earnings?
- For whom does each of the State-specific employment support interventions appear to be the most effective?

In examining Pilot impacts or outcomes for the full sample of enrollees, SSA requested both simple comparisons (uncontrolled for pre-existing baseline differences) of post-enrollment outcomes between the treatment and control groups, and regression-adjusted impact estimates (which controlled for pre-existing group differences).

For regression-adjusted impact estimates, SSA asked the states to estimate separate regression models for each quarter, from the quarter of enrollment to a period eight quarters after enrollment (nine separate regressions), for each outcome measure, with impact result summaries in graphs (displayed as differences of mean predicted values for treatment versus control).

In order to address the question of for whom the offset intervention was most effective, SSA requested regression-adjusted for each of the following subgroups, in addition to the full sample of enrollees:

a. Baseline Medicaid Buy-In participants.

b. Baseline Ages 44 and under/ages 45 and up.

c. Male/Female.

d. Baseline TWP completed.

e. Baseline earners.

To those subgroups, Vermont has added an additional set, which was of interest to us for our State evaluation:

f. Calendar-year 2005 enrollees (early enrollees) versus calendar-year 2006 enrollees (later enrollees).

Altogether, 9 sets of regression estimates and mean predicted values were calculated for these 10 samples (the full sample and 9 subgroups) for each of the 3 primary outcome measures (employment rate, SGA rate, and average earnings). Average quarterly earnings were analyzed with linear regressions, and employment rate and SGA rate were analyzed with logistic regressions (because quarterly outcomes by individual for employment and SGA are binary, or yes/no). Per SSA's model, for each regression analysis of an outcome measure in a particular quarter at or following the quarter of enrollment, there were 5 predictor variables: treatment group (treatment = 1; control = 0) and the outcome measures at each of the four quarters prior to the quarter of enrollment. For the significance test of the treatment, we used the one-tailed probability (p) of the coefficient for the treatment indicator (coded as 0 for control and 1 for treatment), where p <= 0.05 is the standard for statistical significance. For the effect size of the treatment, we used the difference of mean predicted values for the treatment and control groups. All statistical outputs for these SSA-requested analyses are included as appendices to this report. Standard errors of means and, for logistic regressions, odds-ratios – labeled "Exp(B)" - and their 95% confidence intervals are reported in those statistical-output appendices.

In the Social Security Administration's analysis model, data for beneficiaries who died prior to the end of the analysis timeframe were included in analyses for all quarters up to the quarter of death, so samples sizes vary from quarter to quarter.

Vermont Net-Impact Evaluation Model

For our own Vermont analyses, in order to test the statistical significance of outcome changes for the treatment group, we used differences-in-differences linear regressions, comparing the before/after changes for the treatment group to the before/after changes for the control group. In doing so, we used differences-in-differences regression models described by Bertrand, Duflo, & Mullainathan (2004)[17] and summarized by Rose (2005)[18]. One advantage of this approach is that it examines mean outcomes over a longer time period, reducing the statistical

[17] Bertrand, M., Duflo, E., & Mullainathan, S., (2004). How Much Should We Trust Differences-in-Differences Estimates? Quarterly Journal of Economics, 119(1), 249–275.

[18] Rose, Shanna (2005). Econometric Approaches to Causal Inference: Difference-in-Differences and Instrumental Variables. Lecture presentation for Graduate Methods Master Class, Department of Government, Harvard University, February 25, 2005. Web posting, March, 2008, at http://www.people.fas.harvard.edu/~rtmoore/GMMC/SRoseGMMC.ppt.

noise of quarter-to-quarter outcome variations due to chance, and reducing the number of Type I errors (falsely rejecting the null hypothesis) due to multiple tests[19]. Another advantage of this approach is that it allows one to more easily display outcome differences between the groups relative to the unadjusted baseline measures for each group. A potential limitation of this approach relative to the SSA-analysis model, however, is that it relies on random assignment in an experimental design to control for group differences in time trends, (as it does for a host of other possible confounds). As with any assumption of "no difference at baseline" between treatment and control groups on potentially relevant variables, this "common trends" assumption may hold up less well with small sample sizes for certain subgroups. While neither the SSA- nor Vermont-analysis models include formal statistical tests for significant differences in time trends between treatment and control, we present graphic displays of outcome measures at baseline for the groups, which allow for visual assessment.

For each analysis group in the Vermont model, we first compared the year prior to enrollment to the year immediately following enrollment, and then compared the year prior to enrollment to the second year following enrollment. In each comparison, we collapsed the time-series of our dependent variable into two observations for each individual: one before enrollment and one after enrollment. We did this by averaging the quarterly outcomes for each individual across the four quarters prior to the quarter of enrollment and across the four quarters following the quarter of enrollment. (The quarter of enrollment itself represents a mix of the intervention and non-intervention conditions, and was therefore dropped from the analysis.) For each regression analysis, there were 3 independent variables, each coded 1 or 0: group (treatment = 1; control = 0), time relative to enrollment (after = 1; before = 0), and the interaction (product) of group multiplied by time. We used the one-tailed probability (p) of the group-by-time interaction coefficient as the significance test of the treatment effect, where $p <= 0.05$ is the standard for statistical significance. All statistical outputs for these Vermont-model analyses are included as appendices to this report.

In Vermont's analysis model, data for beneficiaries who died prior to the end of the analysis timeframe were excluded from analyses, in order to maintain a constant sample size over time for the differences-in-differences comparisons of annual means.

[19] Using a significance criteria of $p <= 0.05$, we would expect approximately 5% of all statistically "significant" results to be the result of pure chance.

2. Process Evaluation

Recruitment Process and Findings

Target Populations for Recruitment

Outreach and recruitment into the Vermont offset pilot focused on the following target populations:

- Clients of Vermont Vocational Rehabilitation or the Division for the Blind and Visually Impaired
- Individuals served through the adult community mental health system
- Individuals served through the developmental disabilities service system

Enrollments into the Vermont Benefit Offset Pilot were conducted between August 24, 2005 and October 31, 2006.

In the interest of recruiting individuals with a demonstrated interest in employment, the project initially established an eligibility criterion that required pilot candidates to be a current VR customer or to have had an active VR case within three years prior to pilot enrollment. In light of this eligibility requirement, most outreach was directed at individuals who were current or past customers of VR or DVR benefits counseling services. The benefits counseling program's longstanding connection to designated agencies serving individuals with mental health issues and developmental disabilities provided an additional avenue for outreach to these populations, but most would already have been involved with VR at some time.

The pilot did not target any Benefit Offset Pilot outreach mailings specifically to participants in the Medicaid Buy-In program. However, benefits counselors were involved in the outreach efforts associated with the advent of Medicare Part D that were concurrent with the pilot enrollment period, and as part of that effort, mailings were sent to Medicaid Buy-In participants who had any current or past involvement with VR inviting them to contact the local DVR benefits counselor for assistance. As a result, many individuals who sought help with Part D learned of the offset pilot.

Table 4. VR Involvement History at Pilot Enrollment

VR Involvement History at Pilot Enrollment	% of Enrollees
Aug05 - Apr06 eligibility criteria	
had an open VR case at enroll	30.7
had open VR case within 3 years of enroll	17.9
initiated VR case to enroll	0.7
May06 - Oct06 eligibility criteria	
had an open VR case at enroll	30.5
had VR case within 3 years of enroll	13.0
had VR case more than 3 years prior	3.1
initiated VR case only after enroll	0.9
no VR history	3.3
Percent not meeting original guidelines	7.3
Percent with no past VR involvement at enrollment	4.2
Percent with any VR involvement (as of 3/18/08)	96.7

Two-thirds of the way through the enrollment period, in May 2006, Vermont elected, with SSA's permission, to remove the eligibility requirement that applicants have an open or recent VR case. This requirement had created some awkwardness where beneficiaries felt compelled to open cases with VR when they did not need VR services (instances included applicants who were enrolled in VR more than three years ago and were in stable employment, or referrals by local SSA offices of beneficiaries who were working and did not need VR services). The pilot did not undertake any outreach to previously excluded populations nor did it advertise the change in eligibility rules. The primary intent in changing the rules was not to greatly expand the eligible pool, but to limit the inconvenience to applicants and VR staff in opening unnecessary VR cases. As a result, the change in rules had a minimal effect on the profile of enrollees into the pilot. The vast majority of enrollees were current or former VR customers (nearly 97%). Only 40 individuals (7% of all enrollees) did not fit the original eligibility requirements, most of them due to having had a VR case that closed more than three years prior. Only 23 people from this group of 40 went through random assignment with no prior involvement with VR services.

Outreach and Recruitment Methodology

The Vermont pilot staffing structure afforded a high degree of direct control over recruitment and implementation of the pilot. Because the target population for recruitment was comprised primarily of individuals already in the VR and benefits counseling program databases, and our staffing structure supported a personal approach, most of the outreach for the pilot was done through targeted recruitment in which the benefits counselor made contact with a prospective enrollee either directly or through a VR counselor or community service provider who then provided a "warm hand-off", or in-person introduction, to the benefits counselor. General outreach was also conducted through local efforts and limited statewide initiatives.

General Outreach to the Public

In part because we were explicitly recruiting individuals who were current or recent VR consumers, we did not focus heavily on generalized outreach. A press release was issued and press conference held in October 2004 in anticipation of the pilot. The press coverage did

generate interest and led some individuals to maintain contact with benefits counselors until enrollment opened in August 2005, but subsequent contract delays that postponed enrollment until nearly a year later dissipated their effectiveness in recruiting prospective enrollees. Although project staff continued to promote the pilot when opportunities arose—at statewide conferences, trainings and coalition meetings—the majority of public outreach after the initial press conference happened at the local level through the community activities of benefits counselors. Counselors had a PowerPoint overview and one-page flyer they could use for outreach presentations.

Targeted Outreach to Service Providers

Prior to implementing the benefit offset pilot, Vermont DVR did a considerable amount of outreach to agencies serving SSDI beneficiaries to explain the pilot, its goals, and implications for participants. This outreach was necessary both for encouraging participation in the offset and enabling staff from other agencies to better respond to participants' questions and direct them to appropriate VR staff. As the pilot moved forward and benefit problems arose as a result of offset application, the understanding and support of service providers was critical in helping to resolve problems and maintain treatment group members' participation in the pilot.

Targeted Outreach to Advocates

Vermont pilot staff also made a concerted effort to prepare the state's congressional delegation, Governor's hotline staff, and the advocacy community for the initiation of the pilot, anticipating that the random assignment design might generate complaints. Pilot staff provided information to these groups and held meetings to brief them and respond to their questions about the pilot project and its research design. As it turned out, the random assignment process generated little controversy among enrollees, in part because Vermont's informed consent process was very thorough and thoughtful. The biggest cause for complaint among applicants was the fairly late determination by SSA to exclude beneficiaries receiving Childhood Disability Benefits (CDB) or Disabled Widow/widower's Benefits (DWB). SSA communicated this decision to pilot staff at the end of May 2005, after outreach for the pilot had already begun and some CDB beneficiaries had spent several months awaiting the opening of enrollment. The groundwork we laid with advocates and legislators proved invaluable for these complaints, and was also beneficial throughout pilot implementation as treatment group members experienced problems with SSA's administration of their benefits.

Targeted Recruitment of Prospective Enrollees

The Vermont pilot devoted most of its outreach resources to directly recruiting prospective enrollees from the benefits counseling and VR caseloads. Benefits counselors reviewed their own caseloads for prospective eligibles among current and former benefits counseling clients. To facilitate this, pilot technical staff built filters into the benefits counseling program database to identify SSDI-only individuals with a current or recent VR open case. The benefits counselors then initiated direct contacts with these individuals or worked through a local service provider where that was appropriate or helpful.

Beginning in December 2005, pilot technical staff also created recruitment lists using VR data to identify potentially-eligible VR consumers. These lists were organized by VR counselor, so the benefits counselor could sit down with each VR counselor and review candidates on the list to determine an outreach approach. Benefits counselors made an effort to identify any disqualifying factors (i.e., having CDB or DWB benefit, having become SSI-

eligible) before pursuing outreach. As much as possible, any person who had already been prescreened and found ineligible, or had already contacted the benefits counselor to have their pilot eligibility reviewed was excluded from the recruitment list and from mass mailings.

Table 5. Mailings Conducted

Mail pieces sent (and not returned)	
May 2005 (1 counselor's caseload as test run)	31
July 2005	688
January 2006	1153
February 2006	681
April 2006 (re-sent with recovered address)	56
June 2006 (blind & visually impaired VR clients)	140

Compared with other pilot states, the Vermont pilot made limited (and somewhat late) use of mass mailings—only about 3000 pieces were sent over the course of the enrollment period, the majority sent six months after enrollment began. Roughly 2600 individuals were on the mailing list. About 500 of those had incorrect addresses (a hazard exacerbated by recruiting from closed cases), but more than half were either forwarded by the post office or we were able to recover a current address. About 200 individuals never received the mailing due to bad addresses that couldn't be recovered. The letters were personalized to come from the recipient's current or most recent VR counselor, and to encourage the recipient to contact either the sender (their VR counselor), or their local benefits counselor. Contact information was provided for both counselors, as well as the DVR toll-free number. Nearly all of the 2400 individuals who received the mailing were also on the VR recruitment lists mentioned above, so they could have ignored the mailing, but responded to a personal contact. However, there was a noticeable increase in enrollments in the period just following the main mailing in January and February 2006, so the outreach clearly had an effect.

Enrollment Process and Findings

Enrollment and Informed Consent Processes

Eligibility Determination Process

The Vermont pilot decided very early on that it was essential to have dedicated senior staff manage and monitor all aspects of the pilot—including eligibility verification, work development, application of the offset, and offset troubleshooting. During the enrollment phase, all individuals interested in the pilot were reviewed for eligibility by the two project coordinators, who managed requests for Benefits Planning Queries (BPQYs) to verify eligibility, followed through on work-related Continuing Disability Reviews (CDRs) with SSA staff, and cleared applicants as eligible for enrollment by the benefits counselors. Delays between that process and actual enrollment by local counselors occasioned some subsequent ineligibility, but very few enrollees were later determined ineligible—only five to date. This is a testament to the care taken in the recruitment and enrollment process.

Local SSA Field Office Involvement

Vermont DVR has a long established collaborative relationship with the local SSA Field Offices and with the Area Work Incentives Coordinator (AWIC) serving Vermont. Once SSDI beneficiaries expressed interest in participating in the offset pilot, we relied heavily on our relationship with the Field Office to determine beneficiaries' eligibility for participation. Designating a single point of contact with local SSA field offices to verify eligibility worked well except for times when BPQY requests were overwhelming. Having this contact was also critical, since reliance on the BPQY was problematic for determining whether a person was eligible for SSDI under their own SSN and another benefit such as CDB. The BPQY does not give this information so, unless the SSA claims representative looked for it specifically, we had no way of knowing.

Work Development Issues

We also relied on our local SSA contact to supplement or correct BPQYs that did not accurately reflect TWP/EPE usage. The issue of incomplete or overdue work development emerged early in the process of determining eligibility for participation in the pilot. We discovered that a significant number of beneficiaries had not had a work continuing disability review (CDR) and that SSA had not completed the work necessary to identify Trial Work Period months, a benefit cessation, or a benefit termination. In order to avoid delays in enrollment, we resolved some of the eligibility issues by finding individuals "provisionally eligible" based on the evidence that it was likely they were within the 72 month window even if work development was necessary. For beneficiaries for whom eligibility was not clear from the BPQY, it was necessary to request work development by SSA. At first, when we needed to have SSA staff in Baltimore complete the work development for eligibility, the Continuing Disability Review (CDR) process was lengthy and cumbersome. After our AWIC volunteered to complete the CDRs for pilot eligibility, this greatly improved the process.

Provisional Eligibility

The determination of "provisional eligibility" was accomplished by the two project coordinators screening BPQYs generated by the SSA Field Office. Some cases were clearly eligible, for example, if the SSDI entitlement date was within the past 6 years. For situations in which wage information appearing on the BPQY did not appear to correspond to TWP development, the lead benefits counselor would make a determination that even if the wages were developed, the TWP usage would result in the beneficiary being within the EPE, thus eligible for pilot participation.

Table 6. Percent Enrolled Under Provisional Eligibility

Enrollment Phase	Enrolled	Provisionally Eligible (%)
August to October 2005	47	12.8
November 2005 to January 2006	103	24.3
February to April 2006	134	18.7
May to July 2006	114	20.2
August to October 2006	179	21.2
Total enrolled and eligible	577	20.3

Using the "provisional eligibility" definition greatly reduced the need for CDRs to establish pilot eligibility. We made provisional eligibility determinations for 117 or 20% of the total number of enrolled beneficiaries (49 control group, 68 treatment group).

While enrollment progressed steadily throughout the 15-month enrollment window, it gathered momentum towards the end of the period as procedures and supports were put in place to accelerate the eligibility determination process.

Informed Consent and Random Assignment Process

The Vermont pilot established a very tight and consistent enrollment process that ensured enrollees got thorough benefits counseling prior to providing informed consent, and received an immediate answer on their group assignment. Individual contact with the benefits counselor was required before a beneficiary could enroll in the study. Recruitment generally consisted of the following steps:

- Initial contact regarding the pilot enrollment opportunity—either a benefits counselor-initiated contact to an individual on their caseload, or via referral from the VR counselor or community provider or self-referral (often as a result of a project mailing).
- Initial meeting with the benefits counselor to explain the pilot.
- Verification of eligibility by the benefits counselor and project coordinator (this process could take several weeks if the Trial Work Period or EPE status needed to be verified).
- Second meeting with the benefits counselor to conduct informed consent, enrollment and random assignment procedures.

Once the informed consent counseling was completed and the consent form signed, the actual random assignment occurred with the client present: the benefits counselor phoned staff in the DVR central office who verified that all eligibility documentation in the benefits counseling program database was in order before running the automated process to randomly assign the individual to treatment or control group. The enrollee got an immediate result and post-assignment counseling tailored to the group assignment. Since the entire process was done in one sitting and all data collection integrated into the benefits counseling case management database, the process ran smoothly and left little room for confusion among enrollees about their group assignment and its implications.

Recruitment, Enrollment, and Attrition Results

A computer system for outreach tracking was implemented some months after enrollment opened, so there are some gaps in data collection that make it difficult to estimate the total number of people who received some form of direct outreach, but we estimate that roughly 600 individuals were contacted via phone or in person on top of the 2400 who were on recruitment lists and received mailings. Based on that figure of 3000 individuals targeted for recruitment, the number of people who asked to have their eligibility reviewed (904) reflects about a 30% response rate. Of those 904 who responded, 184 were determined ineligible (about 20%), most due to being 72 or more months beyond their ninth trial work month or having a CDB or DWB benefit.

Some eligibility determinations were still pending at the time enrollment closed, so the 20% is a low figure, but not far off. The relatively low rate of ineligibility is a testament to the care with which recruitment lists were drawn and screened by benefits counselors, but another factor—particularly related to the 72 month eligibility rule—is Vermont's targeting of

recruitment to individuals with recent connection to VR, and therefore a greater likelihood of recent attachment to work.

Table 7. Recruitment Results

Recruitment Results	Persons	Percent
Recruited (got mailing or direct contact)	3000	
Responded *(% of recruited)*	904	30.1
Determined ineligible *(% of responders)*	184	20.4
72 months past end of TWP	*73*	
CDB or DWB beneficiary	*47*	
Not SSDI-eligible	*23*	
SSI-eligible	*21*	
Deceased	*5*	
Moved out of Vermont	*5*	
Near retirement	*2*	
Unrecorded reason	*8*	
Responded and not determined ineligible	720	
Enrolled *(% of eligible responders)*	577	80.8

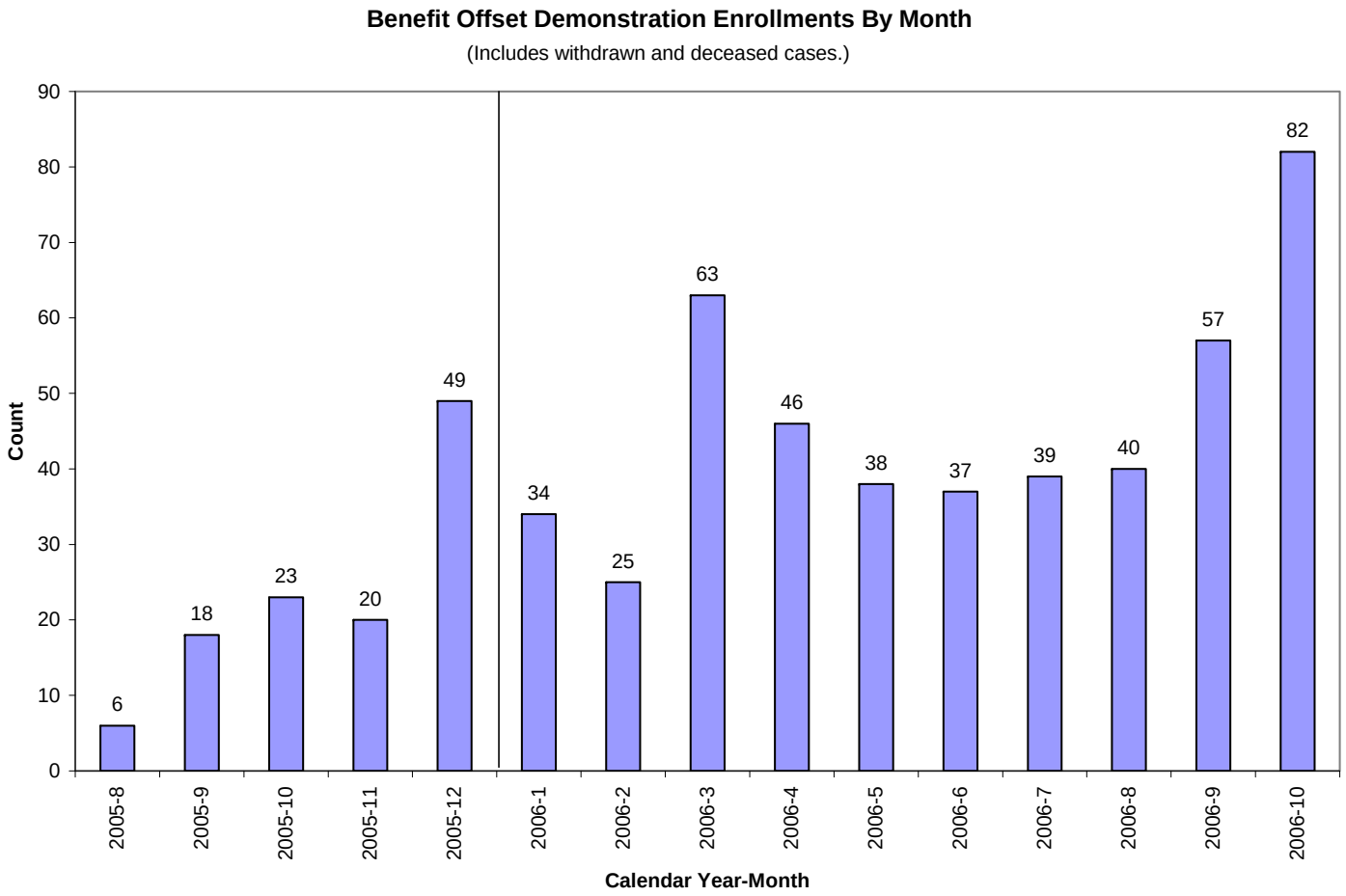
Out of the 720 individuals who responded and were not found ineligible, 582 enrolled (81%), though five of these were later found to have been ineligible at the time of enrollment and were removed from the pilot. Vermont's small scale and the pilot's strong staffing structure played a part in this success, as did the good reputation of both the VR and benefits counseling programs in Vermont. And Vermont's personalized recruitment strategy turned out to be very efficient. Despite having the smallest pool of candidates to draw from, Vermont enrolled the most participants and the largest percentage of SSDI-only beneficiaries in the state (4.8%), compared with the other Pilot states.

Table 8. State Comparisons.

	July 2006 Estimated State Population, Aged 18-64	Disabled Workers [SSDI Only] In Current Pay Status, July 2007	Percent of State's Population, Aged 18-64	Pilot Enrollment	Percent of Disabled Workers in Current Pay Status
Connecticut	2,216,080	52,720	2.4%	264	0.5%
Utah	1,533,326	25,230	1.6%	502	2.0%
Vermont	407,553	12,048	3.0%	577	4.8%
Wisconsin	3,519,942	86,866	2.5%	504	0.6%

Figure 3 below shows Vermont's enrollments by month.

Figure 3.


Benefit Offset Demonstration Enrollments By Month
(Includes withdrawn and deceased cases.)
Count
Calendar Year-Month
0
10
20
30
40
50
60
70
80
90
6
18
23
20
49
34
25
63
46
38
37
39
40
57
82
2005-8
2005-9
2005-10
2005-11
2005-12
2006-1
2006-2
2006-3
2006-4
2006-5
2006-6
2006-7
2006-8
2006-9
2006-10

As shown in Table 9 below, following informed consent a total of 582 individuals attempted to enroll in the pilot, of which 5 individuals (all initially assigned to the treatment group) were later found to be ineligible for the pilot by the Social Security Administration (SSA). Of the remaining 577 eligible enrollees, 284 were randomly assigned to the treatment group and 293 were randomly assigned to the control group. Following random assignment, five individuals (1 control and 4 treatment group members) withdrew consent for participation and for data collection prior to the final outcomes analysis. This left a maximum sample size of 280 treatment group members and 292 control group members (572 total). For the purpose of this analysis, we have labeled the group of those 280 treatment and 292 control individuals as our "full sample".

Table 9. Enrollment and Attrition Counts.

	Treatment	Control	Total
Number Randomly Assigned	289	293	582
Subsequently Declared Ineligible	5	0	5
Eligible Enrollees	284	293	577
Voluntarily Withdrew	4	1	5
Maximum Analytic Sample	280	292	572
Deaths	7	4	11
Minimum Analytic Sample	273	288	561

Out of this overall sample, counts for sample sizes of the analysis subgroups defined earlier are presented in Table 10 below. As indicated earlier, sample sizes for the Vermont-model analyses are smaller, because individuals who died prior to the end of the analysis timeframe were excluded from the Vermont analyses in order to maintain consistent sample sizes over time for the differences-in-differences comparisons of annual means. (Comparisons by age and sex were conducted using SSA-model analyses and sampling criteria only.)

Table 10. Sample Sizes For Analysis

	SSA-Model Analyses			VT-Model Analyses		
Sample	Treatment	Control	Total	Treatment	Control	Total
Full Sample	280	292	572	273	288	561
Baseline Medicaid Buy-In (By Enrollment)	75	98	173	71	98	169
Under Age 45 At Enrollment	102	107	209	N/A	N/A	N/A
Age 45 And Older At Enrollment	178	185	363	N/A	N/A	N/A
Male	126	131	257	N/A	N/A	N/A
Female	154	161	315	N/A	N/A	N/A
Baseline TWP Completed	59	75	134	58	75	133
Baseline Earners	103	120	223	103	120	223
CY 2005 Enrollees (Early Enrollees)	57	57	114	55	57	112
CY 2006 Enrollees (Later Enrollees)	223	235	458	218	231	449

Baseline Characteristics of Enrollees

Social Security Administration Baseline Variables

Baseline characteristics of enrollees included in the SSA-model analyses, at or prior to the date of enrollment, are presented in Table 11 below. The random assignment process was successful in creating treatment and control groups that generally did not differ significantly from each other in measured demographics, with an exception for individuals with less than a high school education (10% for control versus 5% for treatment), though the proportions involved were relatively small. Beyond demographics, there was a borderline-significant advantage for the control group at baseline in terms of Medicaid Buy-In participation (34% for control versus 27% for treatment) and in terms of early baseline employment rates (up to 41% for control versus 34% for treatment). Those differences in baseline characteristics related to outcome measures were controlled-for in the evaluations' regression analyses.

Table 11. (SSA Table 2.) Full Sample: Baseline Descriptive Statistics of Beneficiaries, by Group[2021]

	Control Group				Benefit Offset Group				Difference		
Characteristic	n	X	Estimate	Std. Err.	n	X	Estimate	Std. Err.	Estimate	Std. Err.	2-Tailed P
Female	292	161	55.1%	2.9%	280	154	55.0%	3.0%	-0.1%	4.2%	0.974
Male	292	131	44.9%	2.9%	280	126	45.0%	3.0%	0.1%	4.2%	0.974
Ages 34 and younger	292	38	13.0%	2.0%	280	31	11.1%	1.9%	-1.9%	2.7%	0.475
Ages 35 to 44	292	69	23.6%	2.5%	280	71	25.4%	2.6%	1.7%	3.6%	0.631
Ages 45 to 54	292	124	42.5%	2.9%	280	110	39.3%	2.9%	-3.2%	4.1%	0.439
Ages 55 and up	292	61	20.9%	2.4%	280	68	24.3%	2.6%	3.4%	3.5%	0.332
Race Non-White.	275	4	1.5%	0.7%	257	5	1.9%	0.9%	0.5%	1.1%	0.662
Years since entitlement: <= 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Years since entitlement: > 2 and < 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Years since entitlement: >= 5 and < 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Years since entitlement: >= 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impairment type: Musculoskeletal	259	35	13.5%	2.1%	265	37	14.0%	2.1%	0.4%	3.0%	0.881
Impairment type: Neurological	259	19	7.3%	1.6%	265	16	6.0%	1.5%	-1.3%	2.2%	0.552
Impairment type: Mental - Mental Retardation	259	5	1.9%	0.9%	265	2	0.8%	0.5%	-1.2%	1.0%	0.243
Impairment type: Mental - Not Mental Retardation	259	138	53.3%	3.1%	265	137	51.7%	3.1%	-1.6%	4.4%	0.717
Impairment type: All Others	259	62	23.9%	2.7%	265	73	27.5%	2.7%	3.6%	3.8%	0.344

[20] Reduced sample sizes are the result of missing or unavailable data for particular cases.
[21] Valid data regarding years since entitlement was not available at the time of this report.

	Control Group				Benefit Offset Group				Difference		
Characteristic	n	X	Estimate	Std. Err.	n	X	Estimate	Std. Err.	Estimate	Std. Err.	2-Tailed P
Education less than HS	260	26	10.0%	1.9%	254	13	5.1%	1.4%	-4.9%	2.3%	0.035
Education HS	260	107	41.2%	3.1%	254	112	44.1%	3.1%	2.9%	4.4%	0.500
Education more than HS	260	127	48.8%	3.1%	254	129	50.8%	3.1%	1.9%	4.4%	0.660
Earner ($1200/quarter in at least one of 4 quarters before enrollment	292	120	41.1%	2.9%	280	103	36.8%	2.9%	-4.3%	4.1%	0.290
TWP completed before enrollment	292	75	25.7%	2.6%	280	59	21.1%	2.4%	-4.6%	3.5%	0.192
Medicaid Buy-In participant before enrollment	292	98	33.6%	2.8%	280	75	26.8%	2.6%	-6.8%	3.8%	0.077
Any earnings t-4	292	112	38.4%	2.8%	280	87	31.1%	2.8%	-7.3%	4.0%	0.066
Any earnings t-3	292	121	41.4%	2.9%	280	94	33.6%	2.8%	-7.9%	4.0%	0.051
Any earnings t-2	292	116	39.7%	2.9%	280	105	37.5%	2.9%	-2.2%	4.1%	0.584
Any earnings t-1	292	126	43.2%	2.9%	280	118	42.1%	3.0%	-1.0%	4.1%	0.807
SGA earnings t-4	292	34	11.6%	1.9%	280	24	8.6%	1.7%	-3.1%	2.5%	0.222
SGA earnings t-3	292	31	10.6%	1.8%	280	22	7.9%	1.6%	-2.8%	2.4%	0.253
SGA earnings t-2	292	33	11.3%	1.9%	280	24	8.6%	1.7%	-2.7%	2.5%	0.274
SGA earnings t-1	292	36	12.3%	1.9%	280	31	11.1%	1.9%	-1.3%	2.7%	0.640
Mean earnings t-4	292	n/a	$971	$132	280	n/a	$833	$124	-$138	$181	0.446
Mean earnings t-3	292	n/a	$876	$94	280	n/a	$706	$85	-$170	$127	0.180
Mean earnings t-2	292	n/a	$944	$106	280	n/a	$736	$85	-$209	$136	0.124
Mean earnings t-1	292	n/a	$966	$104	280	n/a	$892	$106	-$74	$148	0.618

Vermont Baseline Variables and Cross-State Comparisons

Table 12 below slices our baseline data slightly differently, prior to attrition from voluntary withdrawals, and compares sample proportions across the four Pilot states, based on earlier state reports using state project data.

For Vermont enrollees, the average age at enrollment was around 46 and most individuals had a physical disability or mental illness. At enrollment, the majority were not working and had not used up their Trial Work Period, and most were either new to benefits counseling services or had enrolled less than a year ago. About a third had some other cash benefit that could be affected by their earnings, and about one-fifth were enrolled in the Medicaid Buy-In program.

The Vermont pilot population differs significantly from other states in educational attainment—only 49% have any education past high school, compared to 67% to 78% in the other pilot states. No other difference between Vermont and the other states is quite as striking as that, though we do not have consistent comparative data for some areas of interest. Connecticut stands out from the rest of the states in the number of people entering with their TWP completed and enrolled in the Medicaid Buy-In, both reflections of the eligibility criteria and outreach strategy adopted by Connecticut. (Baseline TWP completion was higher among early enrollees into Vermont's Pilot, possibly indicating that our early-enrollees subgroup was more similar to Connecticut's full sample.) For the same reason, Vermont's rate of participants with VR history is likely unusual among the states, though not all states have reported on that characteristic.

Table 12. Baseline Enrollee Characteristics Compared By State Project (Prior To Attrition).

Participant Profile at Pilot Enrollment	Vermont		Connecticut		Utah		Wisconsin	
Total enrollment	577	%	254	%	492	%	504	%
Age at Project Enrollment								
34 and Under	70	12.1	30	11.8	74	15.0	80	15.9
35- 54	378	65.5	176	69.3	321	65.2	332	65.9
55 and Over	129	22.4	48	18.9	97	19.7	92	18.3
Sex								
Female	317	54.9	142	55.9	213	43.3	226	44.8
Male	260	45.1	110	43.3	279	56.7	278	55.2
Education Level								
Less than HS	45	7.8	11	4.3	23	4.7	27	5.4
HS Diploma / GED	249	43.2	62	24.4	86	17.5	141	28.0
Some College	158	27.4	108	42.5	288	58.5	222	44.0
4 Year Degree or More	122	21.1	71	28.0	94	19.1	114	22.6
Missing / Unknown	3	0.5		0.0	1	0.2		0.0
Living Arrangement								
Alone	219	38.0	113	44.5	166	33.7	246	48.8
With Spouse / Partner	192	33.3	54	21.3	129	26.2	133	26.4
With Other Family	94	16.3	60	23.6	99	20.1	96	19.0
With Non-Family Adults	42	7.3	23	9.1	34	6.9	29	5.8
Missing / Unknown	30	5.2		0.0	64	13.0		0.0
Disability								

Participant Profile at Pilot Enrollment	Vermont		Connecticut		Utah		Wisconsin	
Total enrollment	577	%	254	%	492	%	504	%
Physical	238	41.2	158	62.2	242	49.2		
Mental / Affective	233	40.4	145	57.1	157	31.9		
Cognitive	49	8.5	46	18.1	56	11.4		
Sensory	27	4.7	40	15.7	34	6.9		
Missing / Unknown	30	5.2		0.0	3	0.6		
Employment Status at Enrollment								
Employed	263	45.6	185	72.8	212	43.1	268	53.2
Not Employed	314	54.4	67	26.4	271	55.1	236	46.8
Weekly Work Hours at Enrollment								
No Hours	314	54.4	67	26.4	271	55.1	236	46.8
Less than 20	119	20.6	36	14.2	80	16.3	111	22.0
20 to 34 Hours	91	15.8	97	38.2	93	18.9	116	23.0
35 or More	48	8.3	50	19.7	39	7.9	41	8.1
Missing / Unknown	5	0.9		0.0	9	1.8		0.0
Status of Trial Work Period at Enrollment using data only for those enrolled fully eligible								
TWP Not Started	230	50.0	60	24.6				
TWP Started	94	20.4	49	20.1				
TWP Used	136	29.6	135	55.3				
Public Program Participation at Enrollment								
Medicaid Buy-In Participant	108	18.7	116	45.7			191	37.9
Food Stamps, Housing, etc	181	31.4						
VR Participation at Enrollment								
Had any past VR involvement	558	95.8	154	60.6				
Started pilot with open VR case	357	61.9	63	24.8				
Status of open case at enrollment								
Application submitted	*17*	*4.8*						
Eligibility certified	*57*	*16.0*						
Plan for Employment signed	*187*	*52.4*						
In job placement	*96*	*26.9*						
Benefits Counseling Services Experience								
Enrolled Before October 2004 (SPI)	173	30.0						
Enrolled October 2004 - June 2005	80	13.9						
Enrolled July 2005 or later (Pilot)	324	56.2						

Recruitment and Enrollment Challenges

Beneficiary Concerns

SSDI work rules are very complex, as were the offset pilot test rules. Beneficiaries (and their service providers) had limited understanding of them, which made it challenging to describe the potential advantage well enough to elicit interest in the pilot and overcome the unease generated by the random assignment design and the strong distrust many beneficiaries have of SSA, and their fear that SSA will cut off their cash benefits and health care if they demonstrate any capacity to work.

Many prospective applicants had no expectation that they would ever work at a level where the offset would benefit them. The limited enrollment window was helpful in that benefits

counselors could urge them to apply if only to preserve the option of using the offset in future, even if they didn't feel ready to increase their work efforts yet. This proved to be a double-edged sword: it helped the pilot in nearly meeting enrollment targets, but it brought many individuals into the project who did not intend to work more, particularly among later enrollees, and thus made it harder to demonstrate an effect from the policy changes.

Another recruitment challenge was that the process of determining eligibility for the pilot necessitated that the beneficiary's SSA case be reviewed for work activity. Because of this, merely applying for the pilot could have an unwelcome effect on the applicant's benefits. The work-related "Continuing Disability Review" (CDR) could result in cessation of benefits and/or an overpayment. Benefits counselors explained this potential outcome to applicants, advising that the CDR would happen eventually anyway and further delay might result in a higher overpayment. Benefits counselors also pointed out that, by doing the work CDR in the pilot application process, the applicant would have the benefits counselor's assistance in straightening out any problems and ensuring the best possible outcome of the CDR. This approach was successful in encouraging individuals to take the risk of applying. Several complicated situations did arise out of applicant work CDRs where the benefits counselors' services proved invaluable to the applicant. This follow-through helped build credibility for benefits counseling and the pilot, regardless of whether that applicant ended up in the treatment group.

Service Provider Responses

Although most service providers welcomed the pilot as an opportunity for their clients, pilot staff did encounter some hesitation and mistrust on the part of VR counselors and service providers who felt that participation in the pilot was not likely to benefit their clients and might prove a positive risk for them. There were concerns that SSA would see evidence of work as cause for cutting off benefits, that other benefits would be affected adversely, that individuals might overestimate their capacity to work and experience health relapses as a result, and that the complexities of operating under new rules would be beyond their client's capacity to manage. The pilot's personalized recruitment approach and credibility of the benefits counseling program with service providers and beneficiaries were critical in overcoming these hesitations. In some cases is took considerable persistence and persuasion to work through service provider concerns to achieve an enrollment.

Service-Provision Impacts of Outreach, Recruitment, and Enrollment

Outreach that is not done carefully can have an adverse impact, raising false expectations and causing confusion and upset among prospective participants and their advocates. This can result in lost credibility for the sponsoring agency. For this reason, the Vermont pilot took great pains to narrowly target outreach to those who were likely to be eligible. Thanks to these efforts, we had a relatively small share of cases where we had to turn an interested person away after inviting them in. The biggest hindrance we faced in more narrowly targeting recruitment was the difficulty getting accurate information from SSA that we needed to determine eligibility under the SSDI-only rule, the 72 month rule and CDB/DWB exclusion.

Vermont was also assiduous in cultivating the support of service providers and advocates by preparing them and maintaining open lines of communication. As a result, outreach and enrollment proceeded smoothly and complaints were minimal. The only real problem

stemmed from SSA tightening eligibility rules around dependent benefits after outreach had begun.

We feel that there was little negative impact from Vermont's outreach, but the tradeoff with this narrowly targeted approach was that the population recruited was not representative of the overall DI-only population in the state, and that many beneficiaries who might have benefitted were never directly invited to apply. No doubt this has an effect on outcomes; however, it is worth noting that Vermont has a far greater proportion of SSDI eligibles in the state participating in the pilot than any other state (by virtue of our limited population), and we encouraged people to enroll even when they expressed doubt they would ever increase work activity.

The biggest impact of outreach was the strain on the benefit counseling program staff. It was an intensive and exhausting process, and taxed benefits counselors and the project coordinators tremendously, particularly as they were also assisting clients with Medicare Part D enrollment during the same period.

Implications for BOND

Successful outreach requires a clear consistent message and local support

BOND will presumably have better information with which to target outreach to potentially eligible individuals, but it will be very important to have very clear and consistent eligibility criteria and informative outreach materials, and a support network for outreach. For the voluntary enrollment group, there must be knowledgeable staff in place with adequate time and resources to do in-person recruitment. It will also be important for BOND to garner support from the service provider and advocacy communities prior to recruitment. Vermont DVR had existing established relationships and a local presence, as well as a strong reputation in Vermont's disability community, and we did substantial outreach to service providers and advocates. In the implementation of BOND, consideration should be given to having a local infrastructure for outreach and enrollment, and local contacts to assist State and local entities in understanding the application of BOND and its effect on beneficiaries.

Recruitment to reach sample size targets takes considerable effort

Although the Vermont pilot had comparatively high rate of enrollment, Vermont still fell just short of the target enrollment we set for ourselves of 600. We do not know what sample sizes will be for required voluntary participant groups in the BOND sites, but it is important to realize the amount of effort demanded to enroll relatively small voluntary samples in the four pilot states.

Eligibility requirements that require SSA work development could impede enrollment

For a national offset demonstration we understand eligibility issues will be different than the restrictions on the four state pilots. It is worth noting, however, that our experience revealed a significant number of beneficiaries needed CDRs either for eligibility in the pilot or to determine the start of an offset (end of the TWP and Cessation). If CDRs are needed to determine eligibility for the voluntary group in the national demonstration, BOND will need to anticipate this workload for successful enrollment.

Administration of the Intervention

Infrastructure for Pilot Implementation

The four-state pilot was extremely complicated to administer for both SSA and the participating states. For SSA, most of the operations had to be conducted outside the existing systems for developing work, calculating benefits and cutting checks. For the states, it meant taking on an entirely new role with clients and working with a new set of SSA personnel in the Baltimore office rather than through accustomed local channels.

Building on Familiar Services

Vermont's approach to the implementation of the offset pilot has been to build as much as possible on the well-established and trusted infrastructure of DVR's benefits counseling program, and to work with participants who had some exposure to employment programs such as VR or benefits counseling services. Benefits counselors maintained their traditional role with both treatment and control groups—providing information and guidance around work incentives and benefits management, and working within the team of service providers involved with client cases (i.e., VR counselor, mental health caseworkers, supported employment providers, Economic Services caseworkers, etc.).

To this they added a new role of serving as "agents" of SSA and the primary direct contact for treatment group members in the pilot. Benefits counselors were responsible for working with treatment group members to develop and update annual earnings estimates, collect and document monthly wages, and help resolve any problems arising from pilot participation. In essence, benefits counselors took on the role of case managers for pilot participants, which added a new dimension of having to collect and manage the documentation on behalf of SSA to their traditional counseling role. Both roles were equally necessary for beneficiaries to take advantage of an offset benefit.

Benefits counselors were not required to maintain contact with control group members—ongoing participation was left to the discretion of the control group member—however, many actively served control group members throughout the pilot.

Support Structure

The benefits counselors were supported by two work incentive project coordinators. One of the project coordinators was designated as the pilot coordinator to serve as primary contact with SSA in Baltimore and ensure consistent information flow and problem resolution. She was responsible for tracking all benefit offsets, coordinating with SSA on work development, gathering documentation needed for SSA's annual reconciliation process, following through to resolve problems with offset application, and coordinating waiver requests when needed. She in turn relied on local benefits counselors to provide earnings documentation and serve as local liaisons with employers when information had to be collected for work development.

The two project coordinators divided up direct supervision of the eleven benefits counselors on a geographic basis (north/south). This was appropriate because of the travel involved and the need for onsite supervision. However, each of the project coordinators had statewide programmatic responsibilities for a variety of programs that were running concurrently with the 1-for-2 Pilot. This division broke down as follows:

Project Coordinator North Responsibilities (Alydia Payette)

- 1-for-2 Project Coordinator.
- Supervision of the six northern benefits counselors.

Project Coordinator South Responsibilities (Peter Burt)

- WIPA Project Coordinator.
- RSA Youth Benefits Counseling Project Coordinator.
- Supervision of five southern benefits counselors.

Technical and administrative staff in DVR's central office provide support for reporting project disenrollments and earnings-estimate changes to SSA, form letter generation and mailing (wage reporting reminders, advance notices of eligibility ending), and database development and maintenance.

The Vermont pilot developed strong and consistent case management practices to minimize any harm to beneficiaries as a result of participation in the pilot. A case management manual was developed early on to outline standardized procedures for verifying eligibility, informed consent, enrollment, earnings estimates, monthly wage reporting and all aspects of participation. In addition, the two work incentive project coordinators acted as lead benefits counselors to provide extensive support and supervision to the benefits counselors, and all treatment group cases were closely monitored by the pilot coordinator.

Management Information Systems

The benefits counselors and project coordinators benefitted from a shared case management system for all benefits counseling cases (dating back to 1999), built and maintained by DVR planning and evaluation staff. This database was modified several times throughout the pilot to accommodate pilot management and reporting needs. Components built specifically for the offset pilot included:

- Outreach tracking
- BPQY tracking
- Eligibility screening
- Random assignment
- Earnings estimates generation & tracking
- Monthly earnings reports tracking
- Tracking of 821, 725, and waiver requests, and benefit offset application
- Pilot-specific case monitoring tools, filters, and alerts
- Form letters
- SSA report generation

Nearly all of these components had several refinements and adjustments made as SSA eligibility and reporting requirements changed and pilot management issues were identified. Having direct access to someone equipped and responsible for database development was crucial to the efficient operation of the Vermont pilot.

Vermont's pilot staff also benefitted immensely from being able to log in to the state's social welfare department database, where they were able to gain accurate information on eligibility and other benefits data for their clients, as well as look at screens showing data from the Unemployment Insurance wage reporting system and SSA interfaces.

A strong and well-integrated staffing and support structure was crucial for implementing this pilot and responding to all the complications that arose, as will be described below.

The Role of Benefits Counselors

The accessibility and support of local DVR benefits counselors was a critical component in engaging and maintaining beneficiaries in the pilot.

Overcoming Fears by Providing Clear, Consistent Information

The presence of local and competent benefits counselors was a key component in getting beneficiaries to the point of willingness to participate in the pilot and effectively utilize the offset provisions. As with many SSDI beneficiaries, pilot participants were financially vulnerable and dependent on their monthly cash benefit. Many did not understand the existing SSDI work incentives, let alone the pilot rules. In addition, we discovered that 49% of pilot participants had psychiatric or cognitive disabilities that may have impeded their understanding of the SSDI program rules and magnified their anxiety about any change in their benefits status. In addition to the lack of understanding, benefits counselors reported that some beneficiaries had a mistrust of SSA in regard to the effect of work on their benefits. The DVR benefits counselors were instrumental in getting beneficiaries past the issues of misunderstanding and mistrust to participate in the pilot.

Providing Reassurance and Resolving Problems

As beneficiaries moved into offset status, the presence of the local benefits counselor became even more important. There were many issues with the application of the offset that resulted in numerous errors in SSDI payments. These included SSDI checks being inappropriately suspended, overpayments, underpayments, and long delays in the application of the offset. Some of these errors may have been a result of the process of administering the offset, but most resulted from SSA using a labor intensive manual payment process and during the first year of the offset confusion among SSA staff. While SSA staff worked hard to improve the process during the course of the demonstration, the development of a more automated payment process that reduces staff workloads would likely improve the administration of the offset and increase the effectiveness of the offset. An unanticipated problem also arose due to the relationship of the SSDI check to the Medicare Part B premium. Pilot participants showed up on SSA's system as having suspended benefits which resulted in having premium bills sent to them. This was very disconcerting for beneficiaries. It was a challenge for benefits counselors to reassure individuals that they could ignore those notices and not lose their health care coverage.

Managing Impacts on Other Benefits

At the time of enrollment, 20% of Vermont's pilot participants were also enrolled in the Medicaid Buy-In program. Delays in offset implementation created a problem for a few Medicaid Buy-In recipients as—until the offset was applied—these individuals had full SSDI payments plus earnings which combined to put them over the Medicaid Buy-In income eligibility level, jeopardizing Medicaid coverage. It required work by the benefits counselor and pilot coordinator with the state Medicaid agency to resolve the problem.

Additionally, at time of enrollment, 29% of Vermont's offset pilot participants were receiving other income supports, including Food Stamp benefits, Federal or State housing subsidies or other public benefits. Benefits counselors assisted those participants in understanding the impact of their earnings and changes to their SSDI benefits as a result of their participation. It was also necessary for benefits counselors to communicate with those agencies administering the other public benefits to explain the pilot and its effect on SSDI.

In many cases these problems could have caused beneficiaries to drop out of the study. However, the accessibility and responsiveness of the DVR benefits counselor to reassure beneficiaries that errors would be fixed kept individuals engaged. The Vermont pilot had a very low drop out rate with only four treatment group members voluntarily withdrawing from the pilot.

Earnings Estimates and Wage Reporting Procedures

Annual Earnings Estimates

One of the more conceptually awkward elements in the pilot for participants and pilot staff alike (both in the four states and at SSA) was the system for reporting earnings via an annualized estimate of earnings. This reporting system was very confusing for all concerned, and was marked by inconsistent methods of computation and interpretation and frequent changes in reporting rules, formats, and timing of submission to SSA. Methods of computing earnings estimates were still being debated five months into the enrollment period. Reporting methods continued to change after that. At the outset SSA wanted every estimate reported on a monthly basis. This worked well during the enrollment period, when every new enrollment also needed to be reported anyway. In January 2007, a few months after enrollment ended, SSA asked that we report on a monthly basis only new estimates that showed significant changes (i.e., change in earnings of $1000 or more, or if work started or ceased). In August 2007, SSA requested that we reduce our reporting to quarterly, and asked for employer names to be reported. Again we made these changes. Later that fall, we made another adjustment when we realized that some changes of less than $1000 still represented shifts from below SGA to above SGA earnings, and these needed to be reported to trigger work development. In preparation for the 2007 annual reconciliation process, it was decided that all new estimates for 2008 should be reported, regardless of the level of change they represented from the prior report. All of these changes required programming adjustments in the benefits counseling program database, so the in-house availability of programming support has been critical.

While the annualized earnings estimate may have worked well for individuals with stable or no employment, it was a poor fit for many of our participants, for whom earnings fluctuated unpredictably through the year, as jobs were lost or added, hours dropped or increased, or health crises eliminated earnings altogether.

Benefits Counselors as SSA Agents

A large proportion of treatment group members were current or former benefits counseling clients who had been carefully instructed by their counselor in the past to report earnings to local SSA claims representatives. In the pilot, benefits counselors became agents of SSA, an unaccustomed role that took some adjustment on both their and the beneficiaries' part. We found it essential to be very clear with beneficiaries about the entity to whom they must report earnings. With a few exceptions, pilot participants understoond that the benefits counselor was the SSA "agent" to whom they needed to report their earnings. However, even

with this understanding, periodic reminders were necessary, particularly with certain disabilities. For example, benefits counselors found it necessary to follow up repeatedly with some beneficiaries with Traumatic Brain Injury (TBI) to obtain information.

Wage Reporting Supports

The database generated a form letter monthly that requested wage reports for all missing months for any participant who had three or more months for which no wage reports were documented in the database. This was sent out from central office under the name of the participant's benefits counselor. Advance warning was given to the benefits counselors so they were prompted to enter any earnings data they had already received but not input into the database. The letter instructed participants to either mail or bring the form and the earnings verification to their benefits counselor.

Many beneficiaries were fearful that they would do something wrong and end up having another overpayment, so we had some participants who assiduously brought earnings verification to the benefits counselor monthly. Because they never built up three missing months, they never received a reminder letter. On the other end of the spectrum, all of our benefits counselors reported that they had 1 or 2 beneficiaries who—even after monthly reminders, a letter, and a phone call, still did not supply earnings verification. Most were in between: they supplied some of the information that was needed but it took repeated calls and appointments for the benefits counselors to get all the earnings verification that was needed for year-end reconciliation. It was very time-consuming work for the benefits counselors.

Annual Reconciliation Process

Towards the close of each year, another system-generated letter went out to all pilot treatment group members to request wage verification and W2 forms for the annual reconciliation process, and to remind them that they needed to do a fresh earnings estimate for the new year.

In December and January, benefits counselors met with each beneficiary who was employed to collect W2 forms and pay stubs. At this meeting the beneficiary and the benefits counselor also completed a form to submit the annual estimate for the new year. This information was then collected, checked to verify all needed information was collected, recorded for tracking in the database and submitted to the SSA by the pilot coordinator. This was extremely time consuming for both the benefits counselors and the pilot coordinator. The benefits counselors spent a great deal of time meeting with beneficiaries, sometimes more than once to get everything. The pilot coordinator then had to collect the information and track information coming from the benefits counselors and going to SSA's Office of Central Operations (OCO) in Baltimore to make sure an estimate and earnings verification was submitted for each participant.

The reconciliation process was also a great deal of work for OCO. The verification needed for the 2006 reconciliation was sent to SSA at the end of March 2007. The reconciliation process was not finished for the beneficiaries who were offset until October 2007. As the work was developed on beneficiaries and we found they should have been offset in 2006, reconciliation still needed to be done on them. In some cases the reconciliation was done, the overpayment notice went out and a waiver was completed only to receive another overpayment notice 4 months later with a different overpayment amount. This was another source of stress for the beneficiaries in this pilot. Because this was a new program being administered by SSA and staff did not have experience with the new benefit offset, numerous

notices were received that stated different overpayment amounts. While SSA improved the administration of the program, the development of an automated system that is better able to track payments and send out correct notices would likely increase the effectiveness of a benefit offset program.

Work Development and Offset Application Procedures

Delays in CDR Processing

As mentioned above, the pilot encountered serious delays in the work development needed to determine eligibility for the pilot. As a result, we had to resort to using "provisional eligibility" to get people enrolled within the enrollment window. But CDRs were still needed to be able to accurately track Trial Work Period usage and determine when cessation occurred and the benefits offset would apply.

The processing of CDRs to determine TWP/EPE status for those participants determined provisionally eligible was an ongoing process, usually initiated by earnings estimates which were over SGA. Having our DVR pilot coordinator involved in tracking and coordinating the process of getting the Office of Central Operations (OCO) the needed information to do the work development made the process quicker. By closely monitoring treatment group wage reports via the database, and working with the beneficiary to complete the SSA-821 to forward on to SSA in Baltimore, the pilot coordinator was instrumental in getting offsets applied in a timelier manner. We found that this intense level of tracking and treatment was crucial to the CDR process.

The involvement of the pilot coordinator in the tracking and CDR process increased over time due to the complications we encountered. Early on in the project we mailed the completed SSA-820 and 821 to OCO. We soon found that mailing information to SSA was not the best option. While tracking the completion of the work development we found out that anything we mailed was scanned into a paperless system; however, the OCO staff working on these cases were not notified that the information was in the system. We waited weeks for notification that the work had been developed, only to discover that the OCO staff did not even know the completed SSA-820 or 821 had been sent to them. After we realized what was happening we started faxing all information directly to the designated OCO staff.

We solved that problem but found we were still waiting weeks or months for the work development to be completed. Eventually, we learned that OCO staff were sending out the SSA-L725 to the employer for wage verification with a tickler for 90 days. This meant that if the employer did not respond to the first request another request was not sent out for at least 90 days. After discovering this, the pilot coordinator asked that the SSA-L725 be sent to her. The OCO staff sent the SSA-L725 to the pilot coordinator and she sent it to the employer. This process was tracked in the benefits counseling program database, and if the completed SSA-L725 was not back within 2 weeks another request was sent out. This process and sending in paystubs with the completed SSA-821 sped up the completion of the work development.

In 2007, we had 170 beneficiaries in the treatment group who had earnings. According to our records SSA had completed work development on 86 beneficiaries since the pilot started and of those 44 resulted in a cessation decision.

Delays in Offset Application

The next challenge we encountered was the very long time period between the work developments being completed and benefits actually being offset. Apparently when this pilot started, the work that needed to be done for it was not considered a priority, so it sat on the desk of OCO staff until they had time to do the inputs for the offset to take effect. The work for the pilot was subsequently made a priority and that helped.

Because of the time it took to do the work development and get the SSA inputs done for the offset to begin, we had beneficiaries who should have been receiving an offset benefit up to 18 months before it actually happened. Of the 49 beneficiaries we had in offset by early 2008, only 3 of those had their benefits offset in a timely manner. Two of the 3 were in suspense at the time they enrolled in the pilot. For the other 46 beneficiaries who experienced a delayed application of the offset, subsequent benefit payments received by those participants, after the offset was applied, were reduced beyond the original prorated monthly offset amount, to make up for the delay. That is, either the subsequent checks were less than what they would have been had the offset been applied in a timely manner, or no further benefit checks were issued until the end of the year. In some cases, there were not enough months left in the year to fully deduct the offset amount for the year, which resulted in an overpayment for the year. Many of those 46 beneficiaries were not able to budget for the unexpected fluctuations in their benefit check amounts, which resulted in financial hardships for them. Receiving an overpayment notice is very stressful for a beneficiary especially when they have done everything that was required of them. These overpayments were not small amounts. After the reconciliation for 2006 was completed, 21 beneficiaries had been overpaid even after receiving no benefit or a much reduced benefit for part of the year. Most of the overpayments were over $1000. The decision by SSA to allow us to report changes in estimates only quarterly exacerbated the problem of overpayments. Many of the delays may have been the result of the process used to administer payments and SSA staff worked hard to correct them. However, these errors may have had an impact on the effectiveness of the benefit offset.

We are still dealing with the untimely start of the benefit offset because work development still needs to be done on many of the offset pilot cases. We track each case so we can initiate the work development if it appears the beneficiary has used their TWP. To do this we request an SSA-821 from our AWIC, the benefits counselor helps the beneficiary complete it and it is faxed to OCO with a note stating we feel the beneficiary has completed their TWP and their benefit will need to be offset due to earnings over SGA.

The measures we put in place to help SSA get the work developed and the benefits offset in a timely manner created an immense amount of work for the pilot coordinator and the benefits counselors.

Impact of Pilot Implementation

Impact of Late Offset on Other Benefits

When the SSDI benefit offset does not happen in a timely manner it affects other benefits such as Medicaid, LIHEAP fuel assistance, Food Stamps, etc. For example, in the case of J.R., her Medicaid was closed because at the time of her review she was receiving her full SSDI benefit plus all her wages. This made her over income for our Medicaid Buy-In. If her benefits had been offset in a timely manner this would not have happened. In order to get her Medicaid reinstated it took numerous hours of the benefits counselor's time to research why the benefit ended and what needed to be done to get it reinstated. To resolve this we had to

get a letter from OCO stating that she was not entitled to her full benefit. The closure of her Medicaid benefit caused great distress for the beneficiary and she was ready to quit her job to get her Medicaid coverage back. It has been our experience that when benefits are reduced or lost and the beneficiary was unaware this would happen, the individual's first inclination is to stop working.

In another case, an individual excluded from the outcomes analysis for having withdrawn consent used the offset for a full year and earned above SGA for longer than that, but was so frustrated by the unpredictability of her benefit checks due to SSA's handling of her benefit offset that she withdrew consent—a protest action made a little less painful for her since she was close to exhausting her extended EPE and was planning to reduce her earnings to under SGA soon anyway.

Impact of Offset on Other Family Member Benefits

Another of the challenges we met with in the pilot was the incorrect suspension of a child's benefit. We had numerous cases in which the child's benefit was suspended when the parent's benefit was offset. We had some very upset ex-wives to contend with when this happened. An example of this is the case of K.S. in which the child's benefit was suspended and before we could get the benefit reissued, his ex-wife started the process of taking the beneficiary to court for nonpayment of child support. This took a great deal of negotiating with the child's mother and a letter from OCO to the courts before it was straightened out. In another case, that of R.C., his ex-wife did not receive benefits for her four girls because they were suspended in error. It took us until the end of the month to get this straightened out and get the benefits issued. In the meantime the mother was receiving bank charges for returned checks. She assumed the benefits would be direct-deposited into her account just as they were every month so she made out her bills and mailed them as usual. These types of problems did not do much for our credibility or that of SSA.

Impact of SSA Using An Alternate System to Manage Pilot Enrollees

There were numerous problems associated with SSA employees who were not assigned to work on the offset pilot taking action on pilot cases or incorrectly coding cases. These actions often led to the issuance of large benefit checks to which the beneficiary was not entitled. In two cases this happened to the same person twice.

In March 2007, W.G. received a check for $7120 in error. She called SSA's toll free number and was correctly referred to our toll free number. Instead she called her benefits counselor. After doing some research it was found that this check was issued in error by an SSA employee who was not assigned to the pilot. Because W.G. was receiving an offset benefit it appeared on her record that she had been underpaid so this employee took an action to release the money they thought she was owed. Unfortunately she was not owed this money and we had to ask her to return the check. In August, she received another check in error, this time for $8672. We found out about this purely by chance as the pilot coordinator had called our AWIC about something else and as he was looking at the record he saw the payment. The benefits counselor was called immediately to get in touch with the beneficiary to let her know the check was not owed her and she would need to return it to SSA. By the time the benefits counselor was able to contact her she had already spent $2000. She also did not believe the benefits counselor when he told her she was not due the check. She said she called SSA's toll free number and even after explaining that this had happened to her before and she had to return the check they told her this check was her money and she could spend it. Needless to

say, when the benefits counselor told her she needed to give the money back to SSA she didn't believe him. She needed a new car and she bought one with the check she received in error. She is now repaying that money.

M.C. received an incorrect payment of $5292. Before we were able to research why she got this payment and whether or not it was money she was due she spent $1000 of the money. She is now paying this $1000 off in monthly payments. These are just two examples; by early 2008 there were roughly 10 to 15 people who received these incorrect payments that we know about.

Once SSA made the decision to create a dedicated unit in OCO to administer the Pilot, the problem impacts described above decreased and were more quickly resolved.

Implications for BOND

Complex interaction with other state and federal benefits need to be anticipated

SSA disability beneficiaries typically rely on a complex web of federal and state benefits for health care and basic needs like food, shelter, and fuel. In order to effectively understand and utilize a benefit offset in a national demonstration, beneficiaries will need to understand the impact on all their benefits. With a national pilot including SSI recipients as well, the complex inter-relationships of benefits will not be understood by beneficiaries without the support of competent benefits counselors working in collaboration with SSA and other agencies serving the beneficiaries. It is vital that the BOND consider these complexities in determining how to provide adequate and responsive local support to beneficiaries, particularly if demonstration sites cross state lines.

SSA work development needs may present a formidable workload

If the BOND design cannot overcome the need for CDRs to determine offset application, it is imperative to anticipate and prepare for the workload associated with work development. In Vermont, 71% of the offset participants in the treatment group had either all or some TWP months remaining. The implication is that work development will need to be done on all those beneficiaries to determine an offset start date, which in some cases will require wage development for several years' earnings. Our experience so far is that this has an insuperable task for SSA in the context of these four state pilots and has necessitated that state personnel take on a heavy share of the workload.

SSA's system for administering benefits needs to be streamlined

If SSA is unable to disentangle offset benefit payments from the payment of dependent beneficiaries successfully, there is great potential for damaging incidents like the ones Vermont has experienced where the dependent benefit serves as the child support payment. Unless these system-related problems are addressed, they will have a greater impact on the participants in BOND simply due to greater numbers of beneficiaries involved.

Similarly, if the BOND is forced to operate through a parallel SSA system and personnel structure apart from the machinery that manages information flow, benefit determinations, and check-cutting and that connects Baltimore with SSA field office personnel, there is a

strong likelihood that delays and errors will compromise the success of BOND. SSA might be sending out many more large checks in error, as we experienced in Vermont. Without the close relationship that was built between the benefits counselors and our participants we would not have discovered these large incorrect payments as quickly as we did. The result of this could be thousands of beneficiaries involved in BOND with huge overpayments.

3. Outcomes Evaluation: Impacts of Benefit Offset on Beneficiary Behavior

Social Security Administration Net-Impact Evaluation Estimates (UI Outcomes)

Simple (Uncontrolled) Comparisons Post-Enrollment

As a preliminary step for examining the effect of the benefit offset on employment, SGA, and earnings, SSA asked the states to report mean outcomes for the treatment and control groups, and any differences between the groups, along with standard errors and probability values for the differences, for the enrollment quarter and all post-enrollment quarters. This represents a simple comparison of group outcomes, **prior to any attempt to control for pre-existing differences between the groups at baseline.** Those values are reported in Tables 13, 14, and 15 below.

The one-tailed probabilities reported in Tables 13 through 15 indicate that there are significant or borderline-significant differences in SGA rate between the treatment and control groups at the first, second, and fourth quarters following the quarter of enrollment. These outcome differences could be the result of pre-existing differences between the groups at baseline, however, such as those seen in Table 11, so we need to control or adjust for possible baseline differences between treatment and control through regression techniques.

Table 13. (SSA Table 1b.) Simple (Uncontrolled) Comparisons; Full Sample; Percentage of Beneficiaries with Quarterly Earnings At or Above SGA By Group

SGA	Control Group				Benefit Offset Group				Difference			
Qtr	n	X	Estimate	Std. Err.	n	X	Estimate	Std. Err.	Estimate	Std. Err.	2-tailed p	1-tailed p
Enrollment (t)	291	43	14.8%	2.1%	280	40	14.3%	2.1%	-0.5%	2.9%	0.868	0.434
t+1	291	47	16.2%	2.2%	280	58	20.7%	2.4%	4.6%	3.2%	0.159	0.080
t+2	290	44	15.1%	2.1%	276	59	21.1%	2.4%	6.0%	3.2%	0.064	0.032
t+3	290	51	17.5%	2.2%	276	50	17.9%	2.3%	0.3%	3.2%	0.917	0.459
t+4	290	39	13.4%	2.0%	276	55	19.6%	2.4%	6.2%	3.1%	0.044	0.022
t+5	289	46	15.8%	2.1%	276	43	15.4%	2.2%	-0.5%	3.0%	0.882	0.441
t+6	288	44	15.1%	2.1%	273	46	16.4%	2.2%	1.3%	3.1%	0.668	0.334
t+7	288	45	15.5%	2.1%	273	48	17.1%	2.3%	1.7%	3.1%	0.587	0.294
t+8	288	39	13.4%	2.0%	273	47	16.8%	2.2%	3.4%	3.0%	0.259	0.129

Table 14. (SSA Table 1c.) Simple (Uncontrolled) Comparisons; Full Sample; Mean Quarterly Earnings By Group.

Earnings	Control Group				Benefit Offset Group				Difference			
Qtr	n	X	Estimate	Std. Err.	n	X	Estimate	Std. Err.	Estimate	Std. Err.	2-Tailed P	1-Tailed P
Enrollment (t)	291	n/a	$1,153	$107	280	n/a	$1,144	$125	-$8	$164	0.960	0.480
t+1	291	n/a	$1,207	$109	280	n/a	$1,346	$121	$139	$163	0.394	0.197
t+2	290	n/a	$1,229	$113	276	n/a	$1,402	$128	$173	$171	0.312	0.156
t+3	290	n/a	$1,264	$123	276	n/a	$1,240	$119	-$23	$171	0.891	0.445
t+4	290	n/a	$1,128	$112	276	n/a	$1,271	$126	$142	$169	0.400	0.200
t+5	289	n/a	$1,218	$126	276	n/a	$1,209	$133	-$9	$184	0.962	0.481
t+6	288	n/a	$1,259	$136	273	n/a	$1,211	$138	-$48	$193	0.805	0.402
t+7	288	n/a	$1,236	$131	273	n/a	$1,229	$141	-$7	$192	0.970	0.485
t+8	288	n/a	$1,132	$118	273	n/a	$1,300	$144	$168	$186	0.367	0.184

Table 15. (SSA Table 1a.) Simple (Uncontrolled) Comparisons; Full Sample; Percentage of Beneficiaries with Any Quarterly Earnings By Group

Employment	Control Group				Benefit Offset Group				Difference			
Qtr	n	X	Estimate	Std. Err.	n	X	Estimate	Std. Err.	Estimate	Std. Err.	2-Tailed P	1-Tailed P
Enrollment (t)	291	148	50.9%	2.9%	280	142	50.7%	3.0%	-0.1%	4.2%	0.972	0.486
t+1	291	146	50.2%	2.9%	280	152	54.3%	3.0%	4.1%	4.2%	0.325	0.162
t+2	290	148	50.9%	2.9%	276	139	49.6%	3.0%	-1.2%	4.2%	0.771	0.386
t+3	290	135	46.4%	2.9%	276	143	51.1%	3.0%	4.7%	4.2%	0.263	0.131
t+4	290	128	44.0%	2.9%	276	134	47.9%	3.0%	3.9%	4.2%	0.353	0.177
t+5	289	127	43.6%	2.9%	276	127	45.4%	3.0%	1.7%	4.2%	0.680	0.340
t+6	288	130	44.7%	2.9%	273	120	42.9%	3.0%	-1.8%	4.2%	0.662	0.331
t+7	288	133	45.7%	2.9%	273	127	45.4%	3.0%	-0.3%	4.2%	0.934	0.467
t+8	288	119	40.9%	2.9%	273	126	45.0%	3.0%	4.1%	4.1%	0.321	0.161

Regression-Adjusted Impact Estimates

As described earlier, SSA's requested analysis model involves controlling for baseline group differences and testing the statistical significance of outcome differences between the treatment and control groups at each and every quarter, from the quarter of enrollment though the eighth quarter following the quarter of enrollment. Thus, for each group or subgroup examined, 27 comparisons were made (3 outcome measures for 9 quarters relative to enrollment) in the form of regressions and means calculations. Sample sizes for observed values varied from quarter to quarter due to attrition resulting from enrollee deaths.

All statistical outputs for these SSA-requested net-impact analyses are included as appendices to this report. Standard errors of means and, for logistic regressions, odds-ratios – labeled "Exp(B)" - and their 95% confidence intervals are reported in those statistical-output appendices.

Full Sample

For the full sample of enrollees (292 control and 280 treatment group members), net-impact estimates derived using SSA's data analysis model are presented in Tables 16 through 18, and Figures 4 though 9, below.

On the measure of quarterly SGA rate for the full sample, we observed significant differences between treatment and control at the 1st, 2nd, and 4th quarters following the quarter of enrollment. On the measure of average quarterly earnings, significant differences were observed at the 1st and 2nd quarters post-enrollment. For quarterly employment rate (i.e., any UI earnings in a quarter), there were significant differences at the 1st and 3rd quarters post-enrollment. Across all three outcome measures, there were significant effects associated with the benefit offset in the first year post-enrollment, but no significant effects in the second year post-enrollment. In the first post-enrollment year, magnitudes of effects for the full sample were modest, representing increases of up to 6 percentage points in the SGA rate, up to $162 in additional average quarterly earnings, and up to a 5 percentage-point increase in the quarterly employment rate.

Table 16. SSA Net Impact Estimates; Full Sample; SGA Rate.

SGA	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	291	280	0.663	0.332		292	280	14.7%	14.3%	-0.5%
Qtr t+1	291	280	0.027	0.014	<=.05	292	280	16.1%	20.7%	4.6%
Qtr t+2	290	276	0.009	0.005	<=.05	292	280	15.3%	21.3%	6.0%
Qtr t+3	290	276	0.555	0.278		292	280	17.7%	18.0%	0.3%
Qtr t+4	290	276	0.011	0.006	<=.05	292	280	13.5%	19.8%	6.3%
Qtr t+5	289	276	0.926	0.463		292	280	16.0%	15.5%	-0.5%
Qtr t+6	288	273	0.365	0.183		292	280	15.3%	16.7%	1.4%
Qtr t+7	288	273	0.305	0.153		292	280	15.7%	17.5%	1.8%
Qtr t+8	288	273	0.110	0.055	<=.10	292	280	13.6%	17.1%	3.5%

Table 17. SSA Net Impact Estimates; Full Sample; Average Earnings

Avg. Earnings	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	291	280	0.664	0.332		292	280	$1,152	$1,144	-$8
Qtr t+1	291	280	0.092	0.046	<=.05	292	280	$1,206	$1,346	$140
Qtr t+2	290	276	0.080	0.040	<=.05	292	280	$1,235	$1,397	$162
Qtr t+3	290	276	0.788	0.394		292	280	$1,269	$1,236	-$33
Qtr t+4	290	276	0.252	0.126		292	280	$1,133	$1,265	$133
Qtr t+5	289	276	0.827	0.414		292	280	$1,221	$1,203	-$18
Qtr t+6	288	273	0.937	0.469		292	280	$1,261	$1,201	-$59
Qtr t+7	288	273	0.752	0.376		292	280	$1,238	$1,221	-$17
Qtr t+8	288	273	0.205	0.103		292	280	$1,133	$1,295	$161

Table 18. SSA Net Impact Estimates; Full Sample; Employment Rate (Any Earnings).

Employment	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	291	280	0.716	0.358		292	280	51.0%	50.7%	-0.3%
Qtr t+1	291	280	0.076	0.038	<=.05	292	280	50.2%	54.3%	4.0%
Qtr t+2	290	276	0.966	0.483		292	280	51.2%	50.2%	-1.0%
Qtr t+3	290	276	0.068	0.034	<=.05	292	280	46.7%	51.7%	4.9%
Qtr t+4	290	276	0.111	0.056	<=.10	292	280	44.3%	48.4%	4.2%
Qtr t+5	289	276	0.367	0.184		292	280	44.0%	45.9%	1.9%
Qtr t+6	288	273	0.856	0.428		292	280	45.1%	43.6%	-1.5%
Qtr t+7	288	273	0.740	0.370		292	280	46.2%	46.2%	0.1%
Qtr t+8	288	273	0.119	0.060	<=.10	292	280	41.3%	45.9%	4.6%

Figure 4.

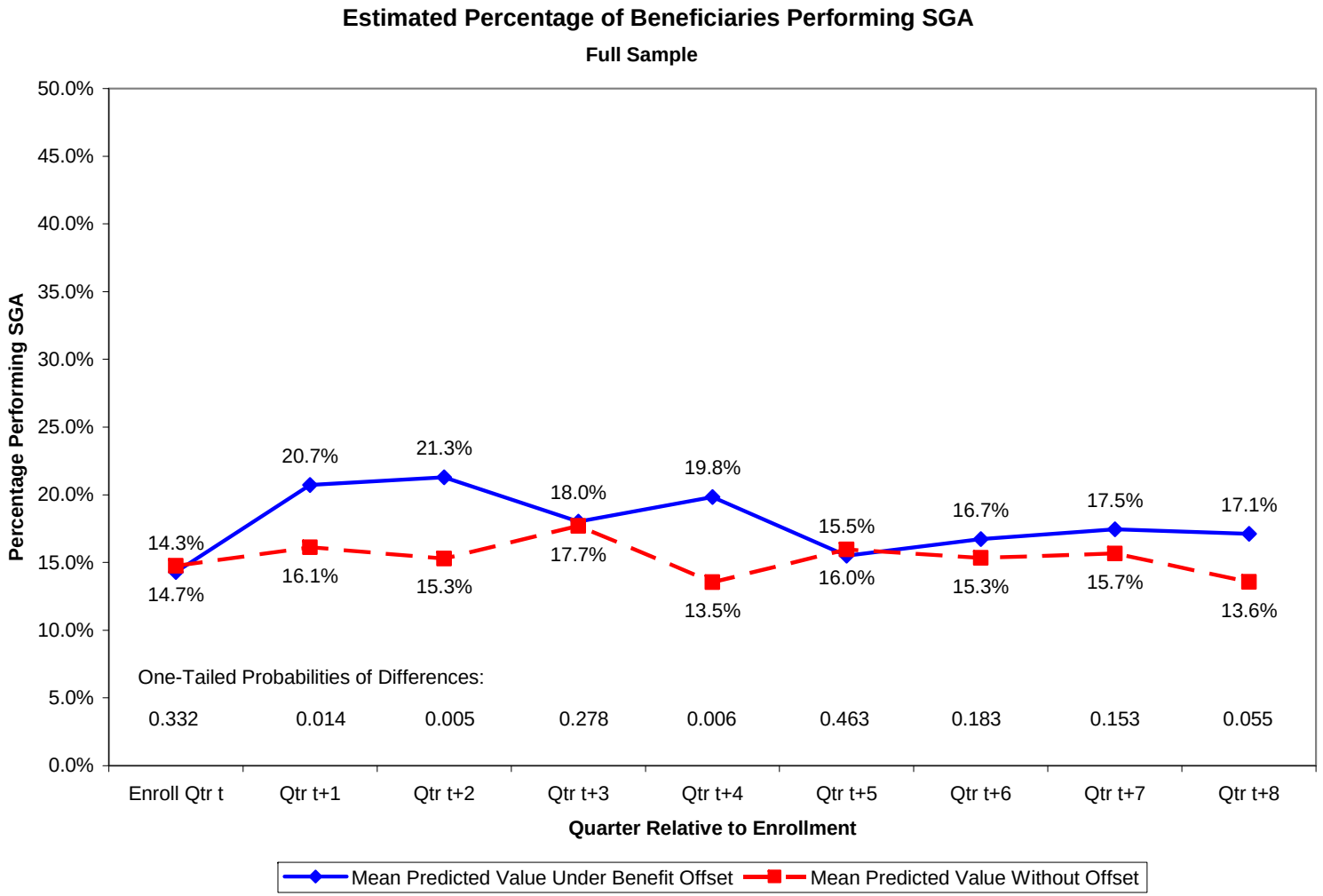

Estimated Percentage of Beneficiaries Performing SGA
Full Sample
Percentage Performing SGA
50.0%
45.0%
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
14.3%
20.7%
21.3%
18.0%
19.8%
15.5%
16.7%
17.5%
17.1%
14.7%
16.1%
15.3%
17.7%
13.5%
16.0%
15.3%
15.7%
13.6%
One-Tailed Probabilities of Differences:
0.332
0.014
0.005
0.278
0.006
0.463
0.183
0.153
0.055
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 5.

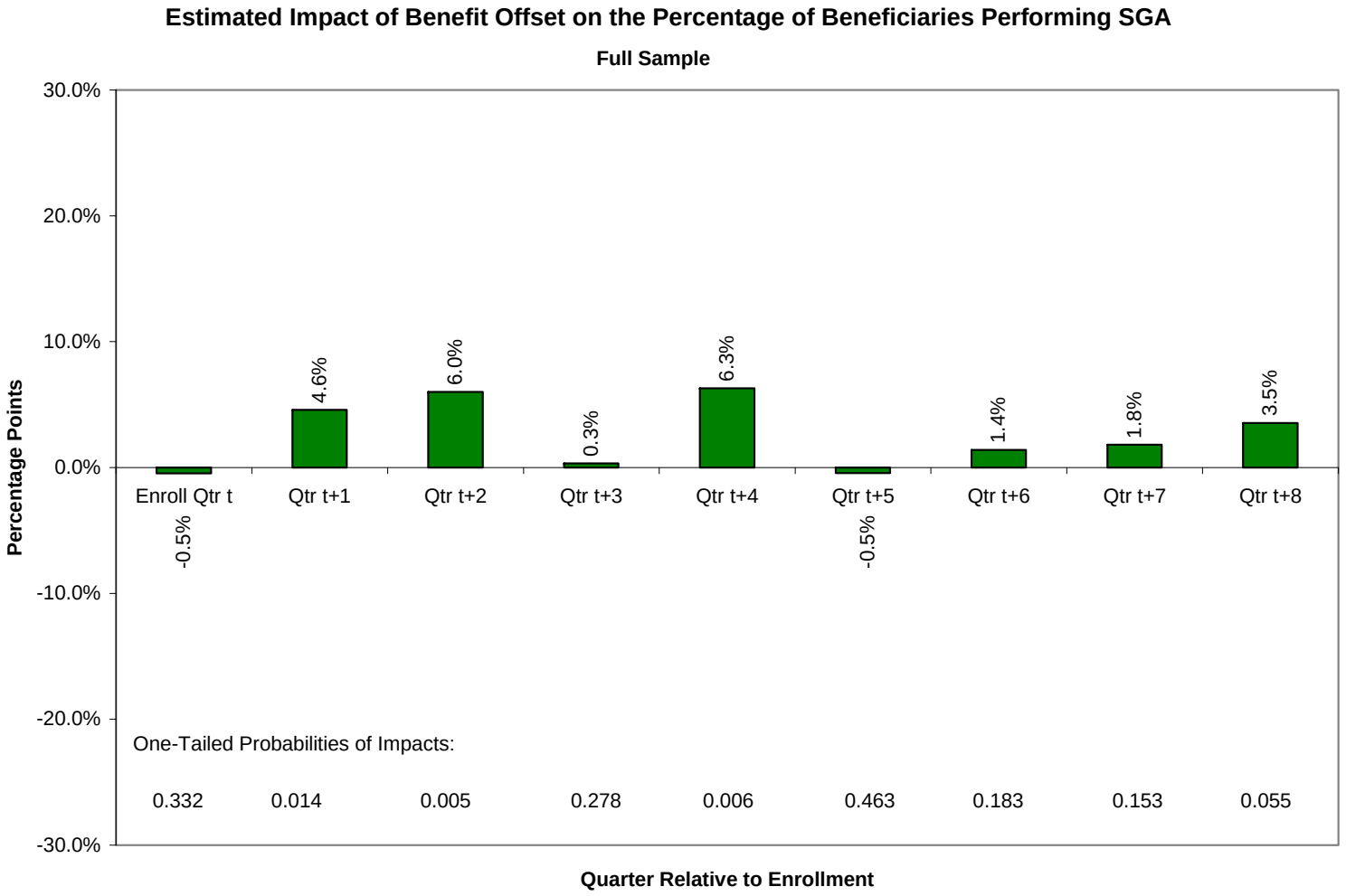

Estimated Impact of Benefit Offset on the Percentage of Beneficiaries Performing SGA
Full Sample
Percentage Points
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
-30.0%
-0.5%
4.6%
6.0%
0.3%
6.3%
-0.5%
1.4%
1.8%
3.5%
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.332
0.014
0.005
0.278
0.006
0.463
0.183
0.153
0.055
Quarter Relative to Enrollment

Figure 6.

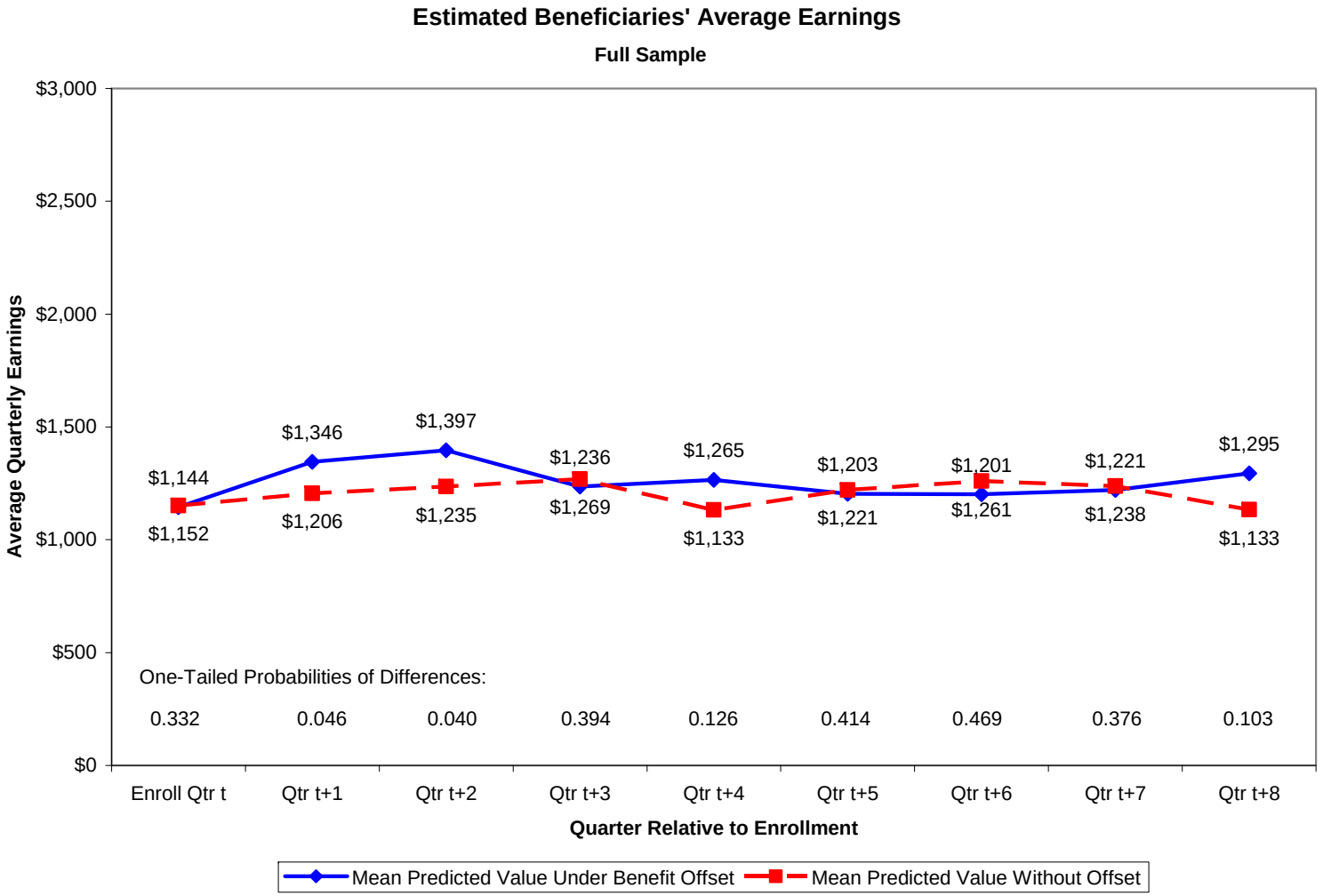

Estimated Beneficiaries' Average Earnings
Full Sample
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
Average Quarterly Earnings
$1,144
$1,346
$1,397
$1,236
$1,265
$1,203
$1,201
$1,221
$1,295
$1,152
$1,206
$1,235
$1,269
$1,133
$1,221
$1,261
$1,238
$1,133
One-Tailed Probabilities of Differences:
0.332
0.046
0.040
0.394
0.126
0.414
0.469
0.376
0.103
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 7.

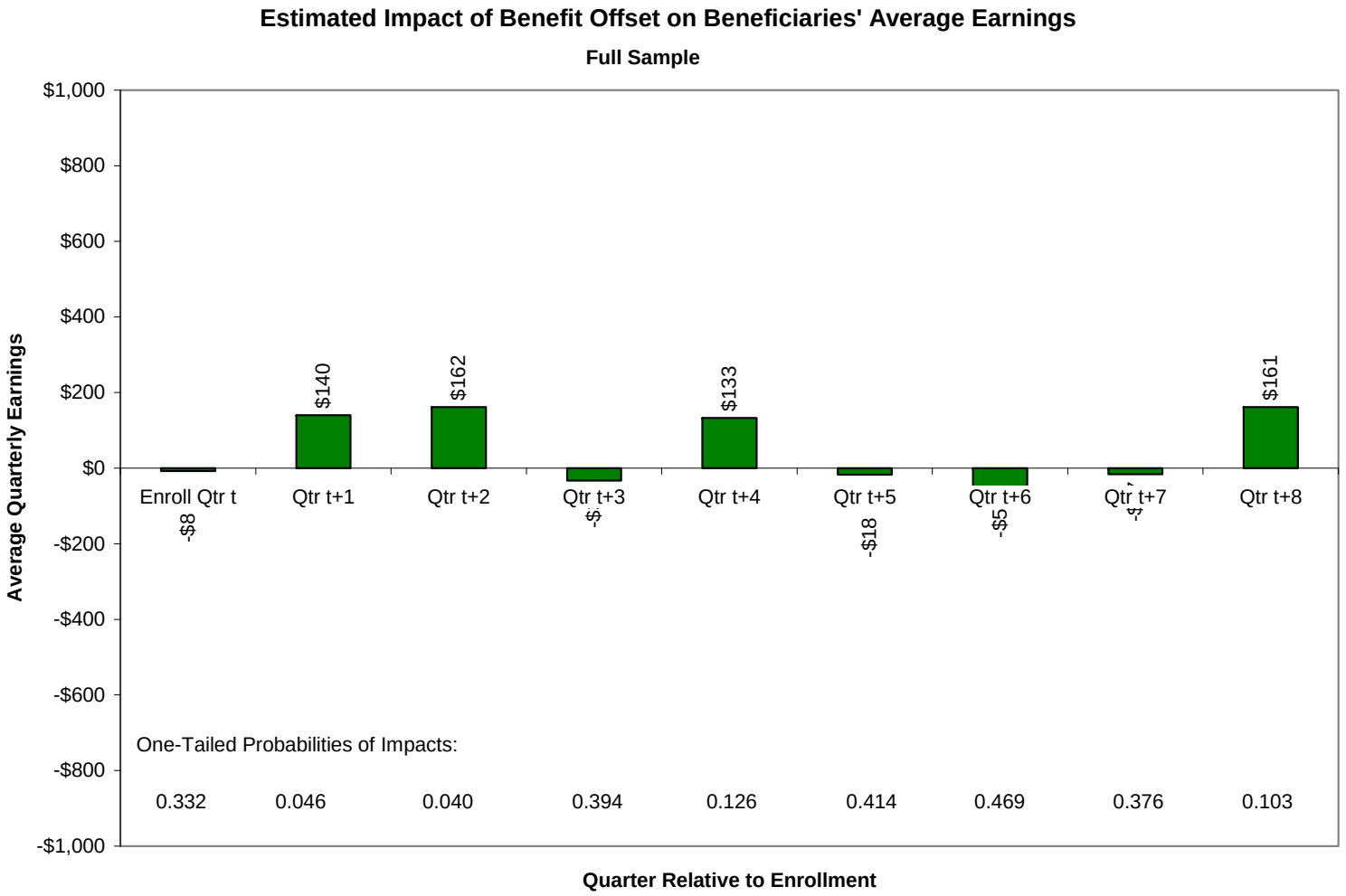

Estimated Impact of Benefit Offset on Beneficiaries' Average Earnings
Full Sample
Average Quarterly Earnings
$1,000
$800
$600
$400
$200
$0
-$200
-$400
-$600
-$800
-$1,000
$140
$162
$133
$161
-$18
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.332
0.046
0.040
0.394
0.126
0.414
0.469
0.376
0.103
Quarter Relative to Enrollment

Figure 8.

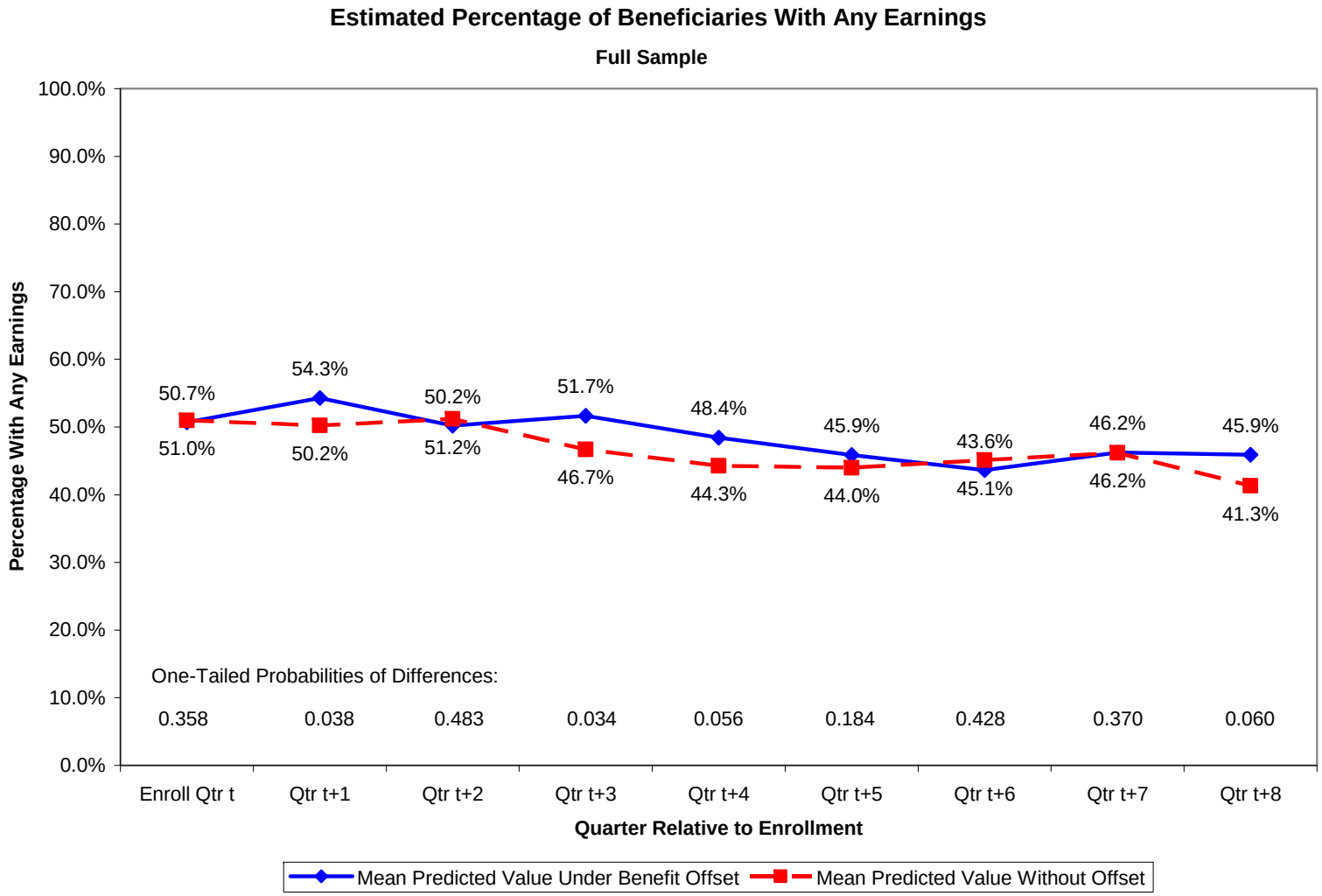
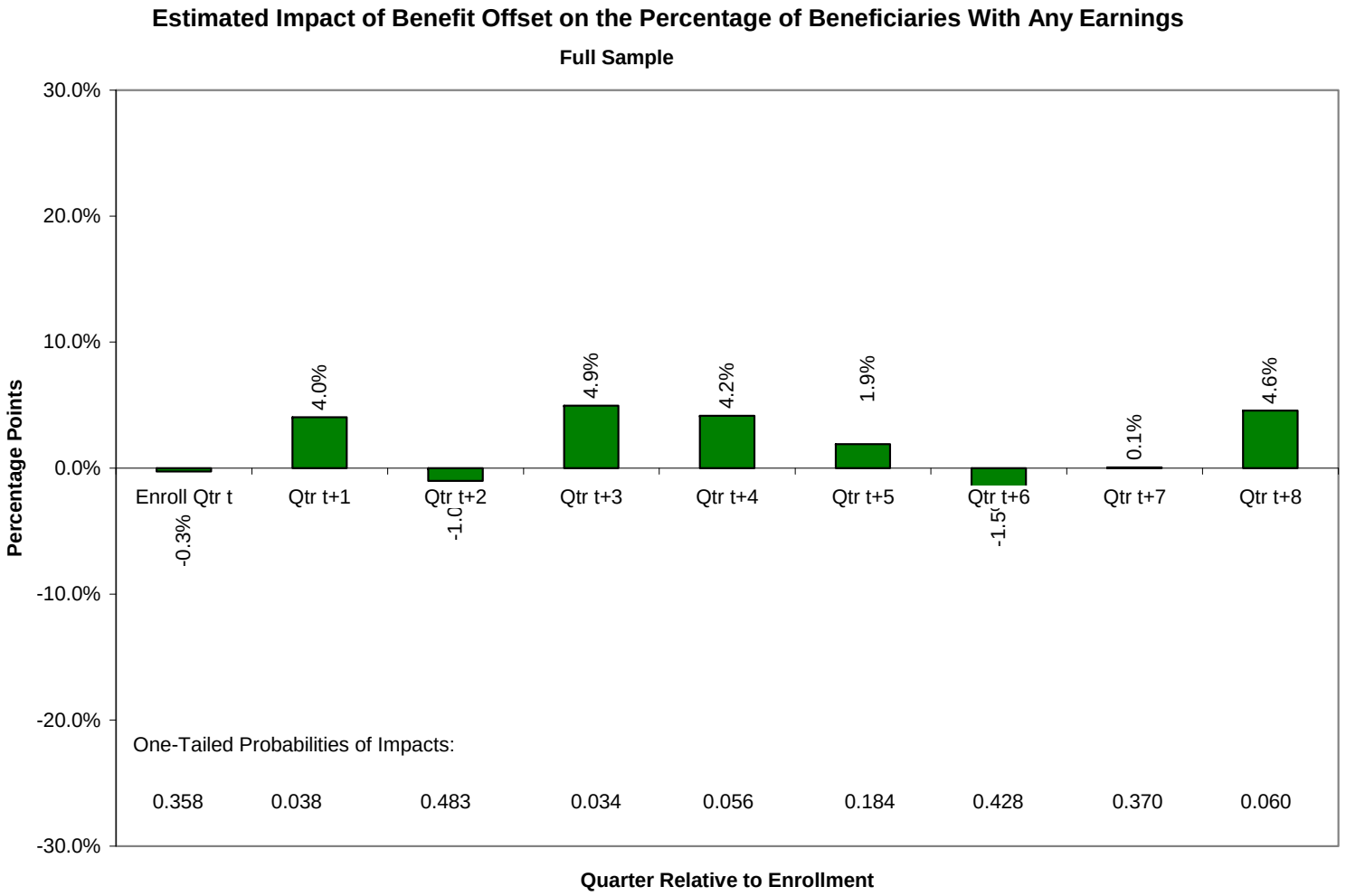

Estimated Percentage of Beneficiaries With Any Earnings
Full Sample
Percentage With Any Earnings
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
50.7%
54.3%
50.2%
51.7%
48.4%
45.9%
43.6%
46.2%
45.9%
51.0%
50.2%
51.2%
46.7%
44.3%
44.0%
45.1%
46.2%
41.3%
One-Tailed Probabilities of Differences:
0.358
0.038
0.483
0.034
0.056
0.184
0.428
0.370
0.060
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 9.


Estimated Impact of Benefit Offset on the Percentage of Beneficiaries With Any Earnings
Full Sample
Percentage Points
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
-30.0%
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
-0.3%
4.0%
-1.0
4.9%
4.2%
1.9%
-1.5
0.1%
4.6%
One-Tailed Probabilities of Impacts:
0.358
0.038
0.483
0.034
0.056
0.184
0.428
0.370
0.060
Quarter Relative to Enrollment

Subgroup: Baseline Medicaid Buy-In

SSA net-impact estimates for the baseline Medicaid Buy-In subgroup are presented in Tables 19 to 21, and in Figures 10 to 15, below. As with the full sample, significant treatment effects for the baseline Medicaid Buy-In subgroup were limited to the first year post-enrollment. For SGA rate, there were significant effects in the 1st, 2nd, and 4th post-enrollment quarters, and for average earnings, there were significant effects in the 1st quarter post-enrollment. No significant effects were observed at any quarter on employment rate (i.e., any UI earnings in a quarter).

Though, as for the full sample, effects for the Medicaid Buy-In group were limited to the first post-enrollment year, the magnitudes of those effects were substantially larger than for the full sample. For quarterly SGA rate, the offset was associated with up to a 14-percentage-point increase, and for average earnings it was associated with an increase of $601 per quarter.

Table 19. SSA Net Impact Estimates; Baseline Medicaid Buy-In Subgroup; SGA Rate.

SGA	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	98	75	0.140	0.070	<=.10	98	75	16.3%	22.7%	6.3%
Qtr t+1	98	75	0.006	0.003	<=.05	98	75	15.3%	29.3%	14.0%
Qtr t+2	98	72	0.051	0.026	<=.05	98	75	17.3%	27.5%	10.1%
Qtr t+3	98	72	0.101	0.051	<=.10	98	75	15.3%	21.8%	6.5%
Qtr t+4	98	72	0.014	0.007	<=.05	98	75	13.3%	26.0%	12.7%
Qtr t+5	98	72	0.466	0.233		98	75	10.2%	12.3%	2.1%
Qtr t+6	98	71	0.299	0.150		98	75	14.3%	17.9%	3.6%
Qtr t+7	98	71	0.878	0.439		98	75	17.3%	16.4%	-0.9%
Qtr t+8	98	71	0.129	0.065	<=.10	98	75	13.3%	20.8%	7.6%

Table 20. SSA Net Impact Estimates; Baseline Medicaid Buy-In Subgroup; Average Earnings.

Avg. Earnings	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	98	75	0.319	0.160		98	75	$1,437	$1,776	$339
Qtr t+1	98	75	0.020	0.010	<=.05	98	75	$1,377	$1,977	$601
Qtr t+2	98	72	0.194	0.097	<=.10	98	75	$1,555	$1,844	$289
Qtr t+3	98	72	0.527	0.264		98	75	$1,435	$1,681	$246
Qtr t+4	98	72	0.250	0.125		98	75	$1,095	$1,454	$359
Qtr t+5	98	72	0.327	0.164		98	75	$1,068	$1,318	$250
Qtr t+6	98	71	0.727	0.364		98	75	$1,291	$1,321	$30
Qtr t+7	98	71	0.990	0.495		98	75	$1,281	$1,249	-$32
Qtr t+8	98	71	0.247	0.124		98	75	$1,036	$1,299	$263

Table 21. SSA Net Impact Estimates; Baseline Medicaid Buy-In Subgroup; Employment Rate (Any Earnings).

Employment	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	98	75	0.979	0.490		98	75	74.5%	74.7%	0.2%
Qtr t+1	98	75	0.334	0.167		98	75	67.3%	72.0%	4.7%
Qtr t+2	98	72	0.479	0.240		98	75	69.4%	65.8%	-3.6%
Qtr t+3	98	72	0.450	0.225		98	75	63.3%	67.3%	4.0%
Qtr t+4	98	72	0.322	0.161		98	75	53.1%	57.8%	4.7%
Qtr t+5	98	72	0.230	0.115		98	75	53.1%	60.4%	7.3%
Qtr t+6	98	71	0.597	0.299		98	75	57.1%	54.2%	-3.0%
Qtr t+7	98	71	0.744	0.372		98	75	54.1%	57.1%	3.0%
Qtr t+8	98	71	0.266	0.133		98	75	46.9%	55.7%	8.8%

Figure 10.

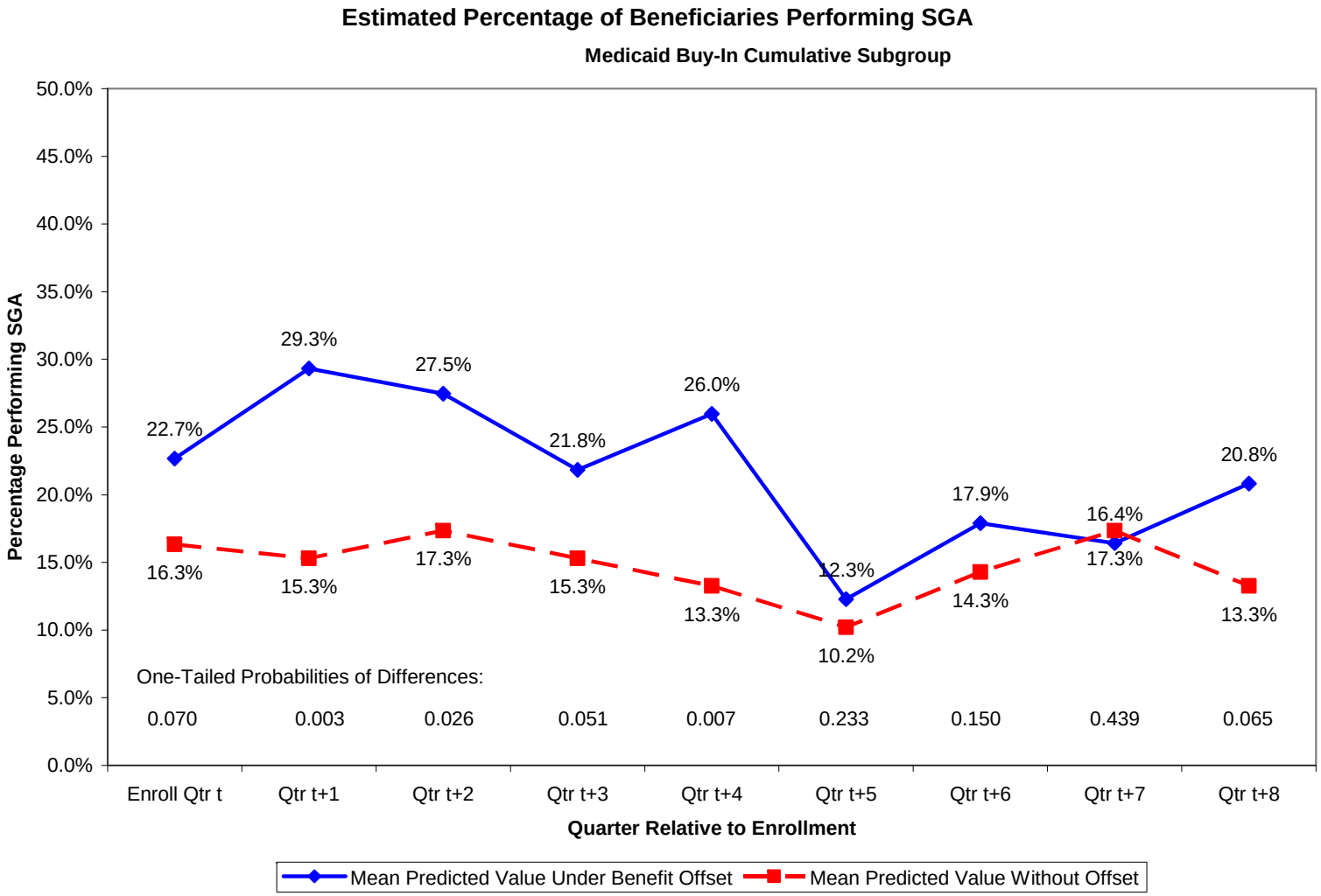

Estimated Percentage of Beneficiaries Performing SGA
Medicaid Buy-In Cumulative Subgroup
Percentage Performing SGA
50.0%
45.0%
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
22.7%
29.3%
27.5%
21.8%
26.0%
12.3%
17.9%
16.4%
20.8%
16.3%
15.3%
17.3%
15.3%
13.3%
10.2%
14.3%
17.3%
13.3%
One-Tailed Probabilities of Differences:
0.070
0.003
0.026
0.051
0.007
0.233
0.150
0.439
0.065
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 11.

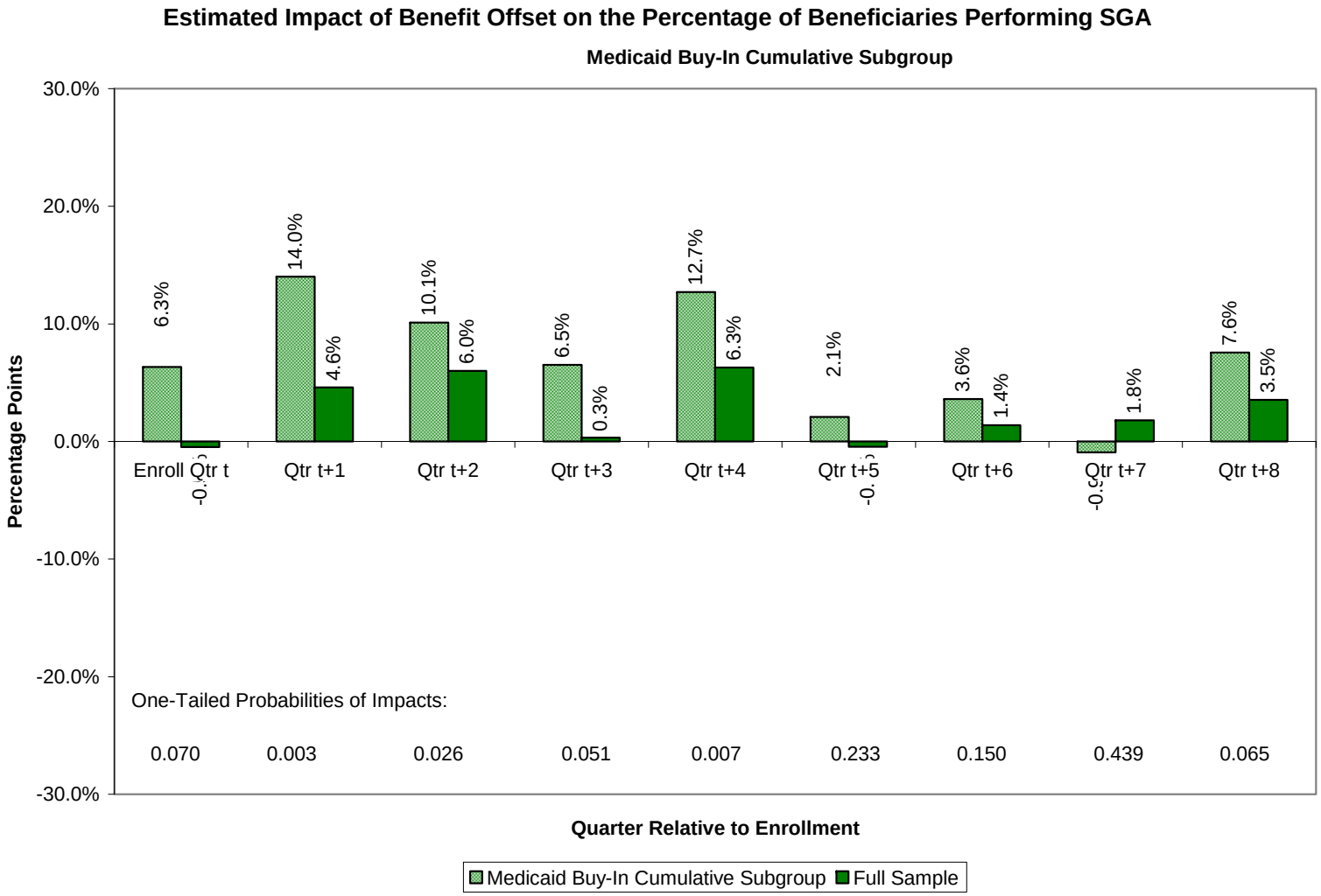

Estimated Impact of Benefit Offset on the Percentage of Beneficiaries Performing SGA
Medicaid Buy-In Cumulative Subgroup
Percentage Points
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
-30.0%
6.3%
14.0%
10.1%
6.5%
12.7%
2.1%
3.6%
7.6%
4.6%
6.0%
0.3%
6.3%
1.4%
1.8%
3.5%
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.070
0.003
0.026
0.051
0.007
0.233
0.150
0.439
0.065
Quarter Relative to Enrollment
Medicaid Buy-In Cumulative Subgroup
Full Sample

Figure 12.

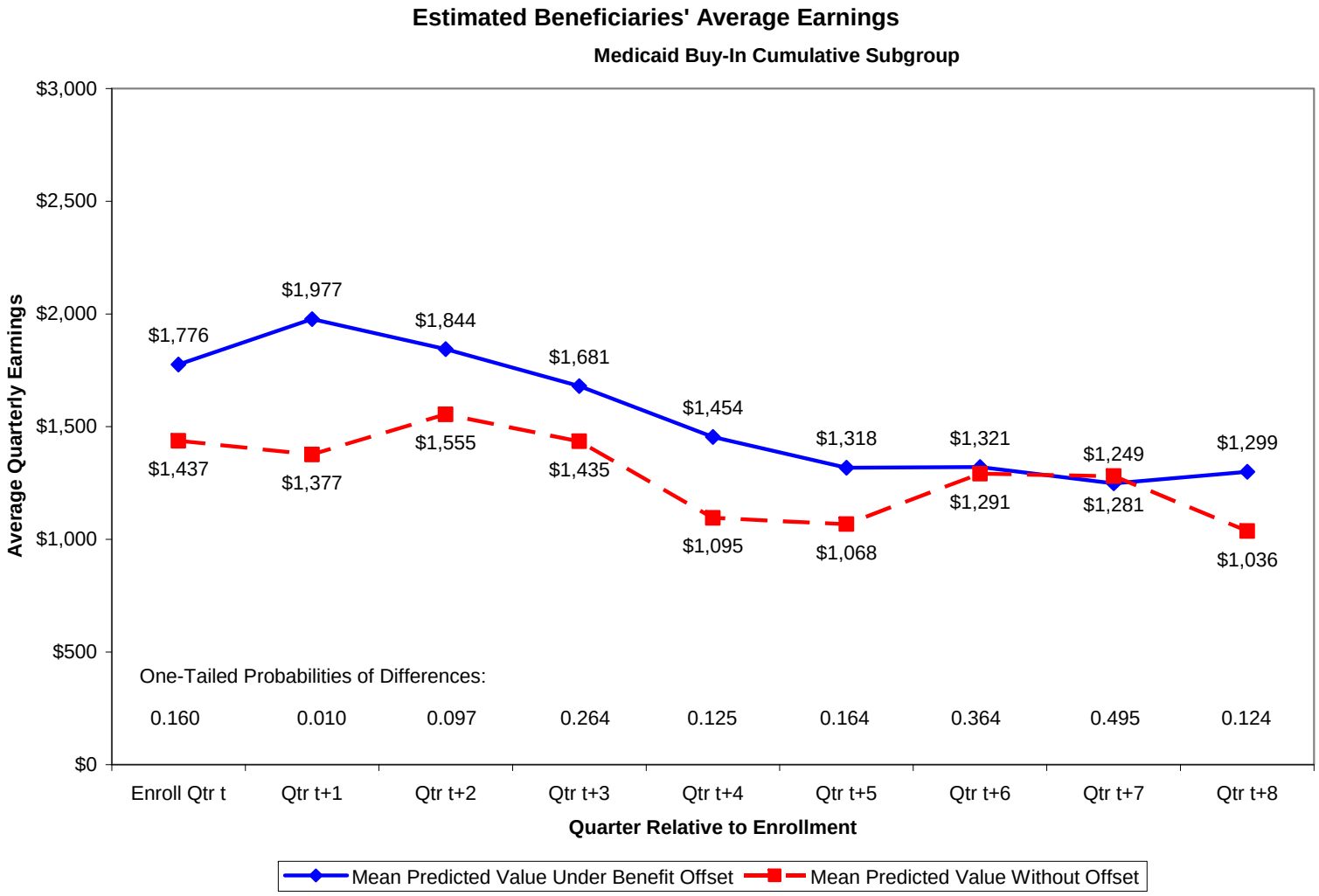

Estimated Beneficiaries' Average Earnings
Medicaid Buy-In Cumulative Subgroup
Average Quarterly Earnings
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
$1,776
$1,977
$1,844
$1,681
$1,454
$1,318
$1,321
$1,281
$1,299
$1,437
$1,377
$1,555
$1,435
$1,095
$1,068
$1,291
$1,249
$1,036
One-Tailed Probabilities of Differences:
0.160
0.010
0.097
0.264
0.125
0.164
0.364
0.495
0.124
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 13.

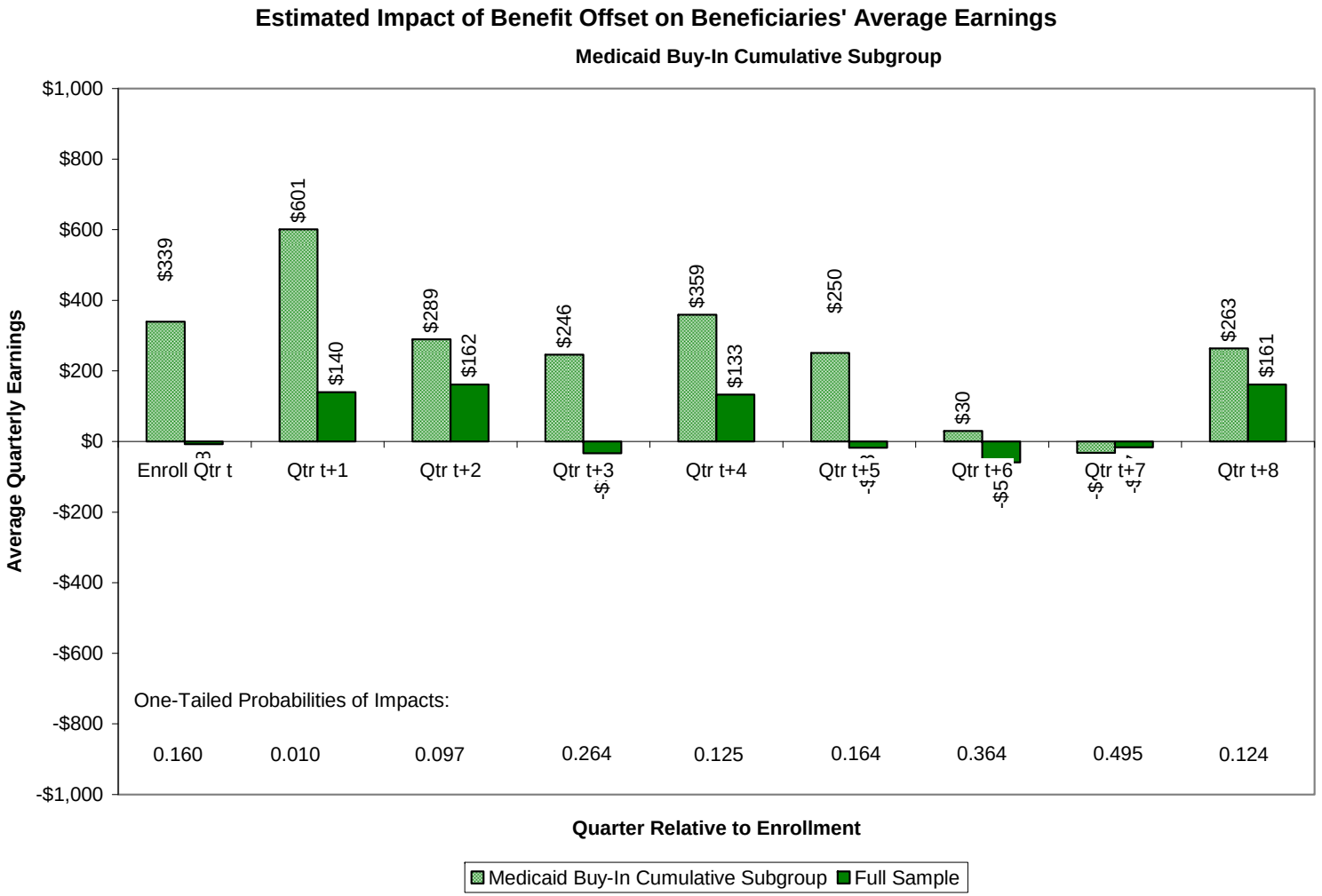

Estimated Impact of Benefit Offset on Beneficiaries' Average Earnings
Medicaid Buy-In Cumulative Subgroup
Average Quarterly Earnings
$1,000
$800
$600
$400
$200
$0
-$200
-$400
-$600
-$800
-$1,000
$339
$601
$140
$289
$162
$246
$359
$133
$250
$30
$263
$161
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.160
0.010
0.097
0.264
0.125
0.164
0.364
0.495
0.124
Quarter Relative to Enrollment
Medicaid Buy-In Cumulative Subgroup
Full Sample

Figure 14.

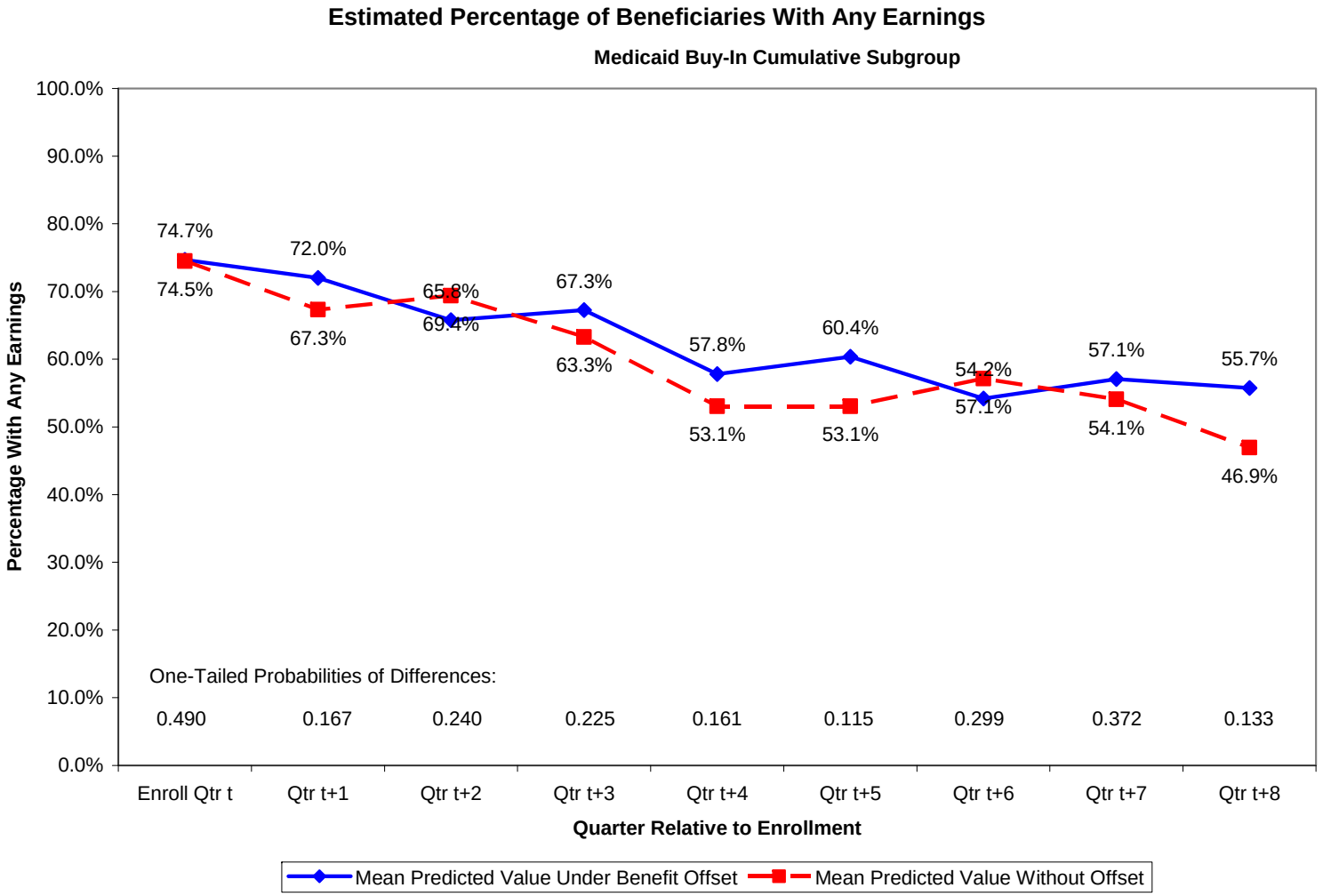
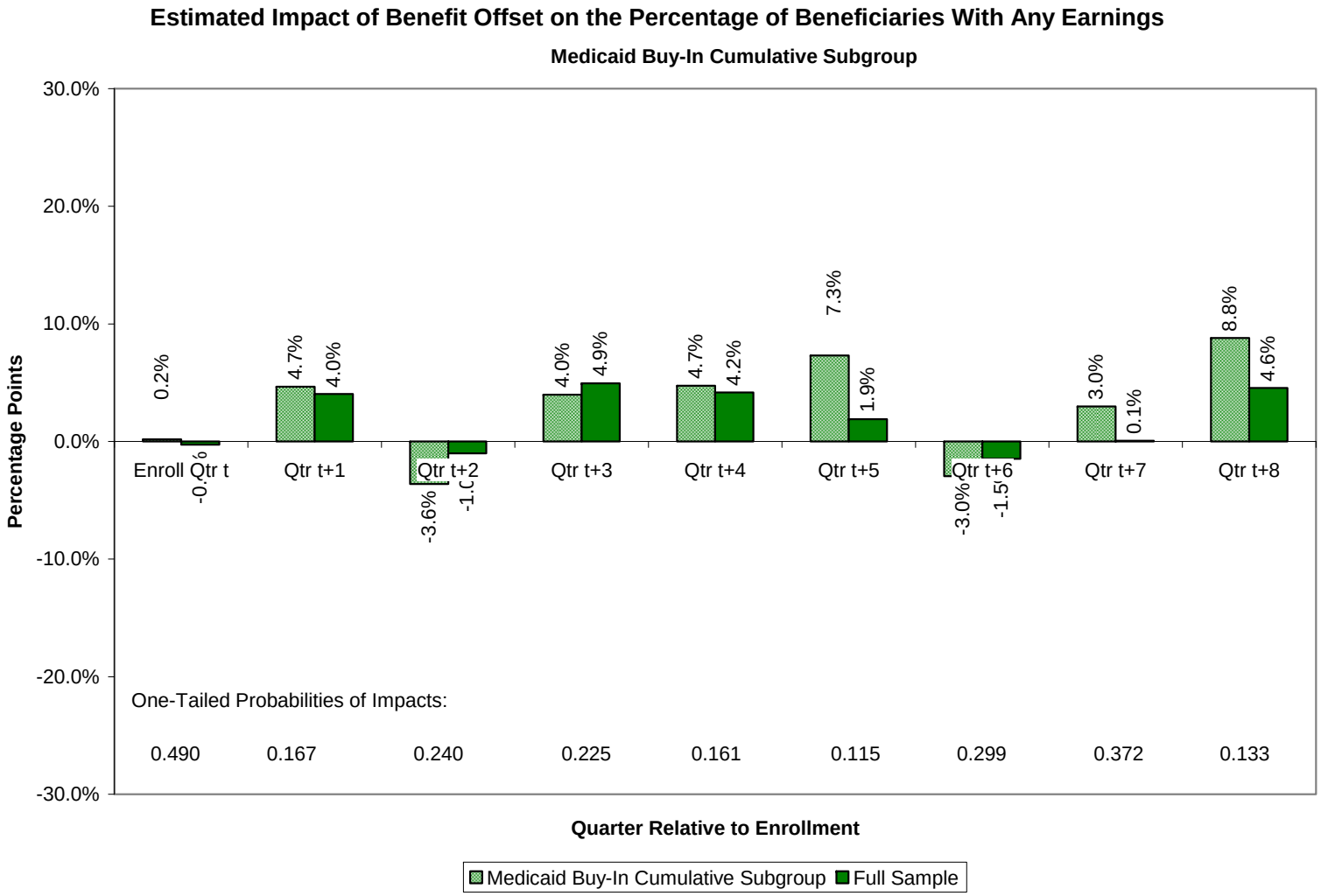

Estimated Percentage of Beneficiaries With Any Earnings
Medicaid Buy-In Cumulative Subgroup
Percentage With Any Earnings
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
74.7%
74.5%
72.0%
67.3%
65.8%
69.4%
67.3%
63.3%
57.8%
53.1%
60.4%
53.1%
54.2%
57.1%
57.1%
54.1%
55.7%
46.9%
One-Tailed Probabilities of Differences:
0.490
0.167
0.240
0.225
0.161
0.115
0.299
0.372
0.133
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 15.


Estimated Impact of Benefit Offset on the Percentage of Beneficiaries With Any Earnings
Medicaid Buy-In Cumulative Subgroup
Percentage Points
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
-30.0%
0.2%
4.7%
4.0%
-3.6%
4.0%
4.9%
4.7%
4.2%
7.3%
1.9%
-3.0%
3.0%
0.1%
8.8%
4.6%
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.490
0.167
0.240
0.225
0.161
0.115
0.299
0.372
0.133
Quarter Relative to Enrollment
Medicaid Buy-In Cumulative Subgroup
Full Sample

Subgroup: Under Age 45 At Enrollment

SSA net-impact estimates for the under-age-45-at-enrollment subgroup are presented in Tables 22 to 24, and in Figures 16 to 21, below. Significant effects were observed at the 2nd, 7th, and 8th post-enrollment quarters for SGA rate, the 2nd and 8th post-enrollment quarters for average earnings, and the 1st and 8th post-enrollment quarters for employment rate. Magnitudes of the effects were larger than those for the full sample, but not as large as those for the baseline Medicaid Buy-In subgroup. Unlike the full sample, significant effects for this group of younger enrollees were distributed across both the first and second years following enrollment.

SSA net-impact estimates for the age-45-and-older subgroup were non-significant, with the exception of a single quarter, the fourth quarter post-enrollment, where there was a modest treatment/control difference (6.7 percentage points) for SGA rate.. The statistical outputs for those results are presented in Appendices 16, 17, and 18.

Table 22. SSA Net Impact Estimates; Under Age 45 At Enrollment Subgroup; SGA Rate.

SGA	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	107	102	0.965	0.483		107	102	19.6%	18.6%	-1.0%
Qtr t+1	107	102	0.142	0.071	<=.10	107	102	20.6%	26.5%	5.9%
Qtr t+2	106	100	0.029	0.015	<=.05	107	102	19.2%	27.9%	8.7%
Qtr t+3	106	100	0.441	0.221		107	102	25.1%	26.0%	1.0%
Qtr t+4	106	100	0.124	0.062	<=.10	107	102	21.2%	26.9%	5.8%
Qtr t+5	106	100	0.952	0.476		107	102	21.1%	19.8%	-1.3%
Qtr t+6	106	100	0.731	0.366		107	102	21.2%	18.9%	-2.3%
Qtr t+7	106	100	0.024	0.012	<=.05	107	102	18.4%	25.9%	7.5%
Qtr t+8	106	100	0.022	0.011	<=.05	107	102	16.4%	25.0%	8.6%

Table 23. SSA Net Impact Estimates; Under Age 45 At Enrollment Subgroup; Average Earnings.

Avg. Earnings	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	107	102	0.638	0.319		107	102	$1,360	$1,472	$112
Qtr t+1	107	102	0.127	0.064	<=.10	107	102	$1,385	$1,584	$199
Qtr t+2	106	100	0.078	0.039	<=.05	107	102	$1,423	$1,626	$203
Qtr t+3	106	100	0.517	0.259		107	102	$1,619	$1,666	$46
Qtr t+4	106	100	0.695	0.348		107	102	$1,684	$1,738	$54
Qtr t+5	106	100	0.739	0.370		107	102	$1,585	$1,626	$41
Qtr t+6	106	100	0.773	0.387		107	102	$1,734	$1,480	-$254
Qtr t+7	106	100	0.362	0.181		107	102	$1,575	$1,675	$99
Qtr t+8	106	100	0.035	0.018	<=.05	107	102	$1,282	$1,797	$515

Table 24. SSA Net Impact Estimates; Under Age 45 At Enrollment Subgroup; Employment Rate (Any Earnings).

Employment	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	107	102	0.106	0.053	<=.10	107	102	58.9%	61.8%	2.9%
Qtr t+1	107	102	0.043	0.022	<=.05	107	102	58.9%	66.7%	7.8%
Qtr t+2	106	100	0.480	0.240		107	102	57.8%	59.0%	1.2%
Qtr t+3	106	100	0.171	0.086	<=.10	107	102	56.9%	62.0%	5.1%
Qtr t+4	106	100	0.137	0.069	<=.10	107	102	55.9%	62.0%	6.0%
Qtr t+5	106	100	0.392	0.196		107	102	54.0%	55.8%	1.8%
Qtr t+6	106	100	0.665	0.333		107	102	56.8%	51.0%	-5.8%
Qtr t+7	106	100	0.255	0.128		107	102	50.2%	55.0%	4.8%
Qtr t+8	106	100	0.058	0.029	<=.05	107	102	44.6%	55.1%	10.5%

Figure 16.

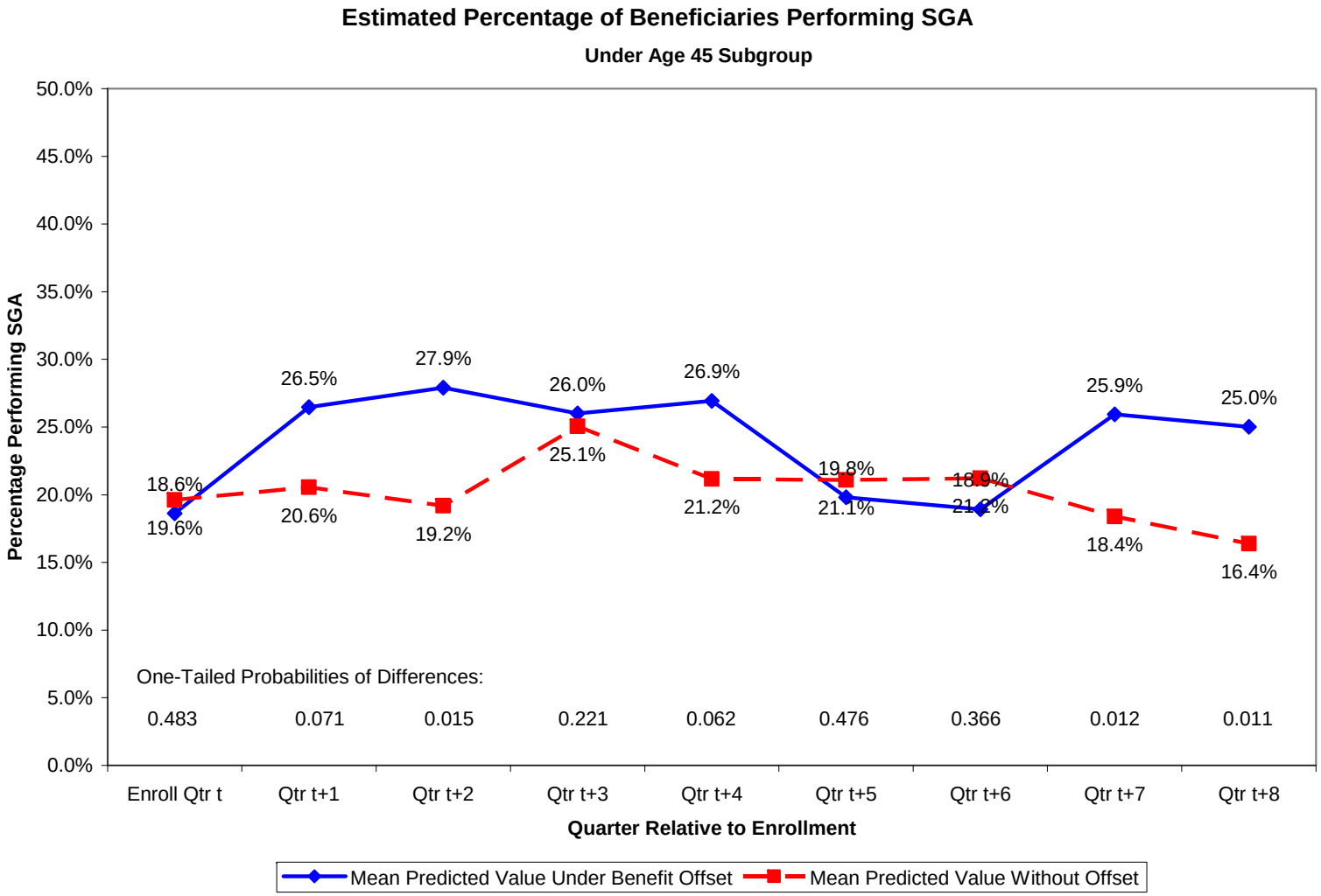

Estimated Percentage of Beneficiaries Performing SGA
Under Age 45 Subgroup
Percentage Performing SGA
50.0%
45.0%
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
18.6%
19.6%
26.5%
20.6%
27.9%
19.2%
26.0%
25.1%
26.9%
21.2%
19.8%
21.1%
18.9%
21.2%
25.9%
18.4%
25.0%
16.4%
One-Tailed Probabilities of Differences:
0.483
0.071
0.015
0.221
0.062
0.476
0.366
0.012
0.011
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 17.

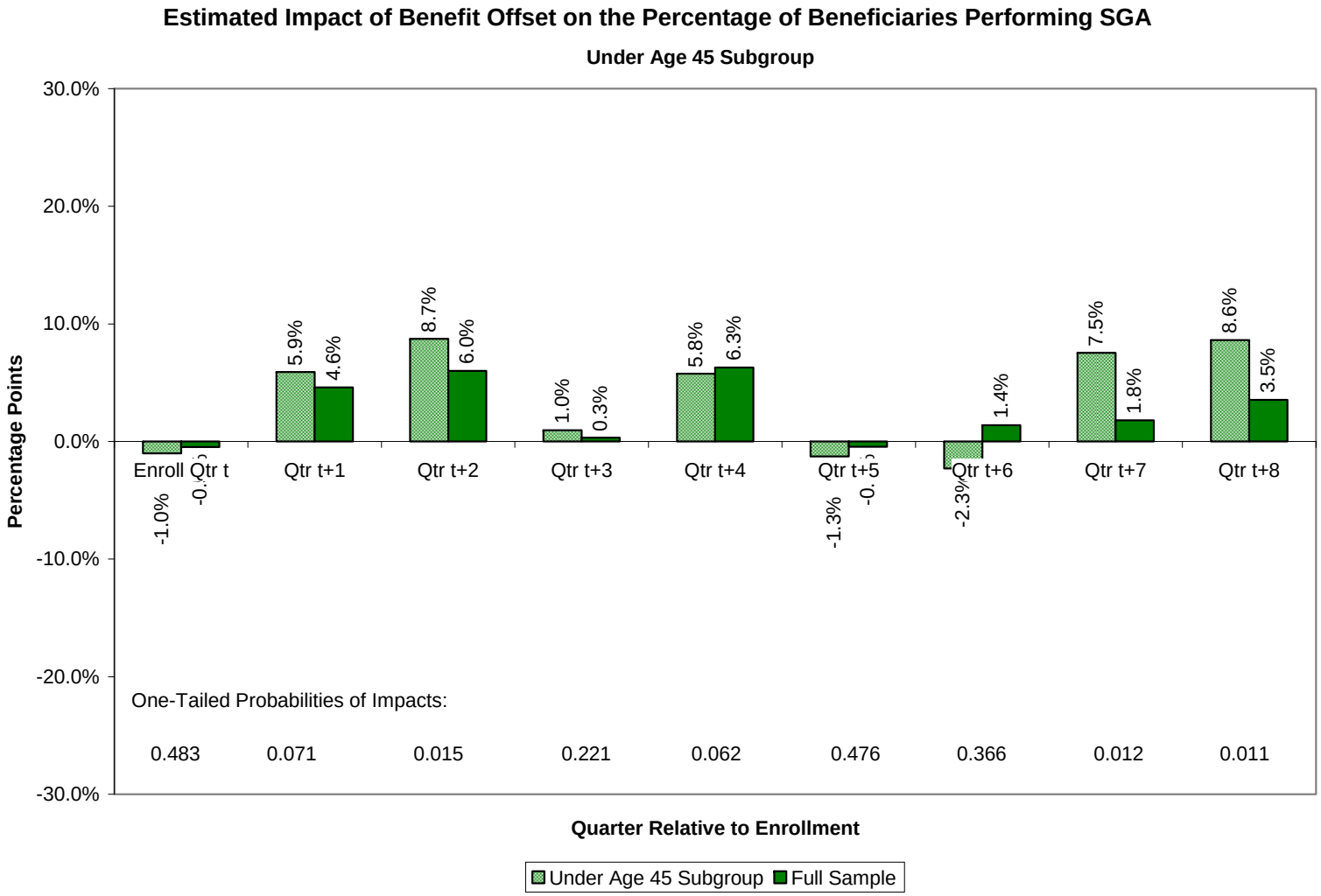

Estimated Impact of Benefit Offset on the Percentage of Beneficiaries Performing SGA
Under Age 45 Subgroup
Percentage Points
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
-30.0%
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
-1.0%
5.9%
4.6%
8.7%
6.0%
1.0%
0.3%
5.8%
6.3%
-1.3%
1.4%
7.5%
1.8%
8.6%
3.5%
One-Tailed Probabilities of Impacts:
0.483
0.071
0.015
0.221
0.062
0.476
0.366
0.012
0.011
Quarter Relative to Enrollment
Under Age 45 Subgroup
Full Sample

Figure 18.

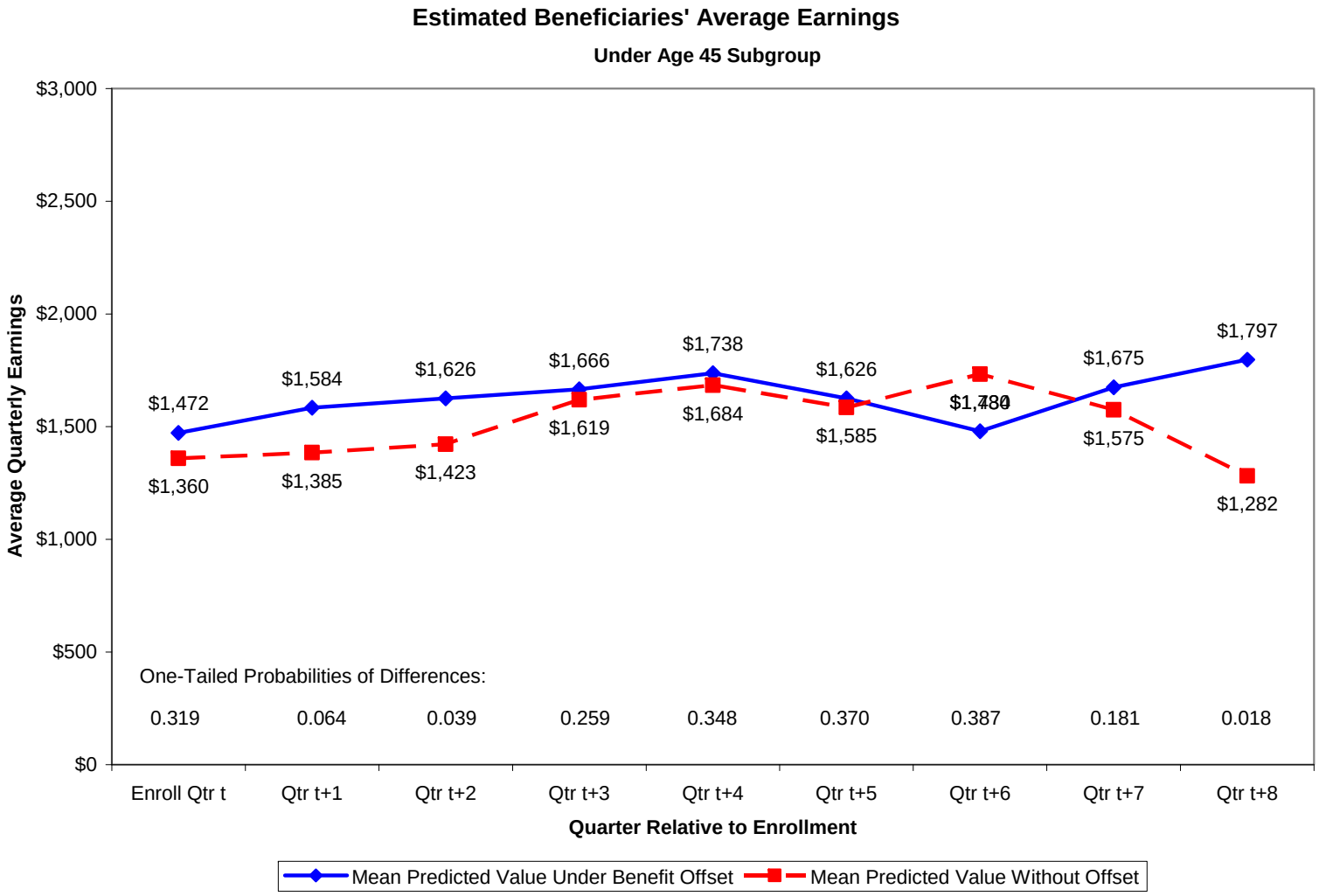

Estimated Beneficiaries' Average Earnings
Under Age 45 Subgroup
Average Quarterly Earnings
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
$1,472
$1,584
$1,626
$1,666
$1,738
$1,626
$1,480
$1,675
$1,797
$1,360
$1,385
$1,423
$1,619
$1,684
$1,585
$1,575
$1,282
One-Tailed Probabilities of Differences:
0.319
0.064
0.039
0.259
0.348
0.370
0.387
0.181
0.018
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 19.

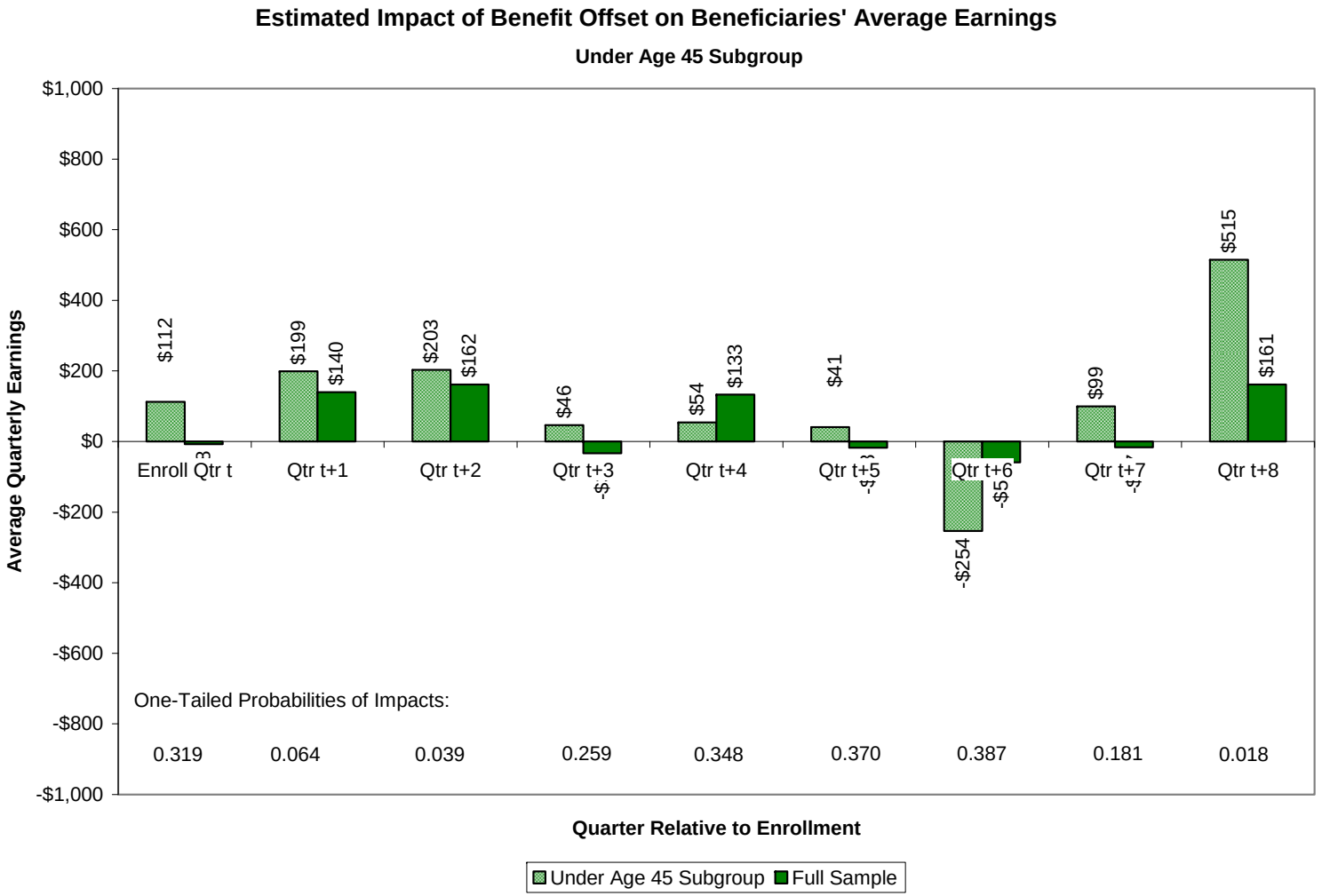

Estimated Impact of Benefit Offset on Beneficiaries' Average Earnings
Under Age 45 Subgroup
Average Quarterly Earnings
$1,000
$800
$600
$400
$200
$0
-$200
-$400
-$600
-$800
-$1,000
$112
$199
$140
$203
$162
$46
$54
$133
$41
-$254
$99
$515
$161
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.319
0.064
0.039
0.259
0.348
0.370
0.387
0.181
0.018
Quarter Relative to Enrollment
Under Age 45 Subgroup
Full Sample

Figure 20.

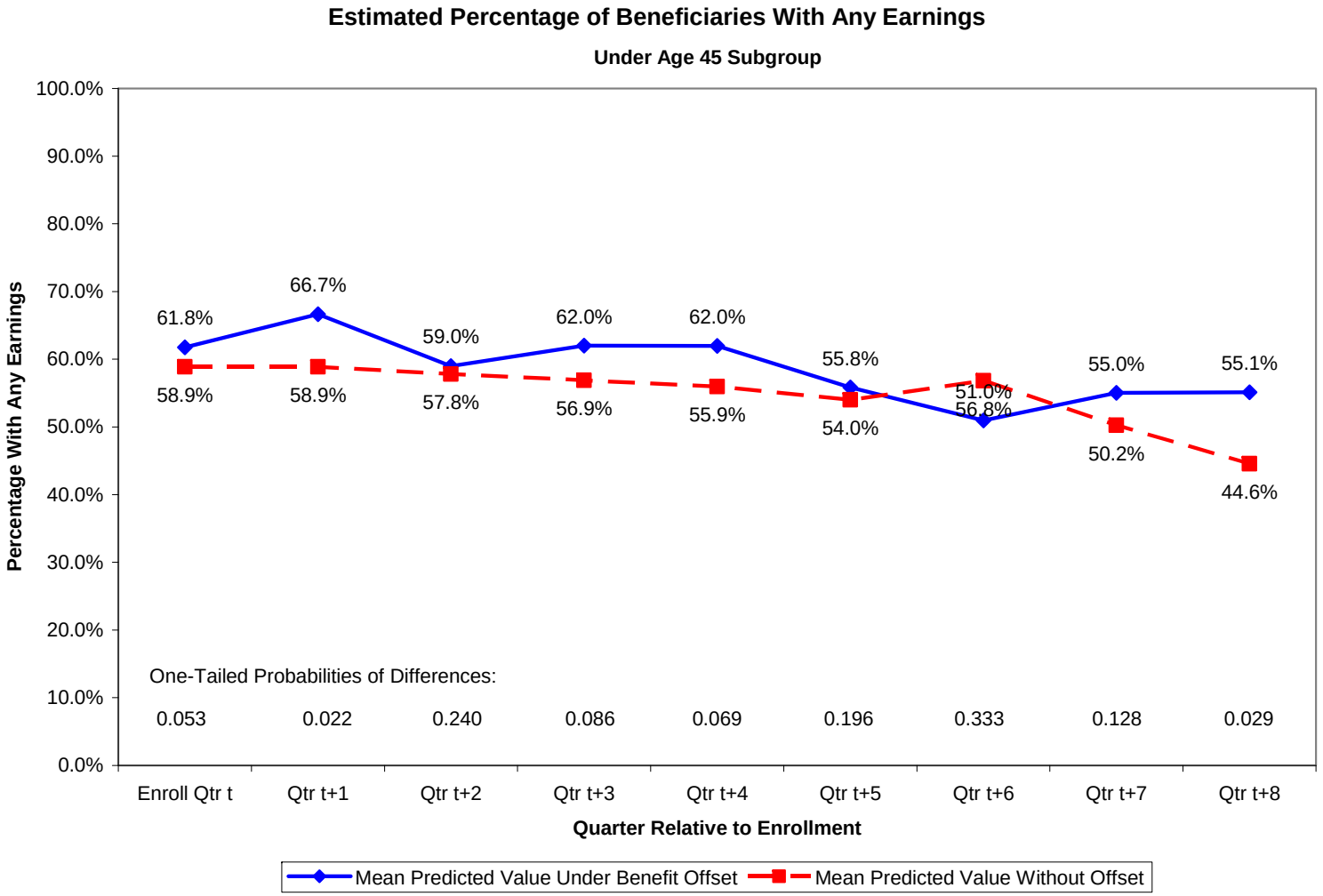
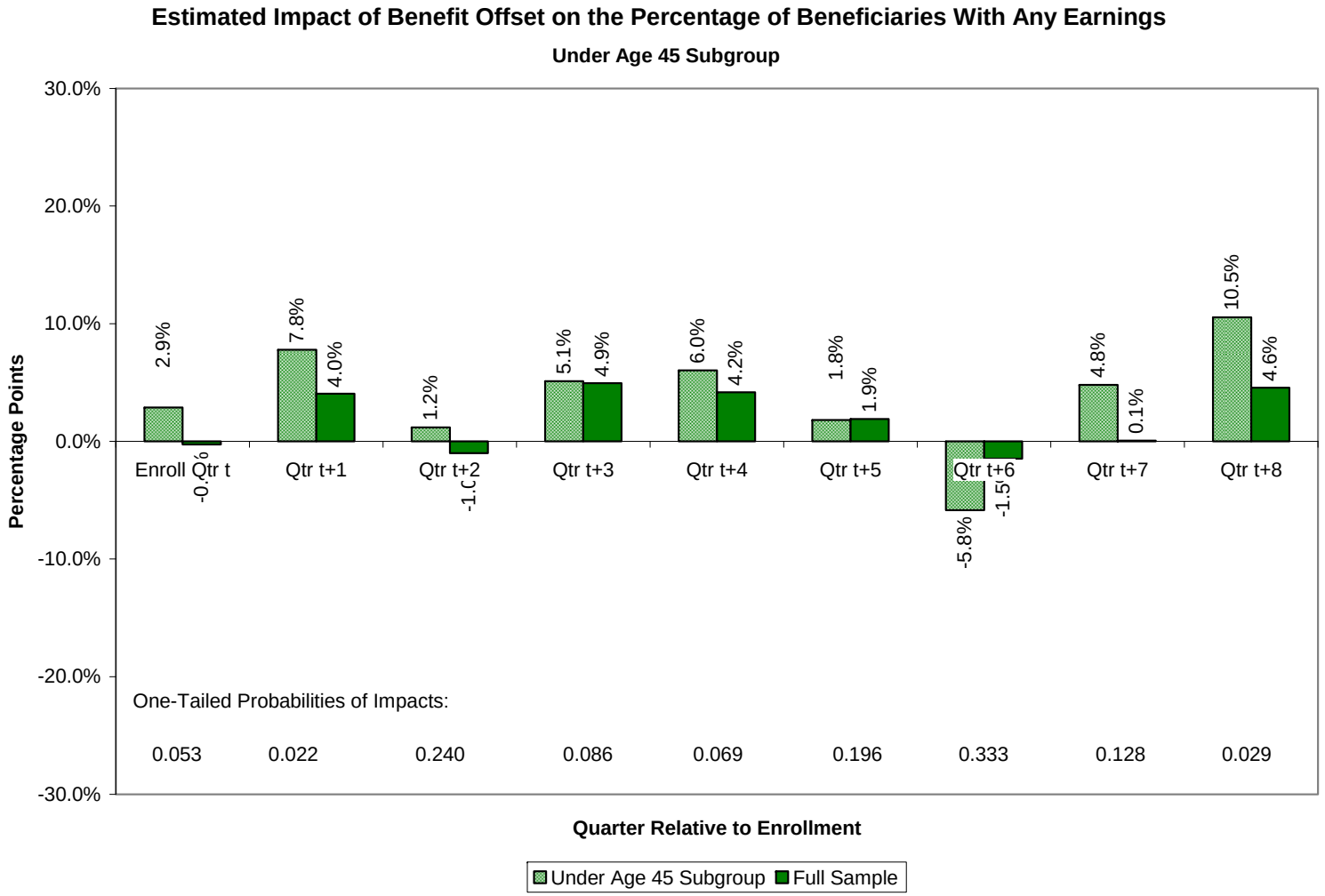

Estimated Percentage of Beneficiaries With Any Earnings
Under Age 45 Subgroup
Percentage With Any Earnings
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
61.8%
66.7%
59.0%
62.0%
62.0%
55.8%
55.0%
55.1%
58.9%
58.9%
57.8%
56.9%
55.9%
54.0%
56.8%
50.2%
44.6%
One-Tailed Probabilities of Differences:
0.053
0.022
0.240
0.086
0.069
0.196
0.333
0.128
0.029
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 21.


Estimated Impact of Benefit Offset on the Percentage of Beneficiaries With Any Earnings
Under Age 45 Subgroup
Percentage Points
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
-30.0%
2.9%
7.8%
4.0%
1.2%
5.1%
4.9%
6.0%
4.2%
1.8%
1.9%
-5.8%
4.8%
0.1%
10.5%
4.6%
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.053
0.022
0.240
0.086
0.069
0.196
0.333
0.128
0.029
Quarter Relative to Enrollment
Under Age 45 Subgroup
Full Sample

Subgroup: Males

SSA net-impact estimates for the males subgroup are presented in Tables 25 to 27, and in Figures 22 to 27, below. Significant effects were observed at 1st and 2nd post-enrollment quarters for SGA rate, and the 1st, 2nd, and 4th post-enrollment quarters for average earnings. For employment rate, significant effects were observed at the 1st, 2nd, 3rd, 4th, and 5th post-enrollment quarters. Effect sizes ranged up to 9.9 percentage points for SGA rate, $329 in additional average earnings, and 10.4 percentage points for employment rate. More than for any other group, for men the offset intervention was associated with an increase in employment rate.

SSA net-impact estimates for the females subgroup were non-significant, with the exception of a single quarter, the fourth quarter post-enrollment, where there was a treatment/control difference of 8.4 percentage points for SGA rate. The statistical outputs for those results are presented in Appendices 22, 23, and 24.

Table 25. SSA Net Impact Estimates; Males Subgroup; SGA Rate.

SGA	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	131	126	0.952	0.476		131	126	15.3%	12.7%	-2.6%
Qtr t+1	131	126	0.004	0.002	<=.05	131	126	13.0%	20.6%	7.7%
Qtr t+2	130	123	0.005	0.003	<=.05	131	126	10.2%	20.1%	9.9%
Qtr t+3	130	123	0.441	0.221		131	126	17.2%	18.5%	1.3%
Qtr t+4	130	123	0.181	0.091	<=.10	131	126	14.9%	18.6%	3.7%
Qtr t+5	129	123	0.678	0.339		131	126	14.0%	14.5%	0.5%
Qtr t+6	128	121	0.184	0.092	<=.10	131	126	13.5%	17.1%	3.6%
Qtr t+7	128	121	0.435	0.218		131	126	16.6%	18.0%	1.3%
Qtr t+8	128	121	0.359	0.180		131	126	14.2%	16.3%	2.1%

Table 26. SSA Net Impact Estimates; Males Subgroup; Average Earnings.

Avg. Earnings	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	131	126	0.354	0.177		131	126	$1,061	$1,172	$111
Qtr t+1	131	126	0.018	0.009	<=.05	131	126	$1,008	$1,338	$329
Qtr t+2	130	123	0.018	0.009	<=.05	131	126	$1,002	$1,384	$382
Qtr t+3	130	123	0.197	0.099	<=.10	131	126	$1,100	$1,265	$165
Qtr t+4	130	123	0.097	0.049	<=.05	131	126	$1,040	$1,308	$268
Qtr t+5	129	123	0.295	0.148		131	126	$1,059	$1,206	$146
Qtr t+6	128	121	0.146	0.073	<=.10	131	126	$1,058	$1,263	$206
Qtr t+7	128	121	0.290	0.145		131	126	$1,112	$1,258	$146
Qtr t+8	128	121	0.268	0.134		131	126	$1,110	$1,297	$187

Table 27. SSA Net Impact Estimates; Males Subgroup; Employment Rate (Any Earnings).

Employment	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	131	126	0.509	0.255		131	126	46.6%	43.7%	-2.9%
Qtr t+1	131	126	0.001	0.001	<=.05	131	126	42.0%	52.4%	10.4%
Qtr t+2	130	123	0.037	0.019	<=.05	131	126	44.2%	50.4%	6.3%
Qtr t+3	130	123	0.007	0.004	<=.05	131	126	40.3%	50.4%	10.1%
Qtr t+4	130	123	0.015	0.008	<=.05	131	126	38.0%	48.0%	10.0%
Qtr t+5	129	123	0.034	0.017	<=.05	131	126	37.3%	45.5%	8.2%
Qtr t+6	128	121	0.107	0.054	<=.10	131	126	39.0%	44.4%	5.4%
Qtr t+7	128	121	0.362	0.181		131	126	42.2%	44.4%	2.2%
Qtr t+8	128	121	0.576	0.288		131	126	39.9%	40.3%	0.4%

Figure 22.

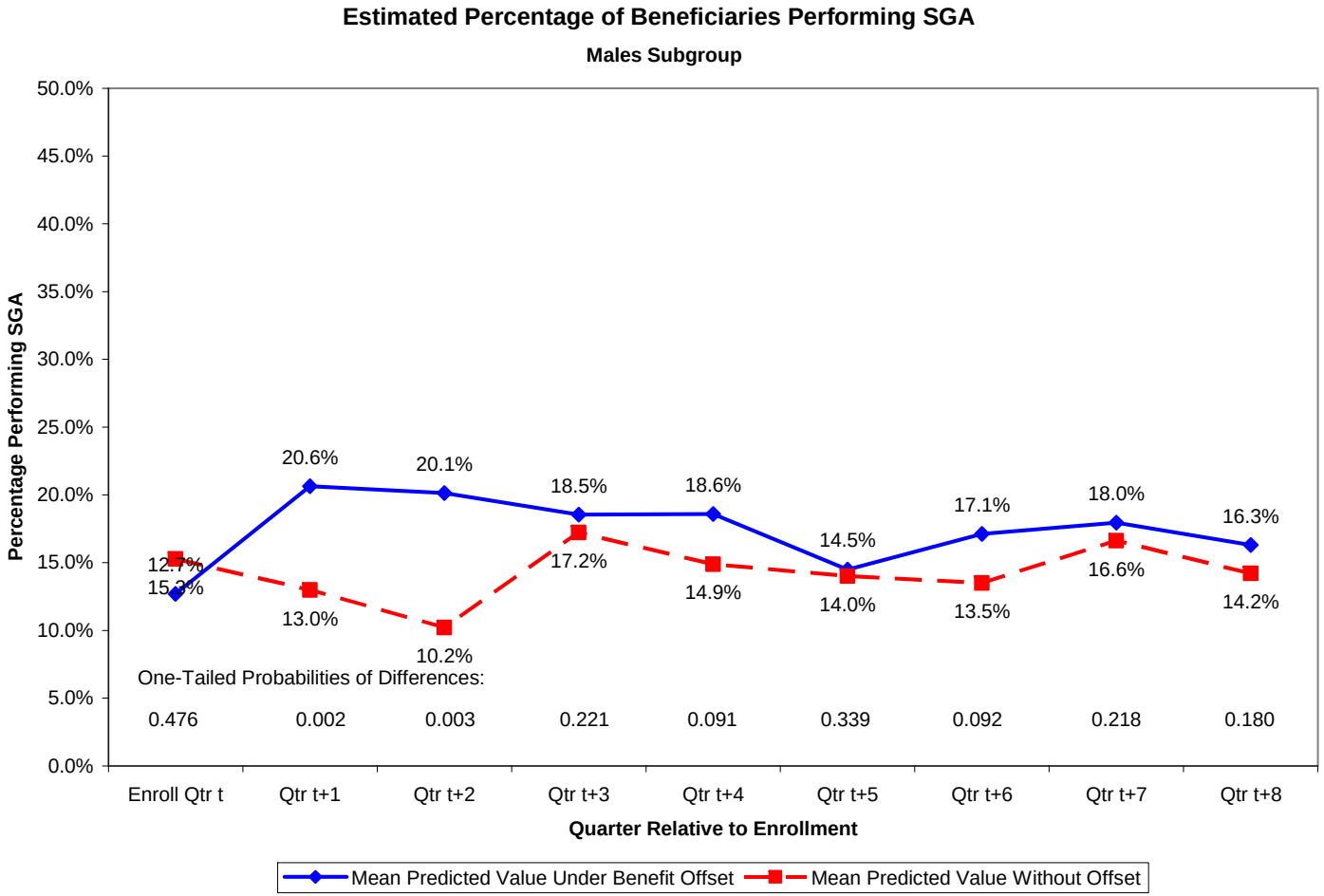

Estimated Percentage of Beneficiaries Performing SGA
Males Subgroup
Percentage Performing SGA
50.0%
45.0%
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
20.6%
20.1%
18.5%
18.6%
14.5%
17.1%
18.0%
16.3%
12.7%
15.3%
13.0%
10.2%
17.2%
14.9%
14.0%
13.5%
16.6%
14.2%
One-Tailed Probabilities of Differences:
0.476
0.002
0.003
0.221
0.091
0.339
0.092
0.218
0.180
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 23.

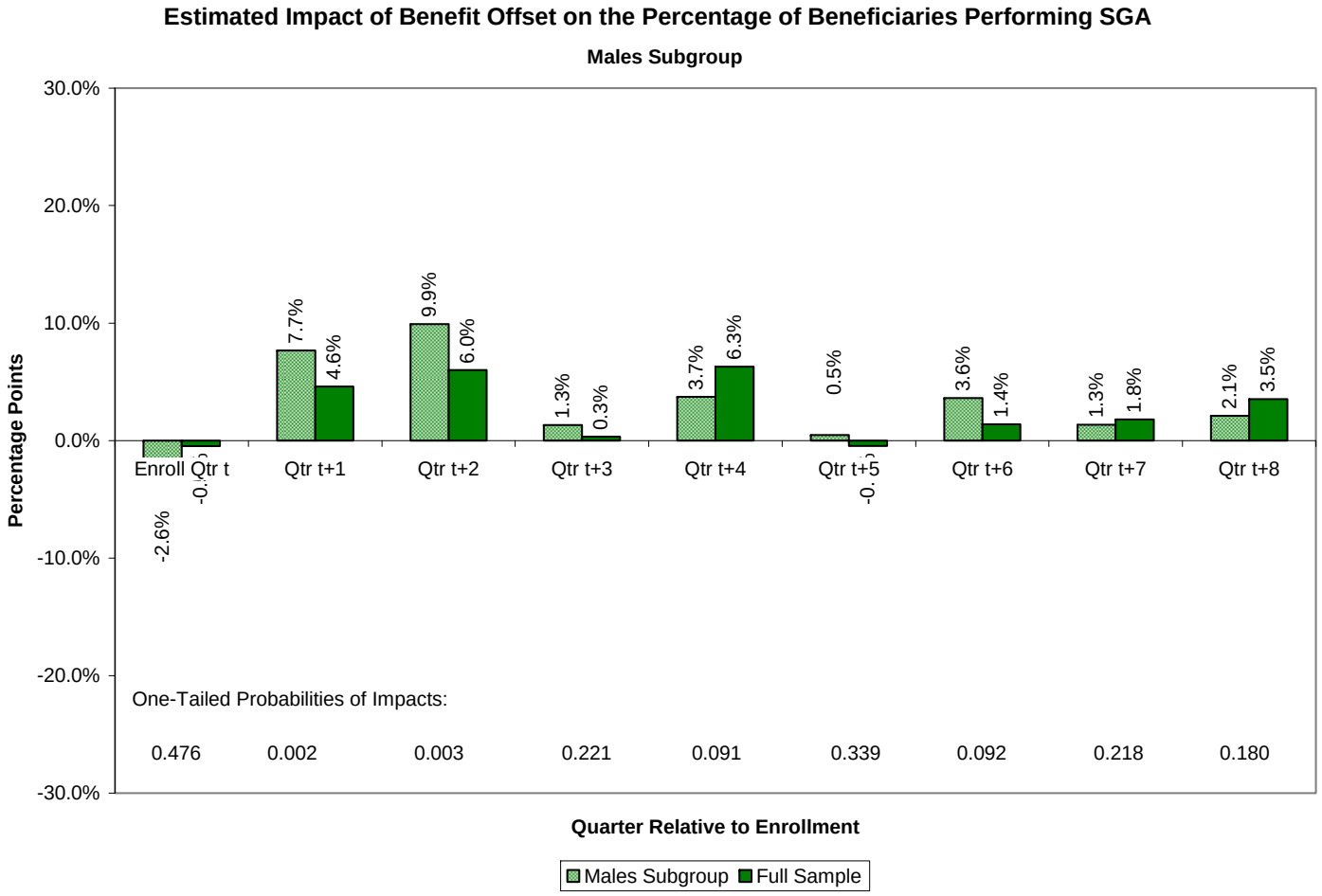

Estimated Impact of Benefit Offset on the Percentage of Beneficiaries Performing SGA
Males Subgroup
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
-30.0%
Percentage Points
-2.6%
7.7%
4.6%
9.9%
6.0%
1.3%
0.3%
3.7%
6.3%
0.5%
3.6%
1.4%
1.3%
1.8%
2.1%
3.5%
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.476
0.002
0.003
0.221
0.091
0.339
0.092
0.218
0.180
Quarter Relative to Enrollment
Males Subgroup
Full Sample

Figure 24.

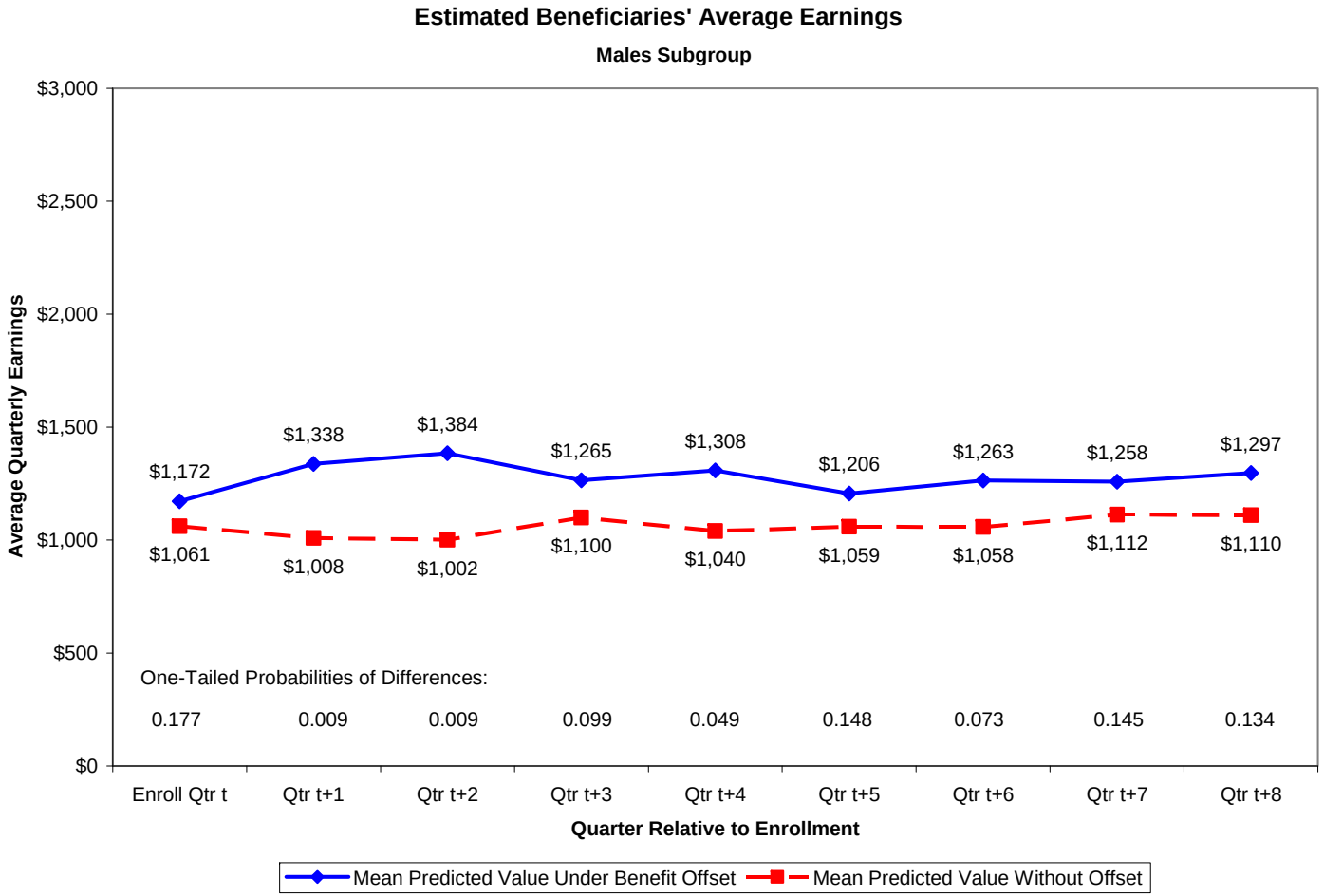

Estimated Beneficiaries' Average Earnings
Males Subgroup
Average Quarterly Earnings
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
$1,172
$1,338
$1,384
$1,265
$1,308
$1,206
$1,263
$1,258
$1,297
$1,061
$1,008
$1,002
$1,100
$1,040
$1,059
$1,058
$1,112
$1,110
One-Tailed Probabilities of Differences:
0.177
0.009
0.009
0.099
0.049
0.148
0.073
0.145
0.134
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 25.

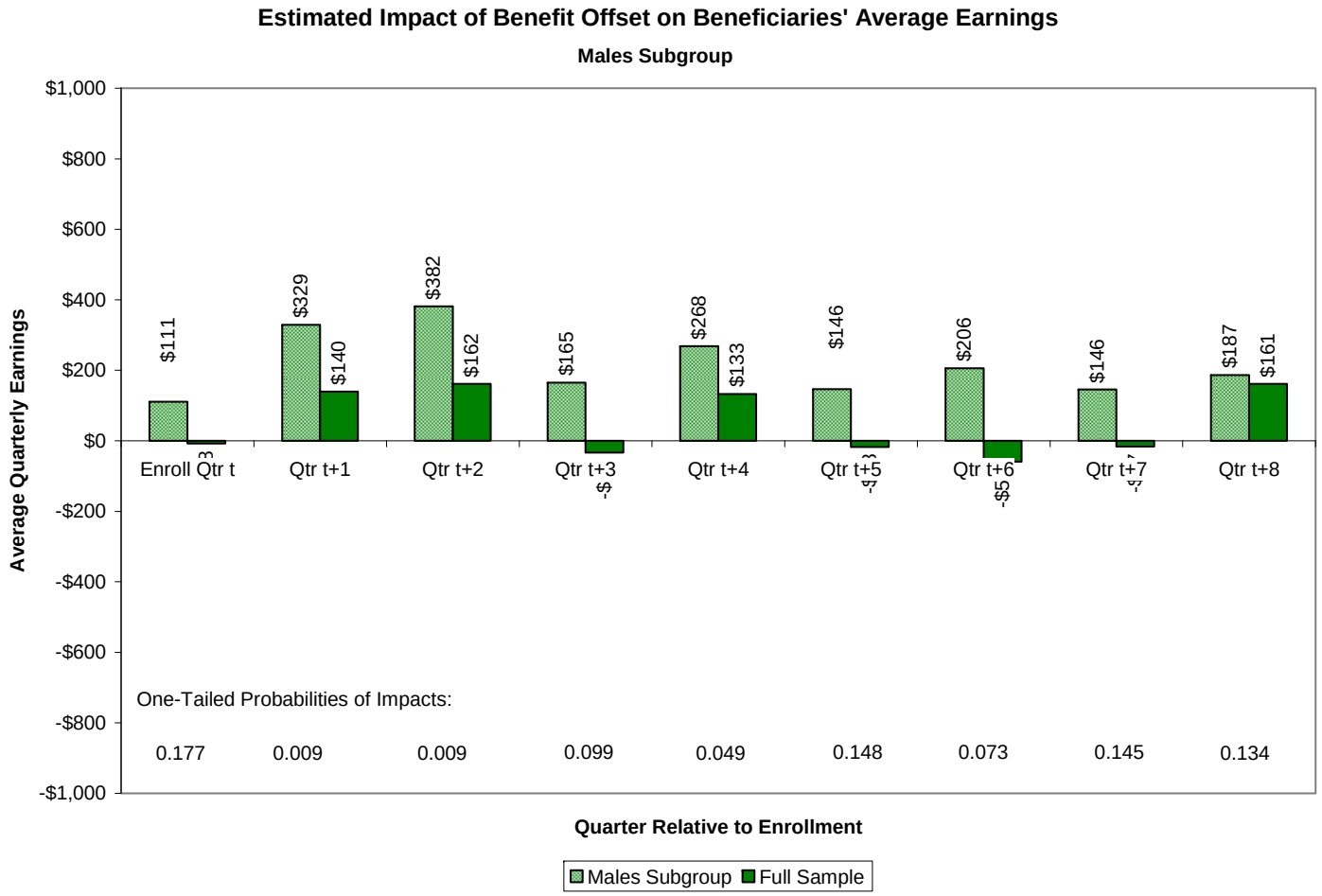

Estimated Impact of Benefit Offset on Beneficiaries' Average Earnings
Males Subgroup
Average Quarterly Earnings
$1,000
$800
$600
$400
$200
$0
-$200
-$400
-$600
-$800
-$1,000
$111
$329
$140
$382
$162
$165
$268
$133
$146
$206
$146
$187
$161
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.177
0.009
0.009
0.099
0.049
0.148
0.073
0.145
0.134
Quarter Relative to Enrollment
Males Subgroup
Full Sample

Figure 26.

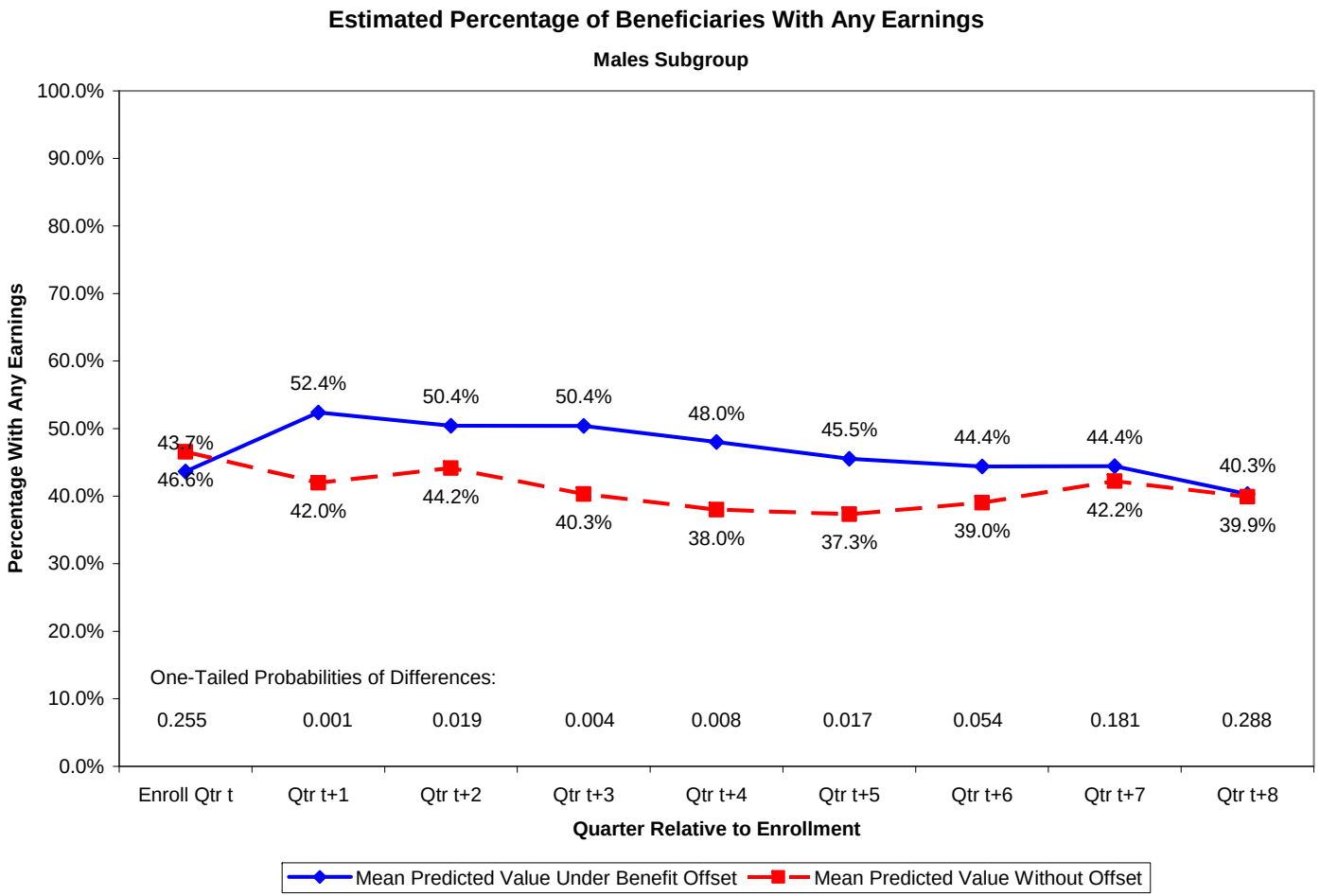
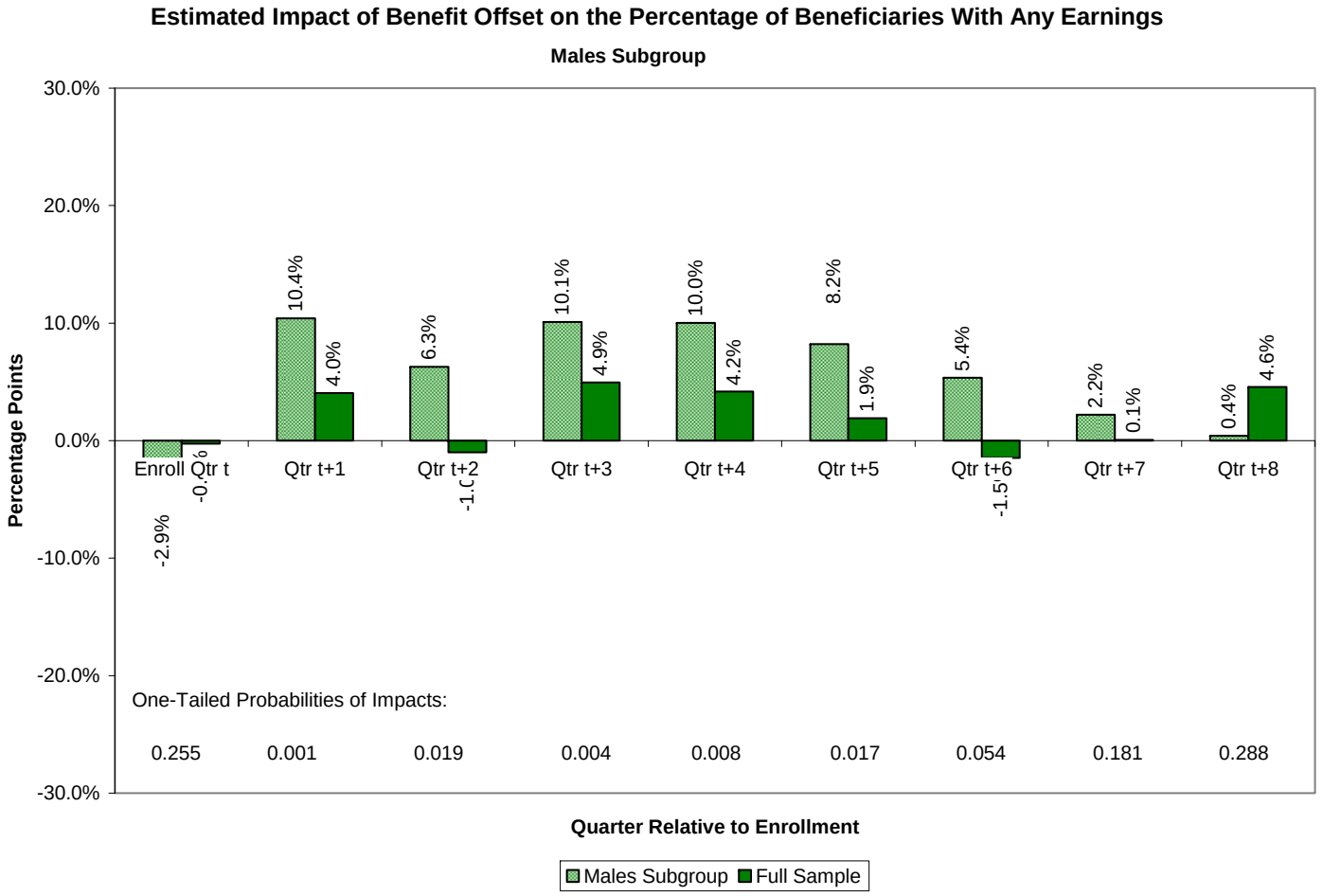

Estimated Percentage of Beneficiaries With Any Earnings
Males Subgroup
Percentage With Any Earnings
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
43.7%
46.6%
52.4%
42.0%
50.4%
44.2%
50.4%
40.3%
48.0%
38.0%
45.5%
37.3%
44.4%
39.0%
44.4%
42.2%
40.3%
39.9%
One-Tailed Probabilities of Differences:
0.255
0.001
0.019
0.004
0.008
0.017
0.054
0.181
0.288
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 27.


Estimated Impact of Benefit Offset on the Percentage of Beneficiaries With Any Earnings
Males Subgroup
Percentage Points
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
-30.0%
-2.9%
10.4%
4.0%
6.3%
10.1%
4.9%
10.0%
4.2%
8.2%
1.9%
5.4%
2.2%
0.1%
0.4%
4.6%
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.255
0.001
0.019
0.004
0.008
0.017
0.054
0.181
0.288
Quarter Relative to Enrollment
Males Subgroup
Full Sample

Subgroup: Baseline TWP Completed

SSA net-impact estimates for the baseline-TWP-completed subgroup are presented in Tables 28 to 30, and in Figures 28 to 33, below. Significant effects were observed at the enrollment quarter and the 1st, 2nd, and 4th post-enrollment quarters for SGA rate, with effect sizes ranging up to 15.3 percentage points. Significant group differences were observed at the 7th post-enrollment quarter for average earnings, and the 5th and 6th post-enrollment quarters for employment rate, but those differences involved lower outcomes for the treatment group compared to control. Interestingly, for the subgroup of enrollees who would be most immediately affected by the benefit offset provisions, we see substantial increases in SGA rate in the first year following enrollment, but then a sharp reversal, with significant decreases in both average earnings and employment rate in the second year post-enrollment. First-year increases in SGA rate, and second-year decreases in employment and average earnings, were both associated with the benefit offset treatment. Potential explanations for this reversal pattern are discussed in subsequent sections of this report.

Table 28. SSA Net Impact Estimates; Baseline TWP Completed Subgroup; SGA Rate.

SGA	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	75	59	0.044	0.022	<=.05	75	59	25.3%	33.9%	8.6%
Qtr t+1	75	59	0.008	0.004	<=.05	75	59	29.3%	42.4%	13.0%
Qtr t+2	75	59	0.005	0.003	<=.05	75	59	25.3%	40.7%	15.3%
Qtr t+3	75	59	0.834	0.417		75	59	33.3%	27.1%	-6.2%
Qtr t+4	75	59	0.075	0.038	<=.05	75	59	25.3%	35.6%	10.3%
Qtr t+5	75	59	0.408	0.204		75	59	26.7%	18.6%	-8.0%
Qtr t+6	75	58	0.896	0.448		75	59	25.3%	20.5%	-4.8%
Qtr t+7	75	58	0.418	0.209		75	59	29.3%	20.5%	-8.8%
Qtr t+8	75	58	0.909	0.455		75	59	28.0%	25.7%	-2.3%

Table 29. SSA Net Impact Estimates; Baseline TWP Completed Subgroup; Average Earnings.

Avg. Earnings	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	75	59	0.124	0.062	<=.10	75	59	$2,094	$2,174	$80
Qtr t+1	75	59	0.402	0.201		75	59	$2,267	$2,302	$35
Qtr t+2	75	59	0.488	0.244		75	59	$2,246	$2,181	-$65
Qtr t+3	75	59	0.228	0.114		75	59	$2,421	$1,765	-$656
Qtr t+4	75	59	0.765	0.383		75	59	$1,925	$1,939	$13
Qtr t+5	75	59	0.179	0.090	<=.10	75	59	$2,011	$1,459	-$553
Qtr t+6	75	58	0.118	0.059	<=.10	75	59	$2,215	$1,452	-$762
Qtr t+7	75	58	0.057	0.029	<=.05	75	59	$2,404	$1,404	-$1,000
Qtr t+8	75	58	0.544	0.272		75	59	$2,075	$1,636	-$439

Table 30. SSA Net Impact Estimates; Baseline TWP Completed Subgroup; Employment Rate (Any Earnings).

Employment	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	75	59	0.736	0.368		75	59	76.0%	76.3%	0.3%
Qtr t+1	75	59	0.320	0.160		75	59	73.3%	76.3%	2.9%
Qtr t+2	75	59	0.190	0.095	<=.10	75	59	76.0%	67.8%	-8.2%
Qtr t+3	75	59	0.622	0.311		75	59	73.3%	69.5%	-3.8%
Qtr t+4	75	59	0.801	0.401		75	59	68.0%	64.4%	-3.6%
Qtr t+5	75	59	0.094	0.047	<=.05	75	59	69.3%	57.6%	-11.7%
Qtr t+6	75	58	0.024	0.012	<=.05	75	59	65.3%	49.4%	-15.9%
Qtr t+7	75	58	0.129	0.065	<=.10	75	59	64.0%	51.2%	-12.8%
Qtr t+8	75	58	0.296	0.148		75	59	61.3%	53.1%	-8.3%

Figure 28.

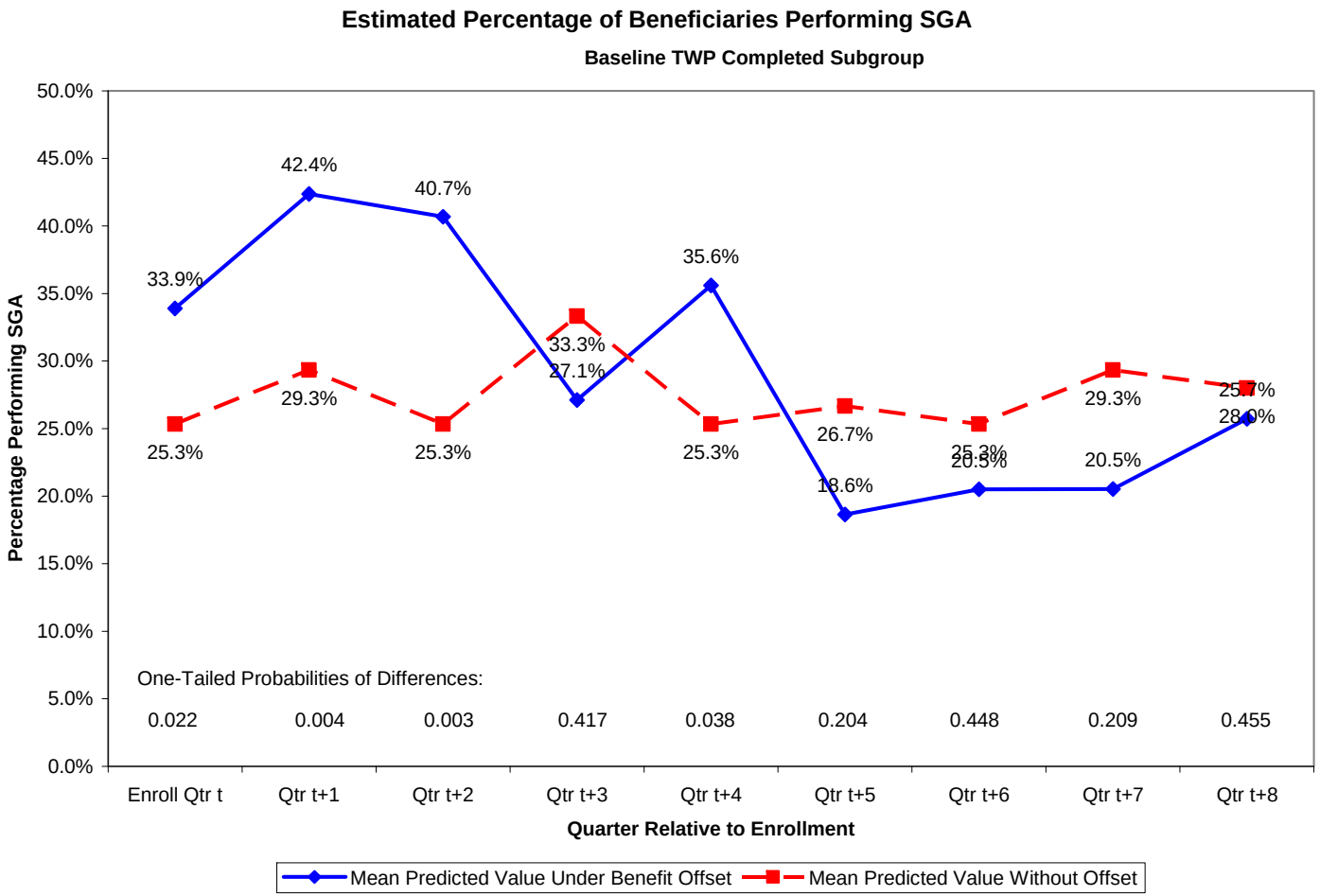

Estimated Percentage of Beneficiaries Performing SGA
Baseline TWP Completed Subgroup
Percentage Performing SGA
50.0%
45.0%
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
42.4%
40.7%
35.6%
33.9%
33.3%
27.1%
29.3%
29.3%
25.7%
25.3%
25.3%
25.3%
26.7%
25.3%
20.5%
20.5%
18.6%
One-Tailed Probabilities of Differences:
0.022
0.004
0.003
0.417
0.038
0.204
0.448
0.209
0.455
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 29.

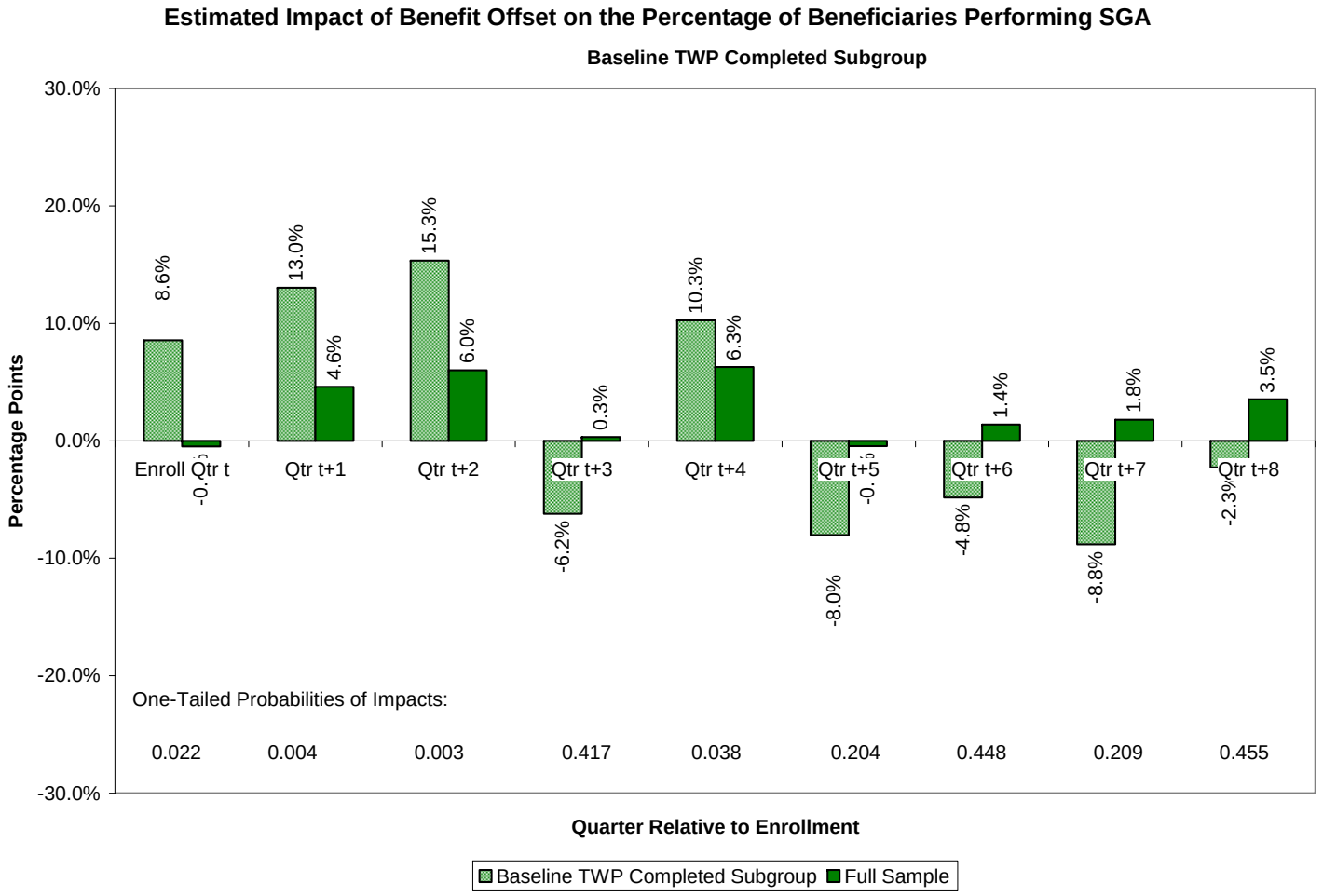

Estimated Impact of Benefit Offset on the Percentage of Beneficiaries Performing SGA
Baseline TWP Completed Subgroup
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
-30.0%
Percentage Points
8.6%
13.0%
15.3%
-6.2%
0.3%
10.3%
6.3%
-8.0%
1.4%
-4.8%
1.8%
-8.8%
3.5%
-2.3%
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.022
0.004
0.003
0.417
0.038
0.204
0.448
0.209
0.455
Quarter Relative to Enrollment
Baseline TWP Completed Subgroup
Full Sample

Figure 30.

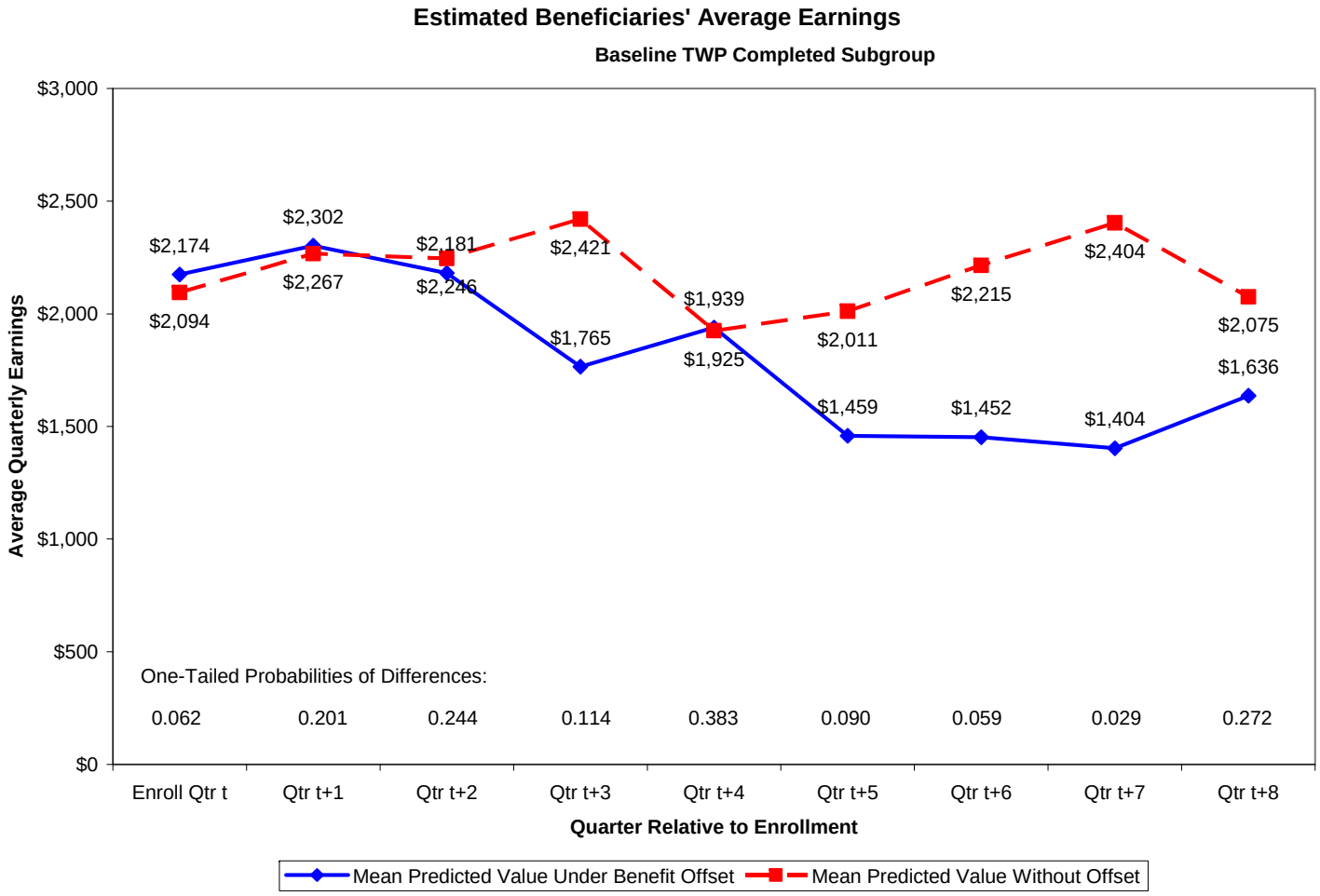

Estimated Beneficiaries' Average Earnings
Baseline TWP Completed Subgroup
Average Quarterly Earnings
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
$2,174
$2,302
$2,181
$2,421
$1,939
$2,404
$2,094
$2,267
$2,246
$1,765
$1,925
$2,011
$2,215
$2,075
$1,459
$1,452
$1,404
$1,636
One-Tailed Probabilities of Differences:
0.062
0.201
0.244
0.114
0.383
0.090
0.059
0.029
0.272
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 31.

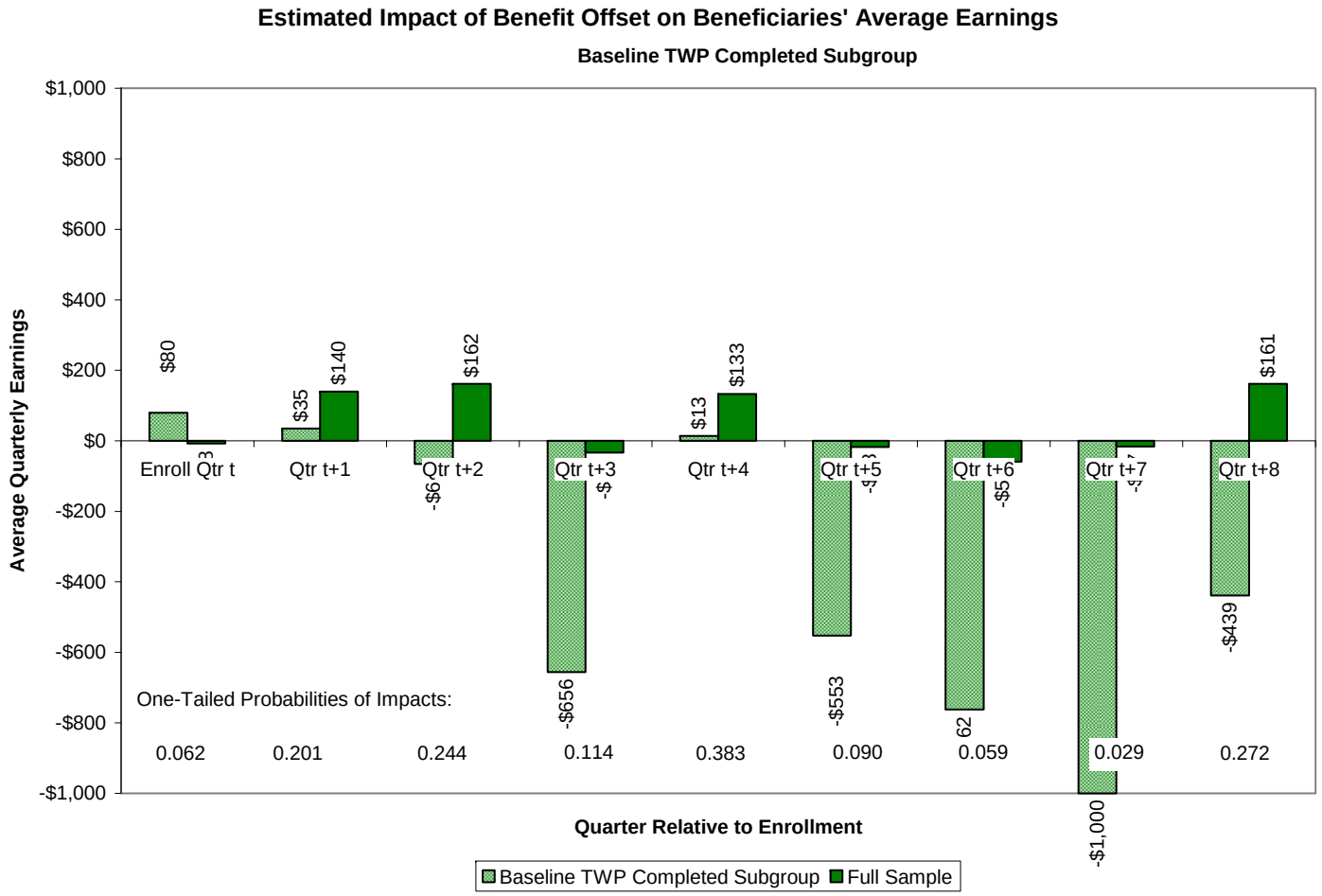

Estimated Impact of Benefit Offset on Beneficiaries' Average Earnings
Baseline TWP Completed Subgroup
Average Quarterly Earnings
$1,000
$800
$600
$400
$200
$0
-$200
-$400
-$600
-$800
-$1,000
$80
$35
$140
$162
$13
$133
$161
-$656
-$553
-$439
-$1,000
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.062
0.201
0.244
0.114
0.383
0.090
0.059
0.029
0.272
Quarter Relative to Enrollment
Baseline TWP Completed Subgroup
Full Sample

Figure 32.

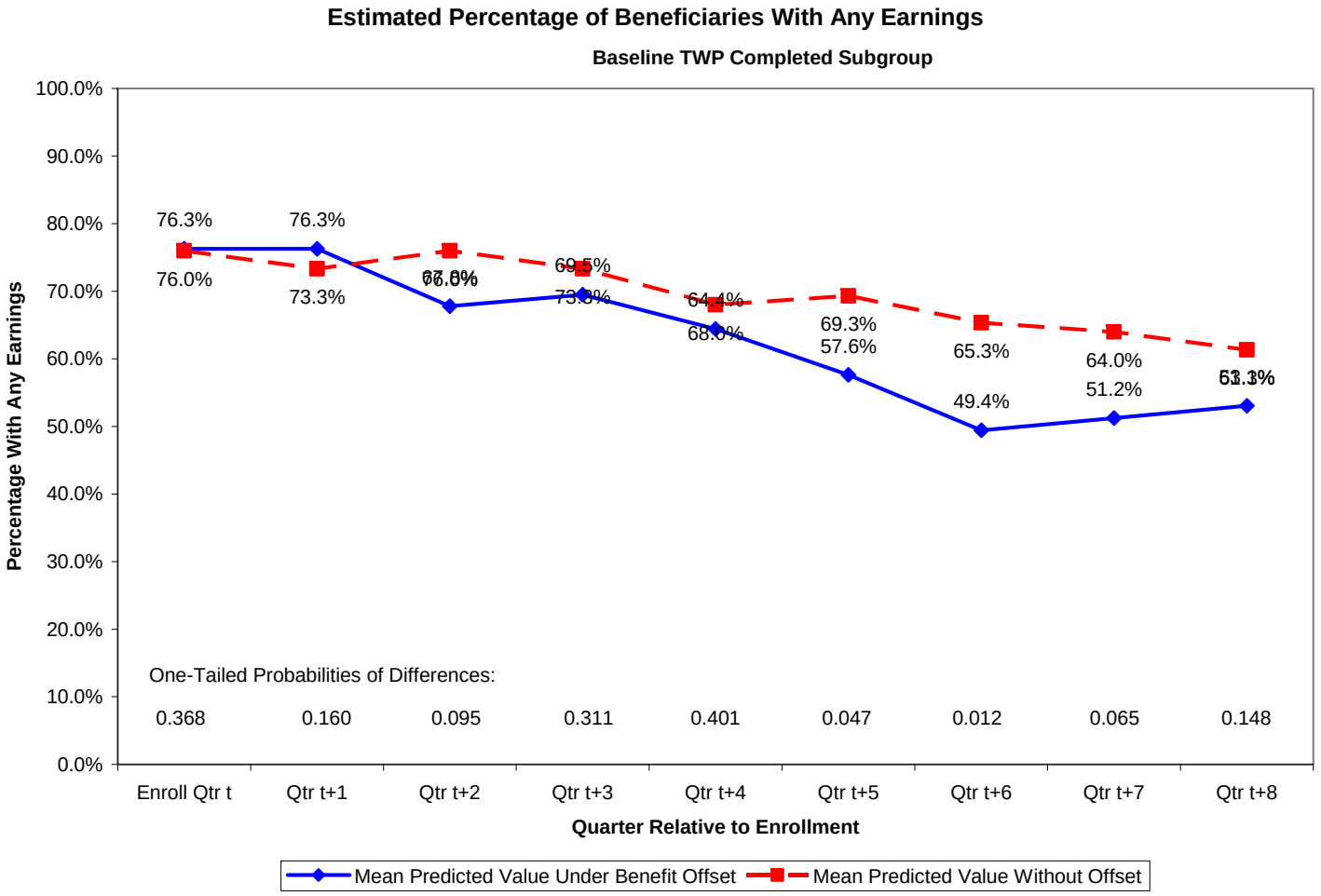
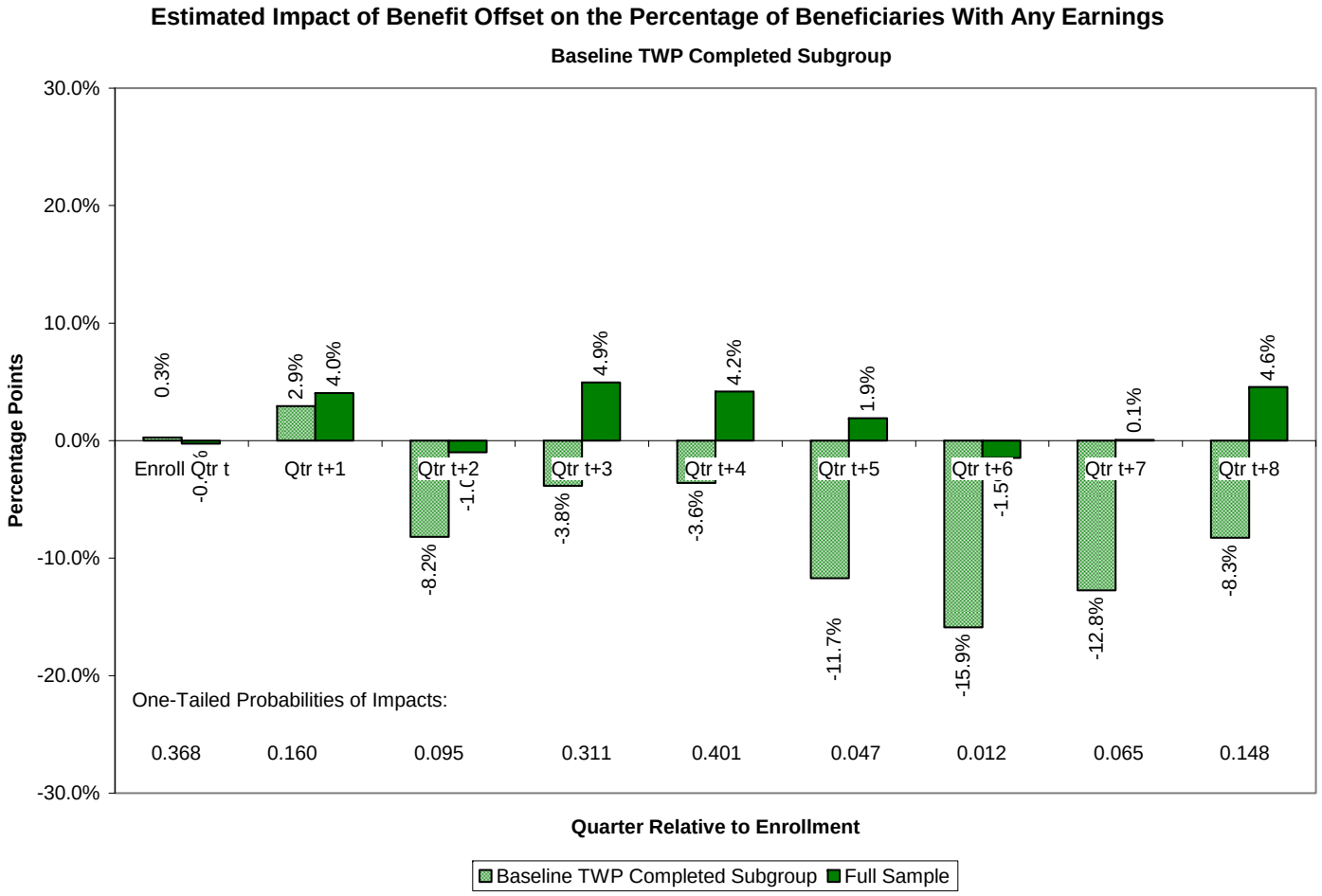

Estimated Percentage of Beneficiaries With Any Earnings
Baseline TWP Completed Subgroup
Percentage With Any Earnings
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
76.3%
76.3%
76.0%
73.3%
69.5%
64.4%
69.3%
65.3%
64.0%
57.6%
49.4%
51.2%
One-Tailed Probabilities of Differences:
0.368
0.160
0.095
0.311
0.401
0.047
0.012
0.065
0.148
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 33.


Estimated Impact of Benefit Offset on the Percentage of Beneficiaries With Any Earnings
Baseline TWP Completed Subgroup
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
-30.0%
Percentage Points
0.3%
2.9%
4.0%
4.9%
4.2%
1.9%
0.1%
4.6%
-8.2%
-3.8%
-3.6%
-11.7%
-15.9%
-12.8%
-8.3%
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.368
0.160
0.095
0.311
0.401
0.047
0.012
0.065
0.148
Quarter Relative to Enrollment
Baseline TWP Completed Subgroup
Full Sample

Subgroup: Baseline Earners

SSA net-impact estimates for the baseline-earners subgroup are presented in Tables 31 to 33, and in Figures 34 to 39, below. Significant effects were observed at the 1st and 4th post-enrollment quarters for SGA rate, with effect sizes ranging up to 10.0 percentage points. No significant effects were observed for average earnings, but for employment rate there was a single quarter showing a significant decrease in employment rate, at the 2nd quarter post-enrollment. With the exception of the latter data point, the overall pattern of outcomes for the baseline earners subgroup does not appear to be greatly different from that of the full sample.

Table 31. SSA Net Impact Estimates; Baseline Earners Subgroup; SGA Rate.

SGA	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	120	103	0.792	0.396		120	103	23.3%	23.3%	0.0%
Qtr t+1	120	103	0.032	0.016	<=.05	120	103	25.0%	35.0%	10.0%
Qtr t+2	120	103	0.178	0.089	<=.10	120	103	26.7%	33.0%	6.3%
Qtr t+3	120	103	0.730	0.365		120	103	28.3%	25.2%	-3.1%
Qtr t+4	120	103	0.084	0.042	<=.05	120	103	20.0%	28.2%	8.2%
Qtr t+5	120	103	0.772	0.386		120	103	21.7%	19.4%	-2.2%
Qtr t+6	120	103	0.570	0.285		120	103	22.5%	18.4%	-4.1%
Qtr t+7	120	103	0.815	0.408		120	103	25.0%	22.3%	-2.7%
Qtr t+8	120	103	0.500	0.250		120	103	21.7%	24.3%	2.6%

Table 32. SSA Net Impact Estimates; Baseline Earners Subgroup; Average Earnings.

Avg. Earnings	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	120	103	0.659	0.330		120	103	$1,841	$1,805	-$36
Qtr t+1	120	103	0.354	0.177		120	103	$1,954	$2,079	$125
Qtr t+2	120	103	0.640	0.320		120	103	$2,137	$1,931	-$207
Qtr t+3	120	103	0.343	0.172		120	103	$2,051	$1,719	-$332
Qtr t+4	120	103	0.785	0.393		120	103	$1,708	$1,735	$27
Qtr t+5	120	103	0.846	0.423		120	103	$1,672	$1,669	-$4
Qtr t+6	120	103	0.261	0.131		120	103	$1,833	$1,459	-$375
Qtr t+7	120	103	0.193	0.097	<=.10	120	103	$1,935	$1,465	-$470
Qtr t+8	120	103	0.742	0.371		120	103	$1,756	$1,607	-$149

Table 33. SSA Net Impact Estimates; Baseline Earners Subgroup; Employment Rate (Any Earnings).

Employment	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	120	103	0.864	0.432		120	103	74.2%	70.9%	-3.3%
Qtr t+1	120	103	0.671	0.336		120	103	76.7%	71.8%	-4.8%
Qtr t+2	120	103	0.005	0.003	<=.05	120	103	77.5%	61.2%	-16.3%
Qtr t+3	120	103	0.622	0.311		120	103	70.0%	65.0%	-5.0%
Qtr t+4	120	103	0.479	0.240		120	103	65.8%	68.0%	2.1%
Qtr t+5	120	103	0.929	0.465		120	103	62.5%	61.2%	-1.3%
Qtr t+6	120	103	0.540	0.270		120	103	62.5%	57.3%	-5.2%
Qtr t+7	120	103	0.942	0.471		120	103	60.8%	60.2%	-0.6%
Qtr t+8	120	103	0.394	0.197		120	103	55.8%	60.2%	4.4%

Figure 34.

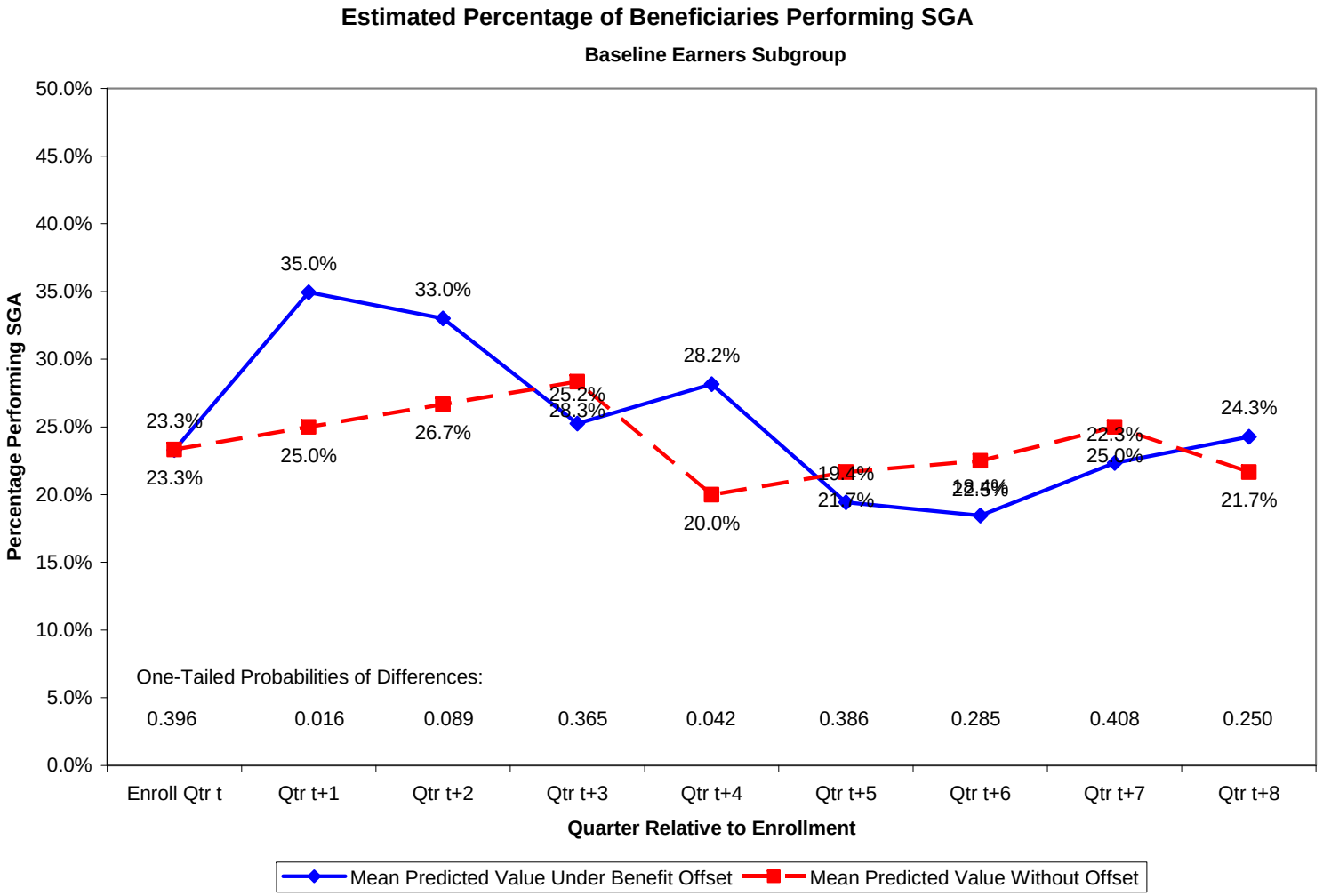

Estimated Percentage of Beneficiaries Performing SGA
Baseline Earners Subgroup
Percentage Performing SGA
50.0%
45.0%
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
35.0%
33.0%
28.2%
24.3%
23.3%
25.0%
26.7%
25.2%
23.3%
20.0%
22.3%
25.0%
21.7%
One-Tailed Probabilities of Differences:
0.396
0.016
0.089
0.365
0.042
0.386
0.285
0.408
0.250
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 35.

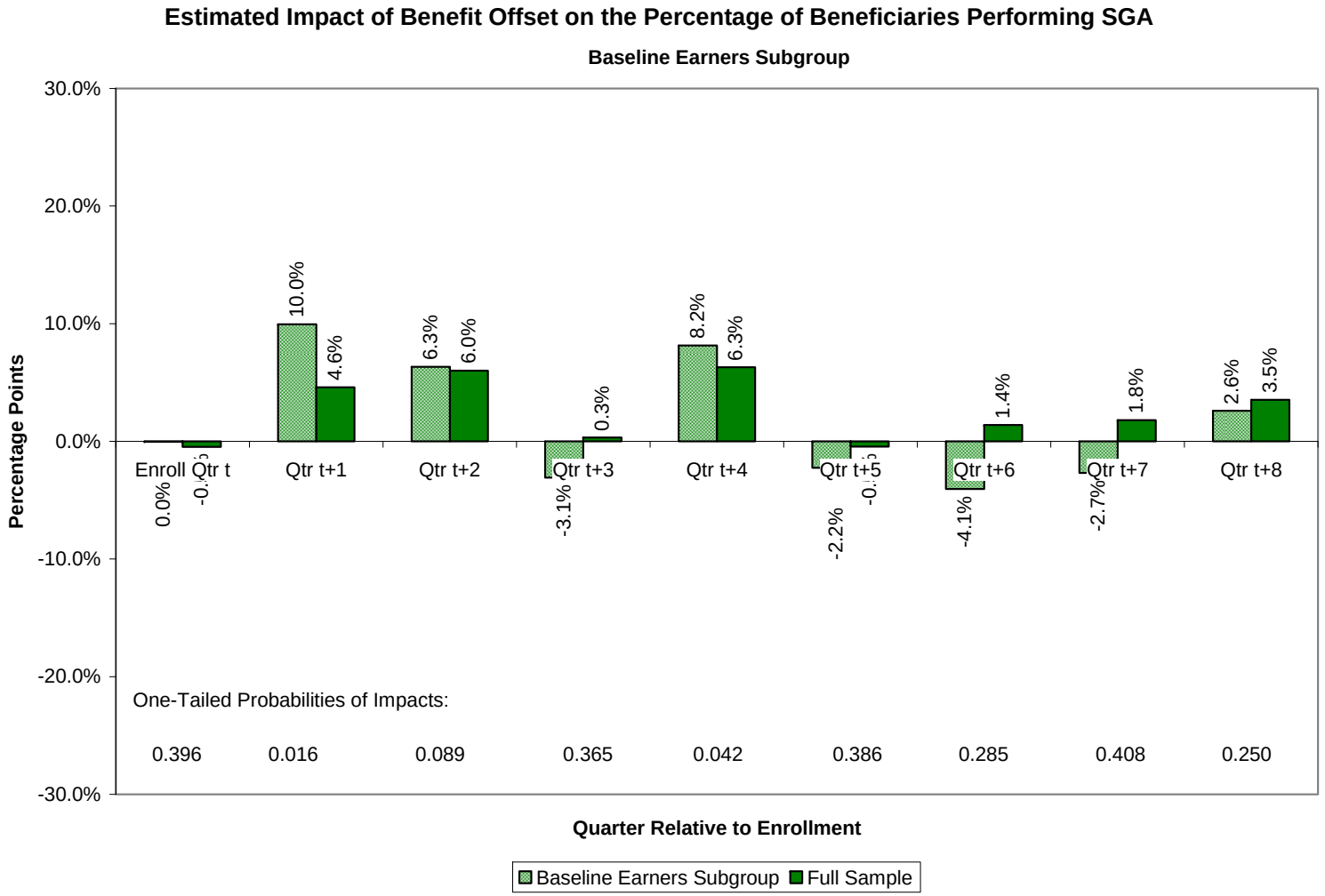

Estimated Impact of Benefit Offset on the Percentage of Beneficiaries Performing SGA
Baseline Earners Subgroup
Percentage Points
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
-30.0%
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
0.0%
10.0%
4.6%
6.3%
6.0%
-3.1%
0.3%
8.2%
6.3%
-2.2%
1.4%
-4.1%
1.8%
-2.7%
2.6%
3.5%
One-Tailed Probabilities of Impacts:
0.396
0.016
0.089
0.365
0.042
0.386
0.285
0.408
0.250
Quarter Relative to Enrollment
Baseline Earners Subgroup
Full Sample

Figure 36.

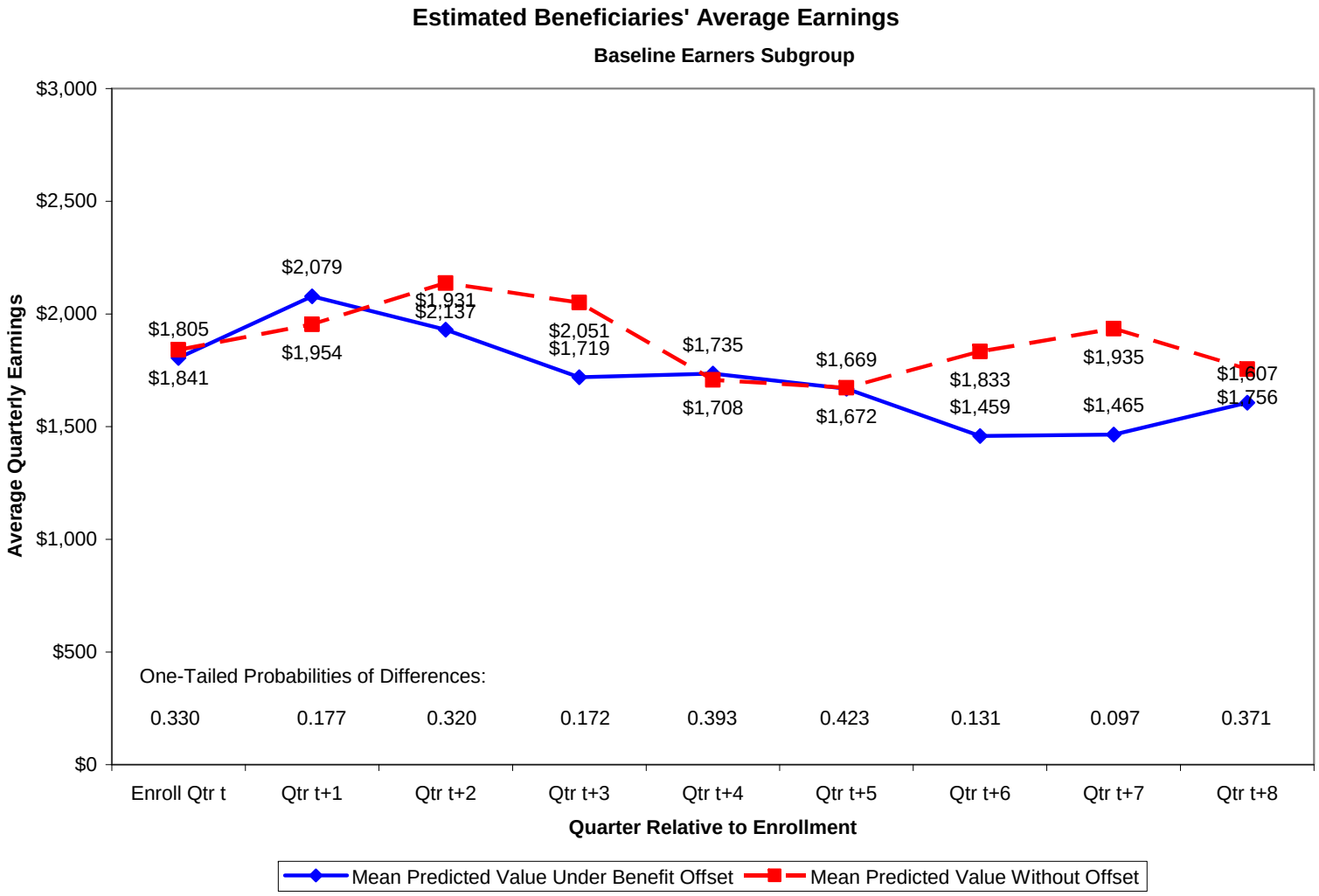

Estimated Beneficiaries' Average Earnings
Baseline Earners Subgroup
Average Quarterly Earnings
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
$1,805
$1,841
$2,079
$1,954
$1,931
$2,137
$2,051
$1,719
$1,735
$1,708
$1,669
$1,672
$1,833
$1,459
$1,935
$1,465
$1,607
$1,756
One-Tailed Probabilities of Differences:
0.330
0.177
0.320
0.172
0.393
0.423
0.131
0.097
0.371
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 37.

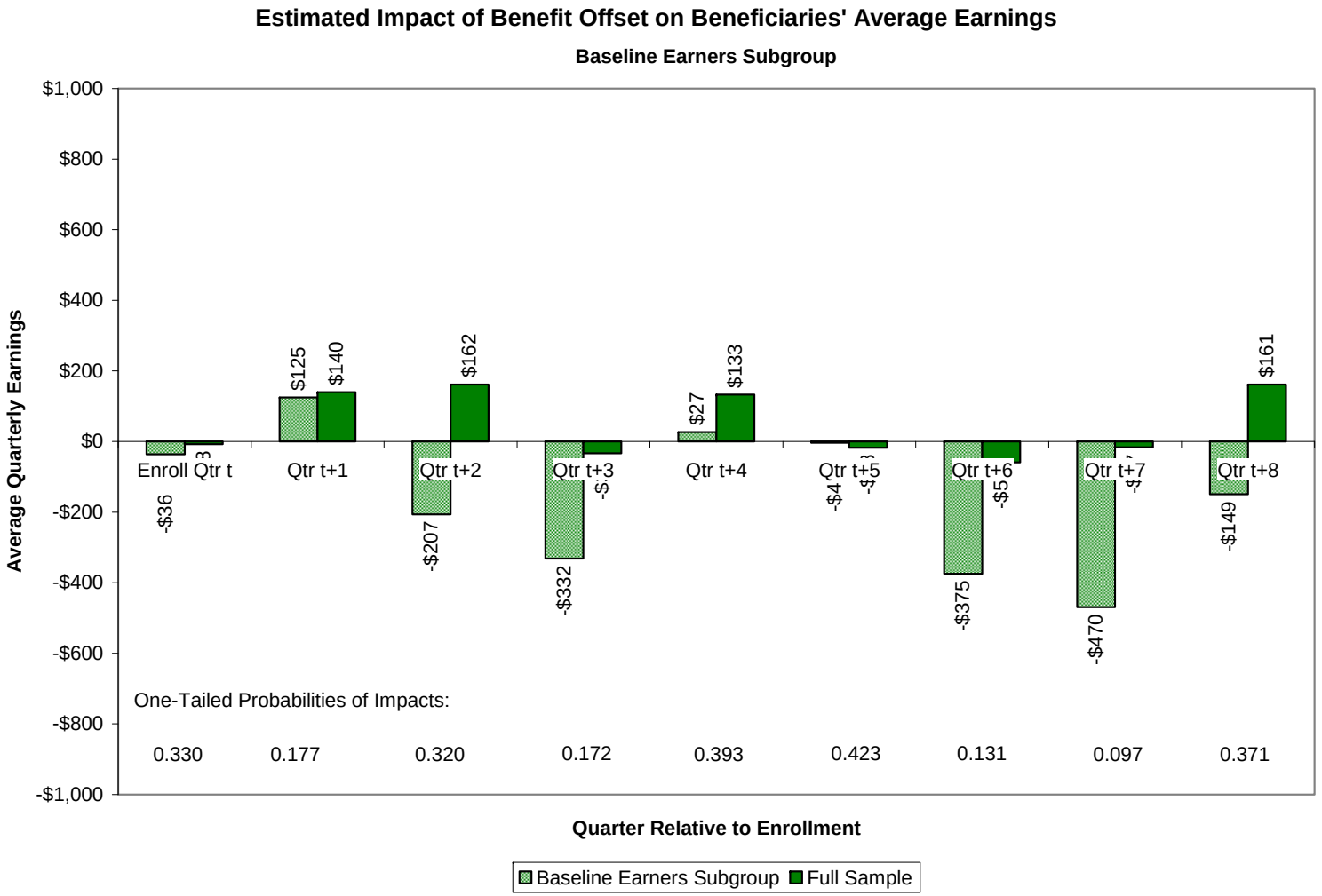

Estimated Impact of Benefit Offset on Beneficiaries' Average Earnings
Baseline Earners Subgroup
Average Quarterly Earnings
$1,000
$800
$600
$400
$200
$0
-$200
-$400
-$600
-$800
-$1,000
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
-$36
$125
$140
-$207
$162
-$332
$27
$133
-$375
-$470
-$149
$161
One-Tailed Probabilities of Impacts:
0.330
0.177
0.320
0.172
0.393
0.423
0.131
0.097
0.371
Quarter Relative to Enrollment
Baseline Earners Subgroup
Full Sample

Figure 38.

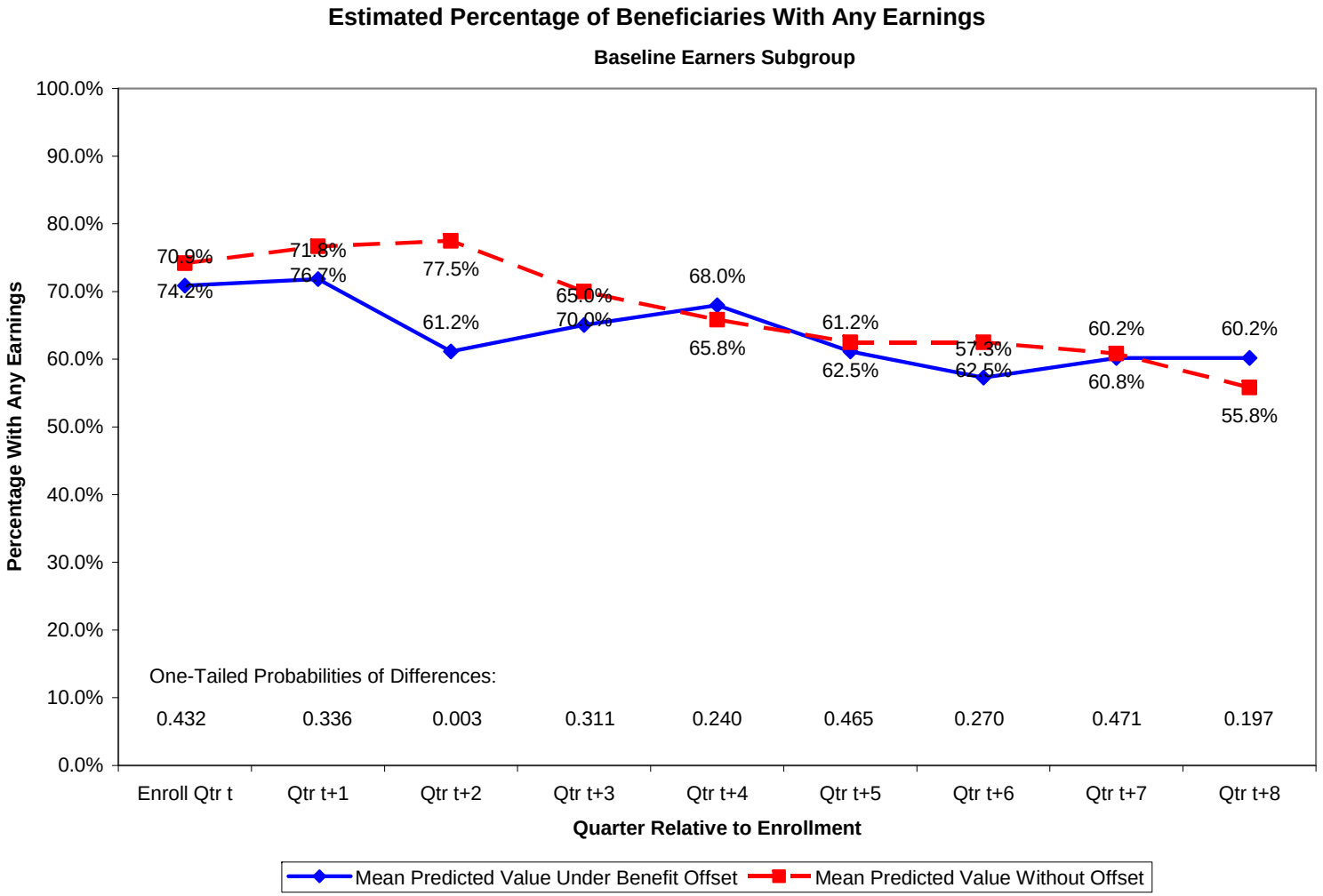
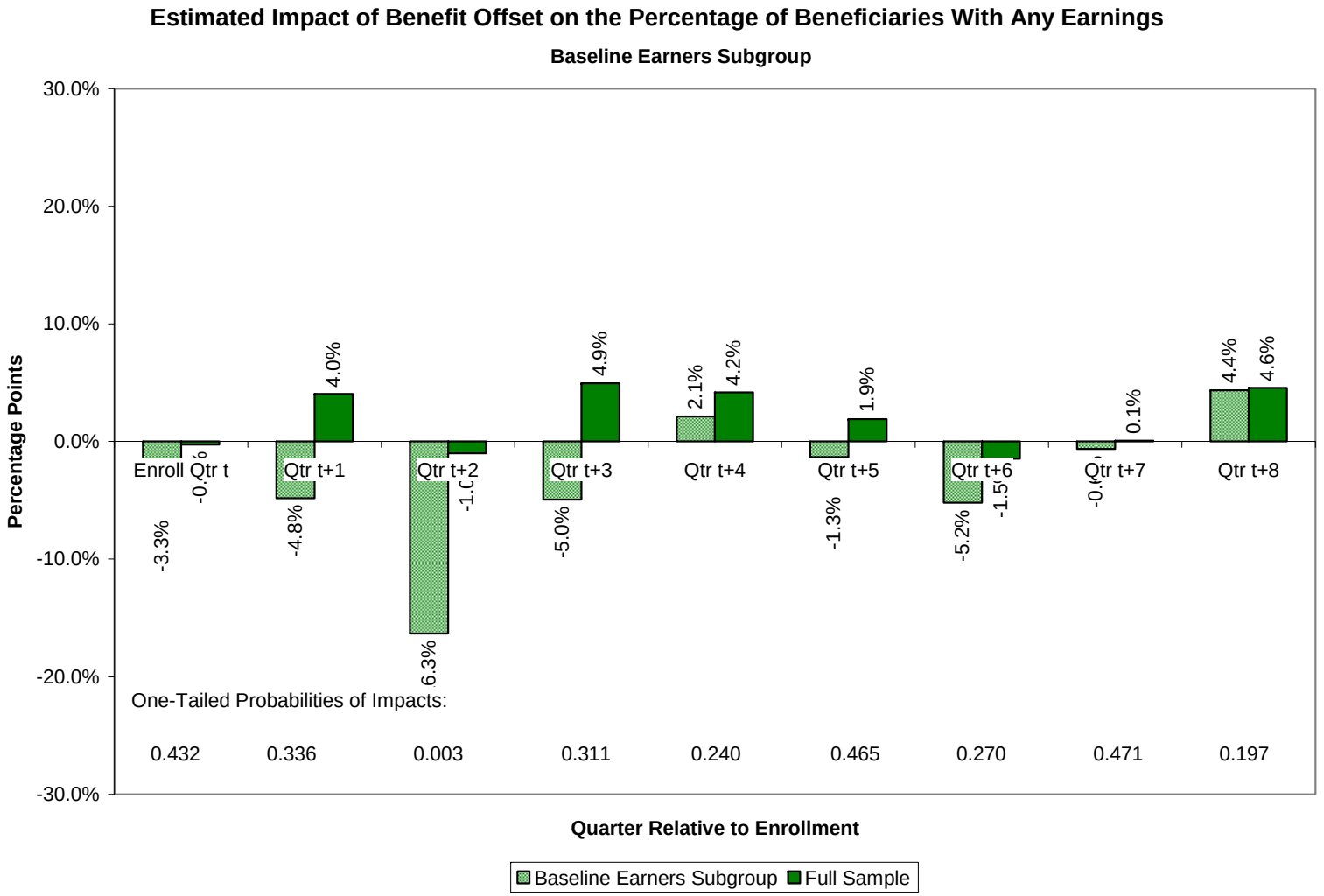

Estimated Percentage of Beneficiaries With Any Earnings
Baseline Earners Subgroup
Percentage With Any Earnings
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
70.9%
71.8%
77.5%
65.0%
60.2%
60.2%
74.2%
76.7%
61.2%
70.0%
68.0%
65.8%
61.2%
62.5%
57.3%
62.5%
60.8%
55.8%
One-Tailed Probabilities of Differences:
0.432
0.336
0.003
0.311
0.240
0.465
0.270
0.471
0.197
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 39.


Estimated Impact of Benefit Offset on the Percentage of Beneficiaries With Any Earnings
Baseline Earners Subgroup
Percentage Points
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
-30.0%
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
-3.3%
-4.8%
-16.3%
-5.0%
2.1%
-1.3%
-5.2%
0.1%
4.4%
4.0%
4.9%
4.2%
1.9%
4.6%
One-Tailed Probabilities of Impacts:
0.432
0.336
0.003
0.311
0.240
0.465
0.270
0.471
0.197
Quarter Relative to Enrollment
Baseline Earners Subgroup
Full Sample

Subgroup: Calendar Year 2005 Enrollees

SSA net-impact estimates for the calendar year 2005 enrollees (i.e., early enrollees) subgroup are presented in Tables 34 to 36, and in Figures 40 to 45, below. Significant effects were observed at the 1st, 4th, and 8th post-enrollment quarters for SGA rate, and the 1st post-enrollment quarter for average earnings. Additionally, borderline-significant ($p <= 0.10$) increases for average earnings were observed at the 2nd, 4th, and 8th quarters post-enrollment. No significant effects were observed for employment rate. As with the subgroup of younger enrollees, effects were distributed over both the first and second years post-enrollment, but the CY 2005 enrollees group had the largest effect sizes of any subgroup examined. Offset effects on SGA rate for this group ranged up to 19.3 percentage points.

Net-impacts for calendar year 2006 enrollees (i.e., later enrollees) were much smaller or non-significant. Statistical outputs for that subgroup are presented in Appendices 34, 35, and 36.

Table 34. SSA Net Impact Estimates; CY 2005 Enrollees Subgroup; SGA Rate.

SGA	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	57	57	0.123	0.062	<=.10	57	57	21.1%	29.8%	8.8%
Qtr t+1	57	57	0.011	0.006	<=.05	57	57	21.1%	40.4%	19.3%
Qtr t+2	57	56	0.116	0.058	<=.10	57	57	29.8%	37.3%	7.5%
Qtr t+3	57	56	0.171	0.086	<=.10	57	57	21.1%	28.4%	7.3%
Qtr t+4	57	56	0.045	0.023	<=.05	57	57	24.6%	40.9%	16.3%
Qtr t+5	57	56	0.228	0.114		57	57	22.8%	32.0%	9.2%
Qtr t+6	57	55	0.388	0.194		57	57	29.8%	34.4%	4.5%
Qtr t+7	57	55	0.421	0.211		57	57	26.3%	30.7%	4.3%
Qtr t+8	57	55	0.011	0.006	<=.05	57	57	19.3%	38.0%	18.7%

Table 35. SSA Net Impact Estimates; CY 2005 Enrollees Subgroup; Average Earnings.

Avg. Earnings	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	57	57	0.288	0.144		57	57	$1,609	$1,970	$361
Qtr t+1	57	57	0.044	0.022	<=.05	57	57	$1,807	$2,329	$523
Qtr t+2	57	56	0.170	0.085	<=.10	57	57	$2,144	$2,332	$188
Qtr t+3	57	56	0.411	0.206		57	57	$1,956	$2,041	$85
Qtr t+4	57	56	0.136	0.068	<=.10	57	57	$1,669	$2,117	$448
Qtr t+5	57	56	0.746	0.373		57	57	$1,805	$1,906	$101
Qtr t+6	57	55	0.952	0.476		57	57	$2,096	$1,969	-$127
Qtr t+7	57	55	0.949	0.475		57	57	$2,135	$1,854	-$281
Qtr t+8	57	55	0.179	0.090	<=.10	57	57	$1,687	$2,080	$392

Table 36. SSA Net Impact Estimates; CY 2005 Enrollees Subgroup; Employment Rate (Any Earnings).

Employment	Observed Values					Predicted Values				
	nC	nT	2TailP	1TailP	Signif.	nC	nT	MeanPredictedC	MeanPredictedT	EstimatedImpact
Enroll Qtr t	57	57	0.661	0.331		57	57	59.6%	59.6%	0.0%
Qtr t+1	57	57	0.259	0.130		57	57	61.4%	63.2%	1.8%
Qtr t+2	57	56	0.967	0.484		57	57	64.9%	60.1%	-4.8%
Qtr t+3	57	56	0.747	0.374		57	57	63.2%	60.3%	-2.9%
Qtr t+4	57	56	0.437	0.219		57	57	50.9%	53.2%	2.3%
Qtr t+5	57	56	0.431	0.216		57	57	49.1%	53.2%	4.1%
Qtr t+6	57	55	0.543	0.272		57	57	61.4%	57.5%	-3.9%
Qtr t+7	57	55	0.488	0.244		57	57	61.4%	55.9%	-5.5%
Qtr t+8	57	55	0.491	0.246		57	57	49.1%	56.1%	6.9%

Figure 40.

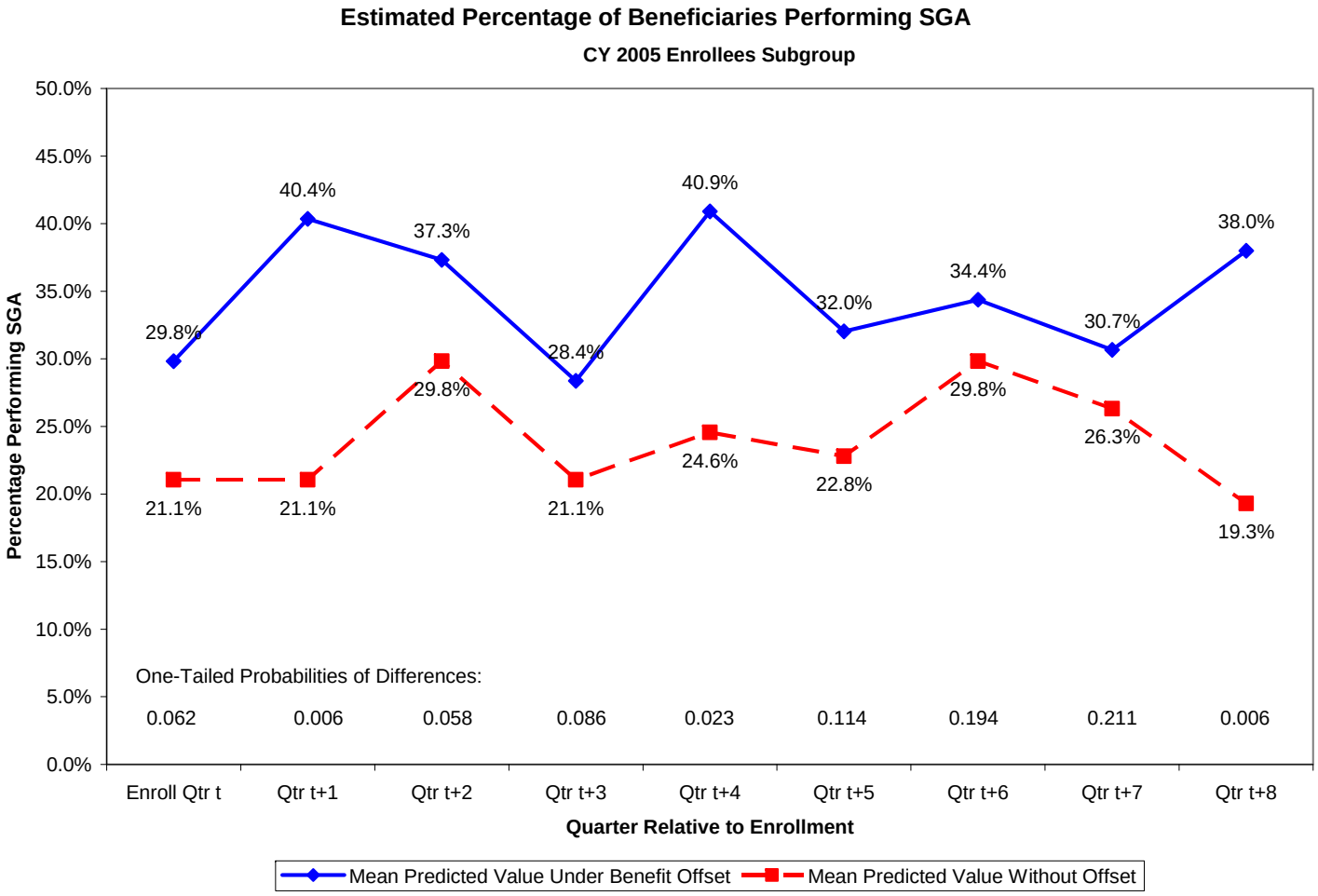

Estimated Percentage of Beneficiaries Performing SGA
CY 2005 Enrollees Subgroup
Percentage Performing SGA
50.0%
45.0%
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
29.8%
40.4%
37.3%
28.4%
40.9%
32.0%
34.4%
30.7%
38.0%
21.1%
21.1%
29.8%
21.1%
24.6%
22.8%
29.8%
26.3%
19.3%
One-Tailed Probabilities of Differences:
0.062
0.006
0.058
0.086
0.023
0.114
0.194
0.211
0.006
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 41.

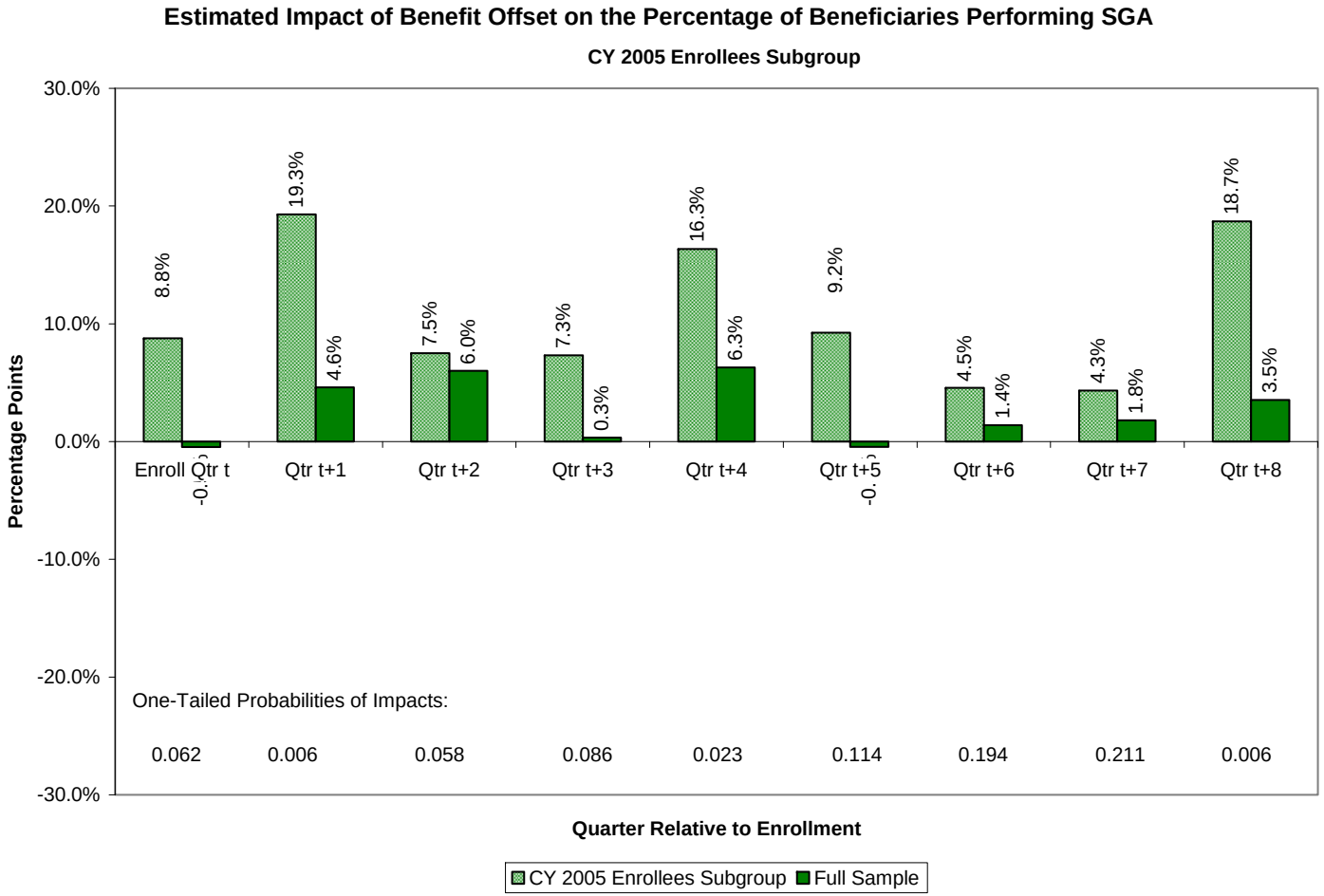

Estimated Impact of Benefit Offset on the Percentage of Beneficiaries Performing SGA
CY 2005 Enrollees Subgroup
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
-30.0%
Percentage Points
8.8%
19.3%
7.5%
6.0%
7.3%
0.3%
16.3%
6.3%
9.2%
4.5%
1.4%
4.3%
1.8%
18.7%
3.5%
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.062
0.006
0.058
0.086
0.023
0.114
0.194
0.211
0.006
Quarter Relative to Enrollment
CY 2005 Enrollees Subgroup
Full Sample

Figure 42.

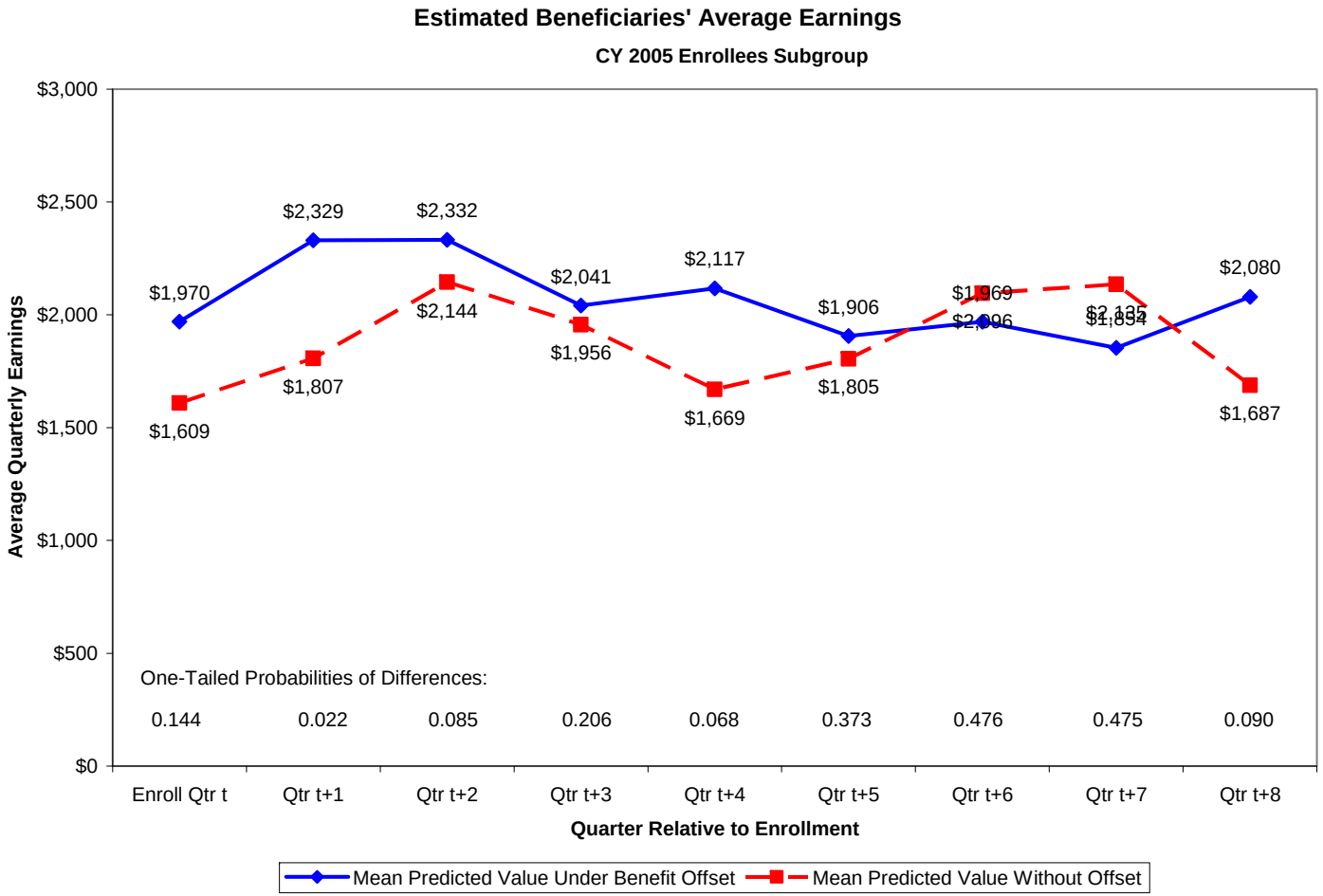

Estimated Beneficiaries' Average Earnings
CY 2005 Enrollees Subgroup
Average Quarterly Earnings
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
$1,970
$2,329
$2,332
$2,041
$2,117
$1,906
$1,969
$2,080
$1,609
$1,807
$2,144
$1,956
$1,669
$1,805
$2,096
$1,687
One-Tailed Probabilities of Differences:
0.144
0.022
0.085
0.206
0.068
0.373
0.476
0.475
0.090
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 43.

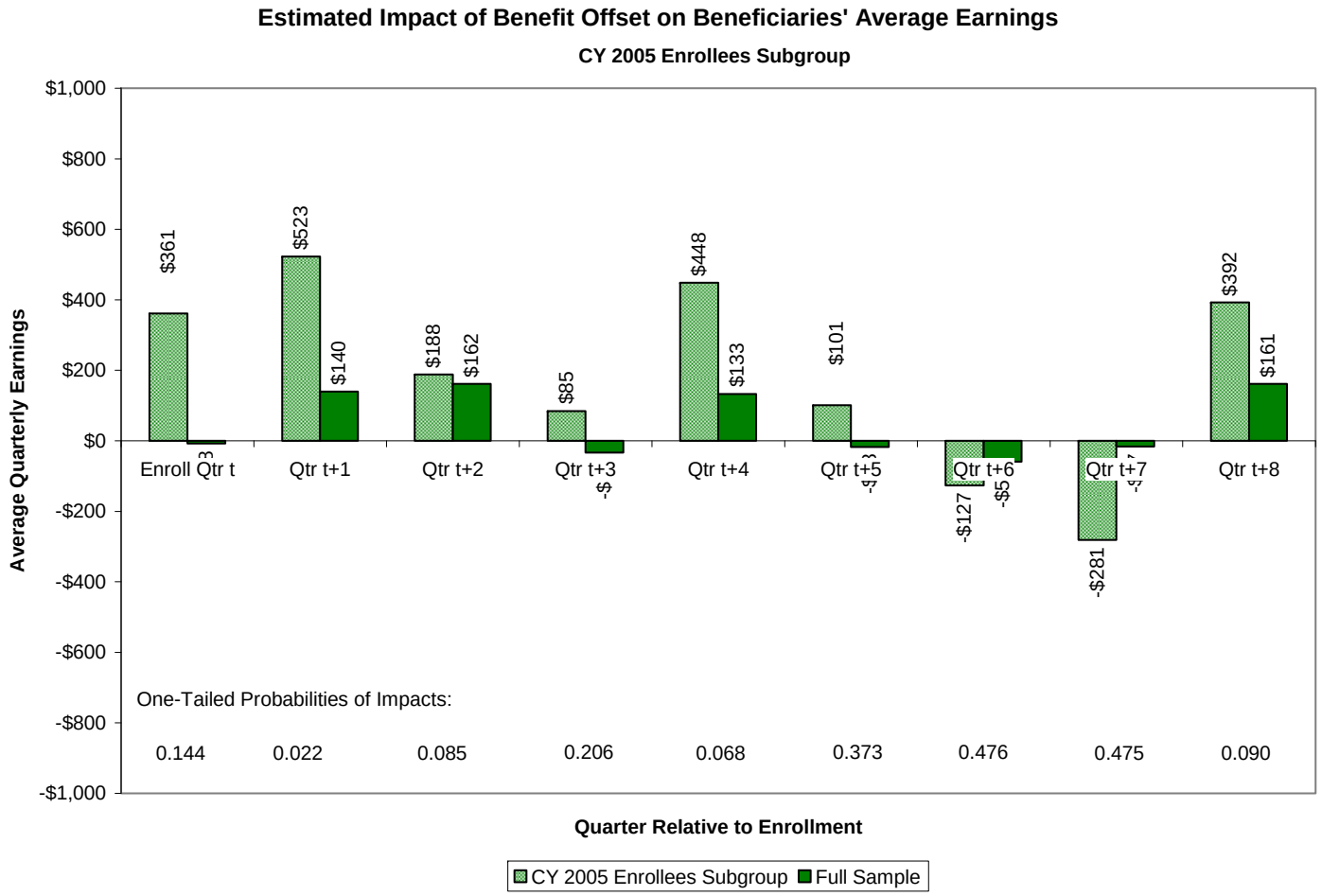

Estimated Impact of Benefit Offset on Beneficiaries' Average Earnings
CY 2005 Enrollees Subgroup
Average Quarterly Earnings
$1,000
$800
$600
$400
$200
$0
-$200
-$400
-$600
-$800
-$1,000
$361
$523
$140
$188
$162
$85
$448
$133
$101
$392
$161
-$127
-$5
-$281
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.144
0.022
0.085
0.206
0.068
0.373
0.476
0.475
0.090
Quarter Relative to Enrollment
CY 2005 Enrollees Subgroup
Full Sample

Figure 44.

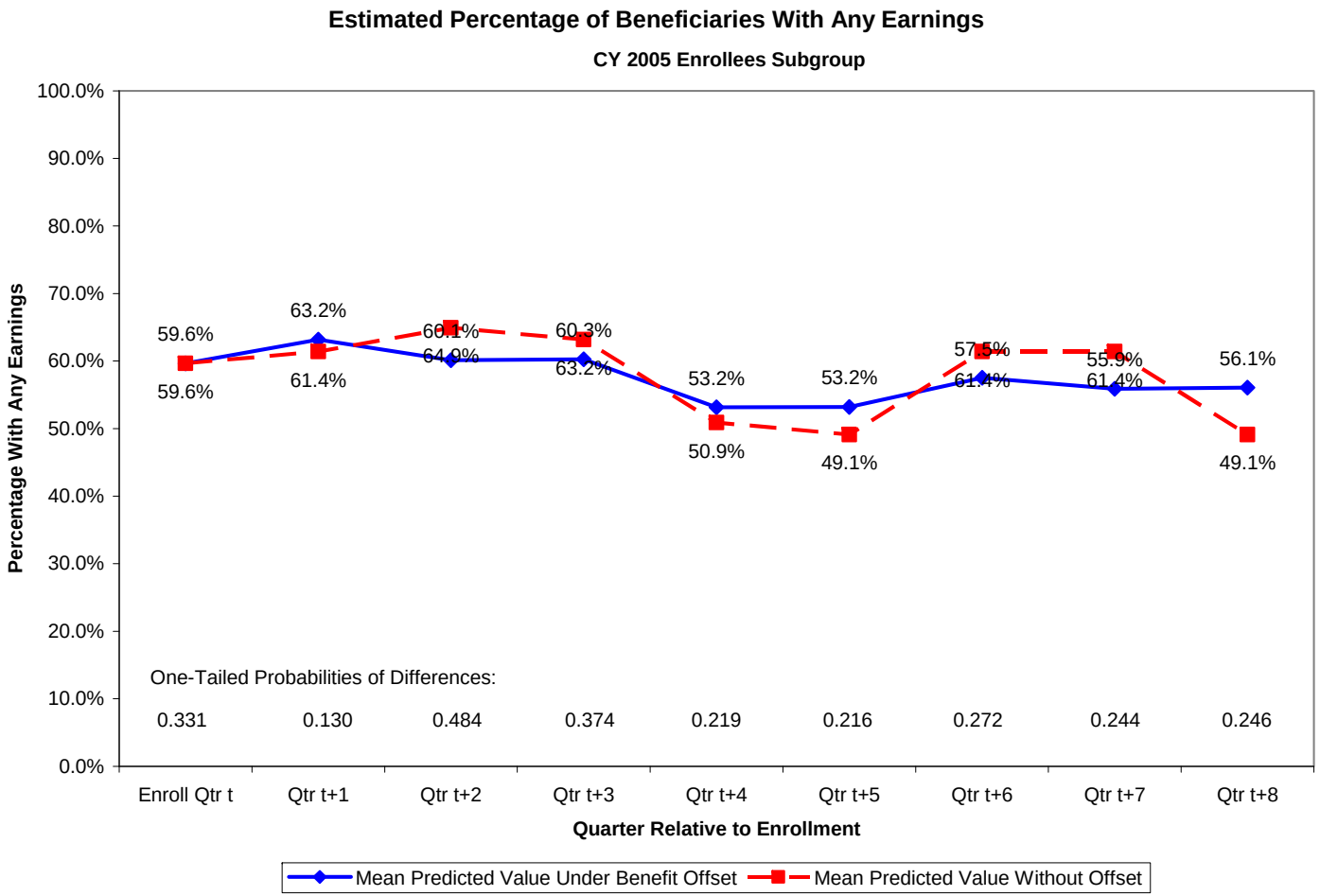
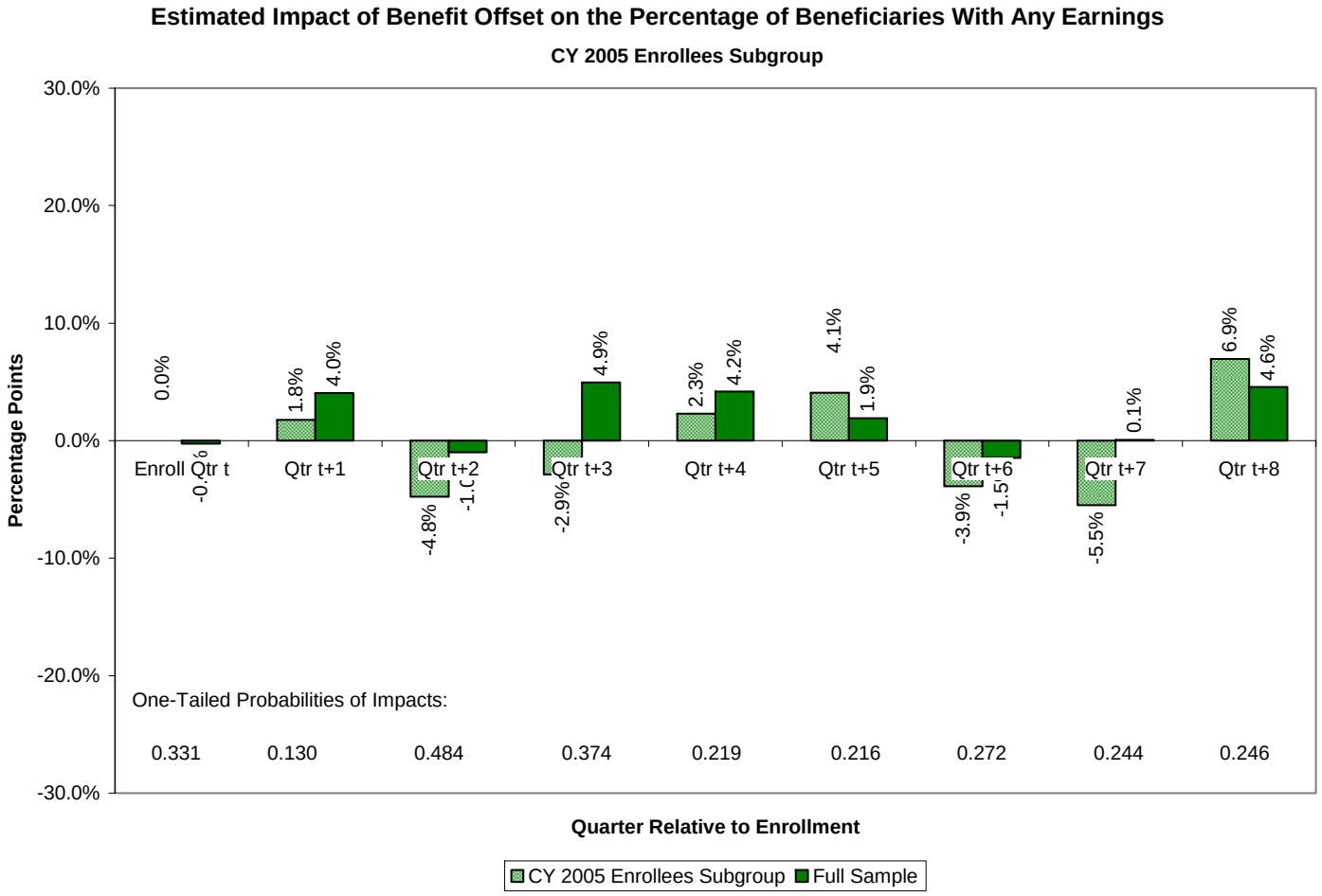

Estimated Percentage of Beneficiaries With Any Earnings
CY 2005 Enrollees Subgroup
Percentage With Any Earnings
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
59.6%
63.2%
59.6%
61.4%
66.1%
64.9%
60.3%
63.2%
53.2%
50.9%
53.2%
49.1%
57.5%
61.4%
55.9%
61.4%
56.1%
49.1%
One-Tailed Probabilities of Differences:
0.331
0.130
0.484
0.374
0.219
0.216
0.272
0.244
0.246
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
Quarter Relative to Enrollment
Mean Predicted Value Under Benefit Offset
Mean Predicted Value Without Offset

Figure 45.


Estimated Impact of Benefit Offset on the Percentage of Beneficiaries With Any Earnings
CY 2005 Enrollees Subgroup
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
-30.0%
Percentage Points
0.0%
-0.1%
1.8%
4.0%
-4.8%
-1.0%
-2.9%
4.9%
2.3%
4.2%
4.1%
1.9%
-3.9%
-1.5%
-5.5%
0.1%
6.9%
4.6%
Enroll Qtr t
Qtr t+1
Qtr t+2
Qtr t+3
Qtr t+4
Qtr t+5
Qtr t+6
Qtr t+7
Qtr t+8
One-Tailed Probabilities of Impacts:
0.331
0.130
0.484
0.374
0.219
0.216
0.272
0.244
0.246
Quarter Relative to Enrollment
CY 2005 Enrollees Subgroup
Full Sample

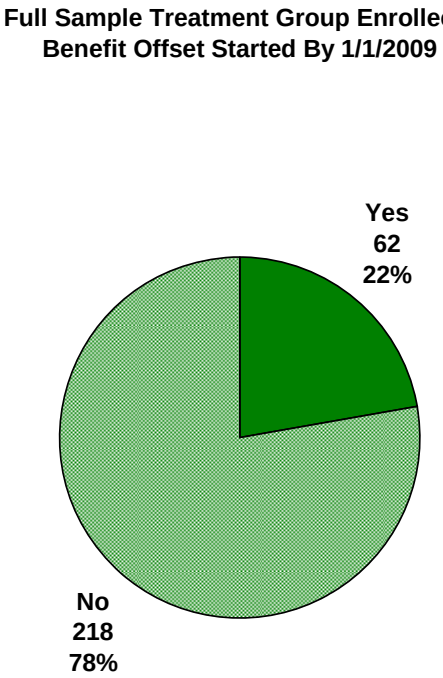
Vermont Net-Impact Evaluation Estimates

Offset Utilization Outcomes

Full Sample

By the end of the analysis timeframe for the Pilot, at the close of calendar year 2008, which was at least 2 years post-enrollment for all individuals, 22% of treatment group enrollees had utilized the benefit offset. This meant that they had completed their TWP and then continued to earn above SGA so that their monthly SSDI benefit was due to be offset, or reduced.

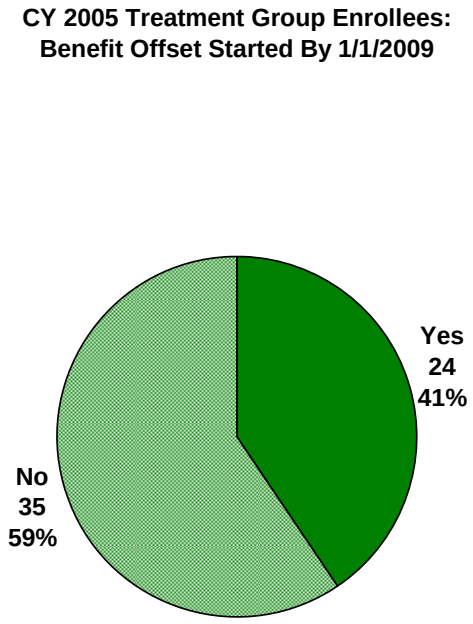
Figure 46.



Subgroup: Calendar Year 2005 Enrollees

Looking at the subgroup with both the greatest amount of time to utilize an offset (at least 3 years post-enrollment), and the subgroup with the greatest observed treatment effects, we find that 41% of calendar year 2005 treatment group enrollees utilized the Pilot's benefit offset provisions.

Figure 47.



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Unemployment Insurance (UI) Wage Data Outcomes

The results of Vermont's net-impact analyses for UI wage data outcomes are presented in Tables 37 to 42 below, and Figures 48 to 62. As described earlier, for our own Vermont impact analyses, we used differences-in-differences linear regressions, comparing the before/after changes for the treatment group to the before/after changes for the control group, based on annual means. For each analysis group, we first compared the year prior to enrollment to the year immediately following enrollment, and then compared the year prior to enrollment to the second year following enrollment. In each comparison, we collapsed the time-series of our dependent variable into two observations for each individual: one before enrollment and one after enrollment. We did this by averaging the quarterly outcomes for each individual across the four quarters prior to the quarter of enrollment and across the four quarters following the quarter of enrollment. In the following tables and figures, the adjusted treatment group mean is the pre-enrollment treatment mean plus the pre/post difference in means for the control group. The difference between the post-enrollment observed mean for the treatment group and the pre-enrollment adjusted mean for the treatment group provides the effect size, in the unit of analysis (percentage points or dollars). Graphically, we plotted the quarterly mean of the outcome variables for treatment and control, for each of the 4 quarters prior to enrollment into the pilot and for a minimum of 8 quarters following the quarter of enrollment. This allows for a visual examination of group means at each individual quarter and for any trends over time. Those plotted means are presented in the figures below, first for the full sample of enrollees, and then for each of the subgroups.

Table 37. Differences-In-Differences; Comparing 4 Qtrs Pre to **First** 4 Qtrs Post; UI Outcomes; Effect Estimates.

Sample	Measure	Nc	Nt	2TailP	1TailP	Signif.	EffectAs%PostT	EffectDiff
Full Sample	SGA Rate	288	273	0.034	0.017	<=.05	34.5%	7.0%
CY2005 Enrollees Subgroup	SGA Rate	57	55	0.021	0.011	<=.05	54.5%	20.6%
CY2006 Enrollees Subgroup	SGA Rate	231	218	0.290	0.145		22.5%	3.6%
Baseline TWP Completed	SGA Rate	75	58	0.056	0.028	<=.05	46.0%	17.0%
Baseline Earners Subgroup	SGA Rate	120	103	0.177	0.089	<=.10	28.5%	8.6%
Baseline Medicaid Buy-In	SGA Rate	98	71	0.037	0.019	<=.05	50.6%	13.7%
Full Sample	Avg Earn	288	273	0.190	0.095	<=.10	19.3%	$257
CY2005 Enrollees Subgroup	Avg Earn	57	55	0.135	0.068	<=.10	36.3%	$823
CY2006 Enrollees Subgroup	Avg Earn	231	218	0.571	0.286		10.3%	$113
Baseline TWP Completed	Avg Earn	75	58	0.590	0.295		12.8%	$266
Baseline Earners Subgroup	Avg Earn	120	103	0.912	0.456		2.2%	$41
Baseline Medicaid Buy-In	Avg Earn	98	71	0.215	0.108		25.4%	$459
Full Sample	Empl Rate	288	273	0.139	0.070	<=.10	14.7%	7.7%
CY2005 Enrollees Subgroup	Empl Rate	57	55	0.335	0.168		17.8%	10.8%
CY2006 Enrollees Subgroup	Empl Rate	231	218	0.239	0.120		13.8%	6.8%
Baseline TWP Completed	Empl Rate	75	58	0.685	0.343		5.6%	4.0%
Baseline Earners Subgroup	Empl Rate	120	103	0.862	0.431		-1.9%	-1.3%
Baseline Medicaid Buy-In	Empl Rate	98	71	0.394	0.197		11.4%	7.7%

Table 38. Differences-In-Differences; Comparing 4 Qtrs Pre to **First** 4 Qtrs Post; UI Outcomes; Means.

Sample	Measure	AdjMeanPreT	MeanPostT	MeanPreC	MeanPostC	MeanPreT	MeanPostT
Full Sample	SGA Rate	13.3%	20.3%	11.5%	15.6%	9.2%	20.3%
CY2005 Enrollees Subgroup	SGA Rate	17.2%	37.7%	20.6%	24.1%	13.6%	37.7%
CY2006 Enrollees Subgroup	SGA Rate	12.4%	15.9%	9.2%	13.5%	8.0%	15.9%
Baseline TWP Completed	SGA Rate	20.0%	37.1%	29.0%	28.3%	20.7%	37.1%
Baseline Earners Subgroup	SGA Rate	21.7%	30.3%	24.2%	25.0%	20.9%	30.3%
Baseline Medicaid Buy-In	SGA Rate	13.4%	27.1%	15.3%	15.3%	13.4%	27.1%
Full Sample	Avg Earn	$1,077	$1,334	$941	$1,214	$804	$1,334
CY2005 Enrollees Subgroup	Avg Earn	$1,446	$2,269	$1,368	$1,894	$919	$2,269
CY2006 Enrollees Subgroup	Avg Earn	$985	$1,097	$835	$1,046	$774	$1,097
Baseline TWP Completed	Avg Earn	$1,816	$2,082	$2,064	$2,215	$1,666	$2,082
Baseline Earners Subgroup	Avg Earn	$1,825	$1,866	$1,890	$1,963	$1,752	$1,866
Baseline Medicaid Buy-In	Avg Earn	$1,349	$1,809	$1,395	$1,365	$1,378	$1,809
Full Sample	Empl Rate	44.3%	51.9%	40.7%	48.3%	36.7%	51.9%
CY2005 Enrollees Subgroup	Empl Rate	50.1%	60.9%	50.0%	60.1%	40.0%	60.9%
CY2006 Enrollees Subgroup	Empl Rate	42.8%	49.7%	38.4%	45.4%	35.9%	49.7%
Baseline TWP Completed	Empl Rate	66.7%	70.7%	72.3%	72.7%	66.4%	70.7%
Baseline Earners Subgroup	Empl Rate	67.8%	66.5%	72.9%	72.5%	68.2%	66.5%
Baseline Medicaid Buy-In	Empl Rate	59.9%	67.6%	65.3%	63.3%	62.0%	67.6%

Table 39. Differences-In-Differences; Comparing 4 Qtrs Pre to **Second** 4 Qtrs Post; UI Outcomes; Effect Estimates.

Sample	Measure	Nc	Nt	2TailP	1TailP	Signif.	EffectAs%PostT	EffectDiff
Full Sample	SGA Rate	288	273	0.221	0.111		24.0%	4.0%
CY2005 Enrollees Subgroup	SGA Rate	57	55	0.070	0.035	<=.05	48.4%	16.5%
CY2006 Enrollees Subgroup	SGA Rate	231	218	0.789	0.395		7.2%	0.9%
Baseline TWP Completed	SGA Rate	75	58	0.774	0.387		11.7%	2.5%
Baseline Earners Subgroup	SGA Rate	120	103	0.789	0.395		8.1%	1.7%
Baseline Medicaid Buy-In	SGA Rate	98	71	0.395	0.198		31.3%	5.4%
Full Sample	Avg Earn	288	273	0.441	0.221		13.3%	$165
CY2005 Enrollees Subgroup	Avg Earn	57	55	0.355	0.178		25.4%	$506
CY2006 Enrollees Subgroup	Avg Earn	231	218	0.732	0.366		7.4%	$78
Baseline TWP Completed	Avg Earn	75	58	0.610	0.305		-17.9%	-$270
Baseline Earners Subgroup	Avg Earn	120	103	0.774	0.387		-7.2%	-$112
Baseline Medicaid Buy-In	Avg Earn	98	71	0.613	0.307		14.0%	$188
Full Sample	Empl Rate	288	273	0.284	0.142		12.2%	5.6%
CY2005 Enrollees Subgroup	Empl Rate	57	55	0.329	0.165		19.7%	11.1%
CY2006 Enrollees Subgroup	Empl Rate	231	218	0.474	0.237		9.7%	4.2%
Baseline TWP Completed	Empl Rate	75	58	0.592	0.296		-10.5%	-5.6%
Baseline Earners Subgroup	Empl Rate	120	103	0.605	0.303		6.7%	4.0%
Baseline Medicaid Buy-In	Empl Rate	98	71	0.379	0.190		14.3%	8.3%

Table 40. Differences-In-Differences; Comparing 4 Qtrs Pre to **Second** 4 Qtrs Post; UI Outcomes; Means.

Sample	Measure	AdjMeanPreT	MeanPostT	MeanPreC	MeanPostC	MeanPreT	MeanPostT
Full Sample	SGA Rate	12.8%	16.8%	11.5%	15.1%	9.2%	16.8%
CY2005 Enrollees Subgroup	SGA Rate	17.6%	34.1%	20.6%	24.6%	13.6%	34.1%
CY2006 Enrollees Subgroup	SGA Rate	11.6%	12.5%	9.2%	12.8%	8.0%	12.5%
Baseline TWP Completed	SGA Rate	19.0%	21.6%	29.0%	27.3%	20.7%	21.6%
Baseline Earners Subgroup	SGA Rate	19.4%	21.1%	24.2%	22.7%	20.9%	21.1%
Baseline Medicaid Buy-In	SGA Rate	11.8%	17.3%	15.3%	13.8%	13.4%	17.3%
Full Sample	Avg Earn	$1,075	$1,241	$941	$1,212	$804	$1,241
CY2005 Enrollees Subgroup	Avg Earn	$1,483	$1,988	$1,368	$1,931	$919	$1,988
CY2006 Enrollees Subgroup	Avg Earn	$974	$1,052	$835	$1,035	$774	$1,052
Baseline TWP Completed	Avg Earn	$1,778	$1,508	$2,064	$2,176	$1,666	$1,508
Baseline Earners Subgroup	Avg Earn	$1,662	$1,550	$1,890	$1,799	$1,752	$1,550
Baseline Medicaid Buy-In	Avg Earn	$1,153	$1,340	$1,395	$1,169	$1,378	$1,340
Full Sample	Empl Rate	40.2%	45.8%	40.7%	44.2%	36.7%	45.8%
CY2005 Enrollees Subgroup	Empl Rate	45.3%	56.4%	50.0%	55.3%	40.0%	56.4%
CY2006 Enrollees Subgroup	Empl Rate	38.9%	43.1%	38.4%	41.5%	35.9%	43.1%
Baseline TWP Completed	Empl Rate	59.1%	53.5%	72.3%	65.0%	66.4%	53.5%
Baseline Earners Subgroup	Empl Rate	55.7%	59.7%	72.9%	60.4%	68.2%	59.7%
Baseline Medicaid Buy-In	Empl Rate	49.5%	57.8%	65.3%	52.8%	62.0%	57.8%

Table 41. Differences-In-Differences; Comparing 4 Qtrs Pre to **Third** 4 Qtrs Post; UI Outcomes; Effect Estimates.

Sample	Measure	Nc	Nt	2TailP	1TailP	Signif.	EffectAs%PostT	EffectDiff
CY2005 Enrollees Subgroup	SGA Rate	57	55	0.028	0.014	<=.05	60.0%	20.5%
CY2005 Enrollees Subgroup	Avg Earn	57	55	0.077	0.039	<=.05	47.0%	$1,042
CY2005 Enrollees Subgroup	Empl Rate	57	55	0.197	0.099	<=.10	29.2%	14.9%

Table 42. Differences-In-Differences; Comparing 4 Qtrs Pre to **Third** 4 Qtrs Post; UI Outcomes; Means.

Sample	Measure	AdjMeanPreT	MeanPostT	MeanPreC	MeanPostC	MeanPreT	MeanPostT
CY2005 Enrollees Subgroup	SGA Rate	13.6%	34.1%	20.6%	20.6%	13.6%	34.1%
CY2005 Enrollees Subgroup	Avg Earn	$1,172	$2,214	$1,368	$1,620	$919	$2,214
CY2005 Enrollees Subgroup	Empl Rate	36.1%	50.9%	50.0%	46.1%	40.0%	50.9%

Full Sample

For the full sample of enrollees (288 control and 273 treatment group members),[22] we found a significant treatment effect on SGA rate in the first year following the quarter of enrollment, with a modest effect size of 7 percentage points, representing 35% of the post-enrollment SGA rate for the treatment group. We found only borderline-significant effects on average earnings or employment rate in the first year following enrollment, and there were no significant effects across any measure (SGA rate, average earnings, or employment rate) during the second year post-enrollment.

[22] Following attrition due to deaths.

Figure 48.

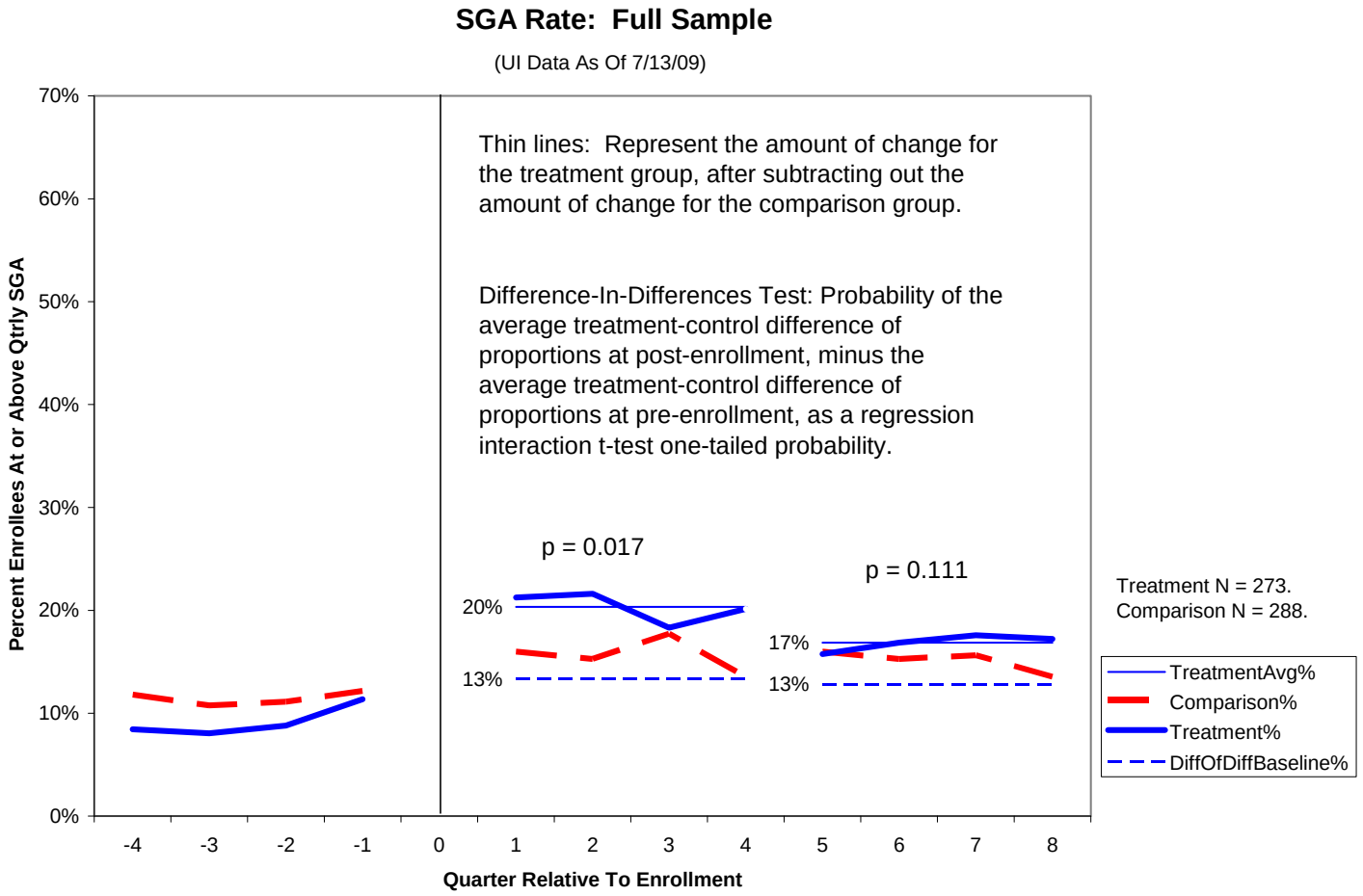

SGA Rate: Full Sample
(UI Data As Of 7/13/09)
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
Difference-In-Differences Test: Probability of the average treatment-control difference of proportions at post-enrollment, minus the average treatment-control difference of proportions at pre-enrollment, as a regression interaction t-test one-tailed probability.
p = 0.017
p = 0.111
20%
13%
17%
13%
Treatment N = 273.
Comparison N = 288.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%
Percent Enrollees At or Above Qtrly SGA
70%
60%
50%
40%
30%
20%
10%
0%
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
Quarter Relative To Enrollment

Figure 49.

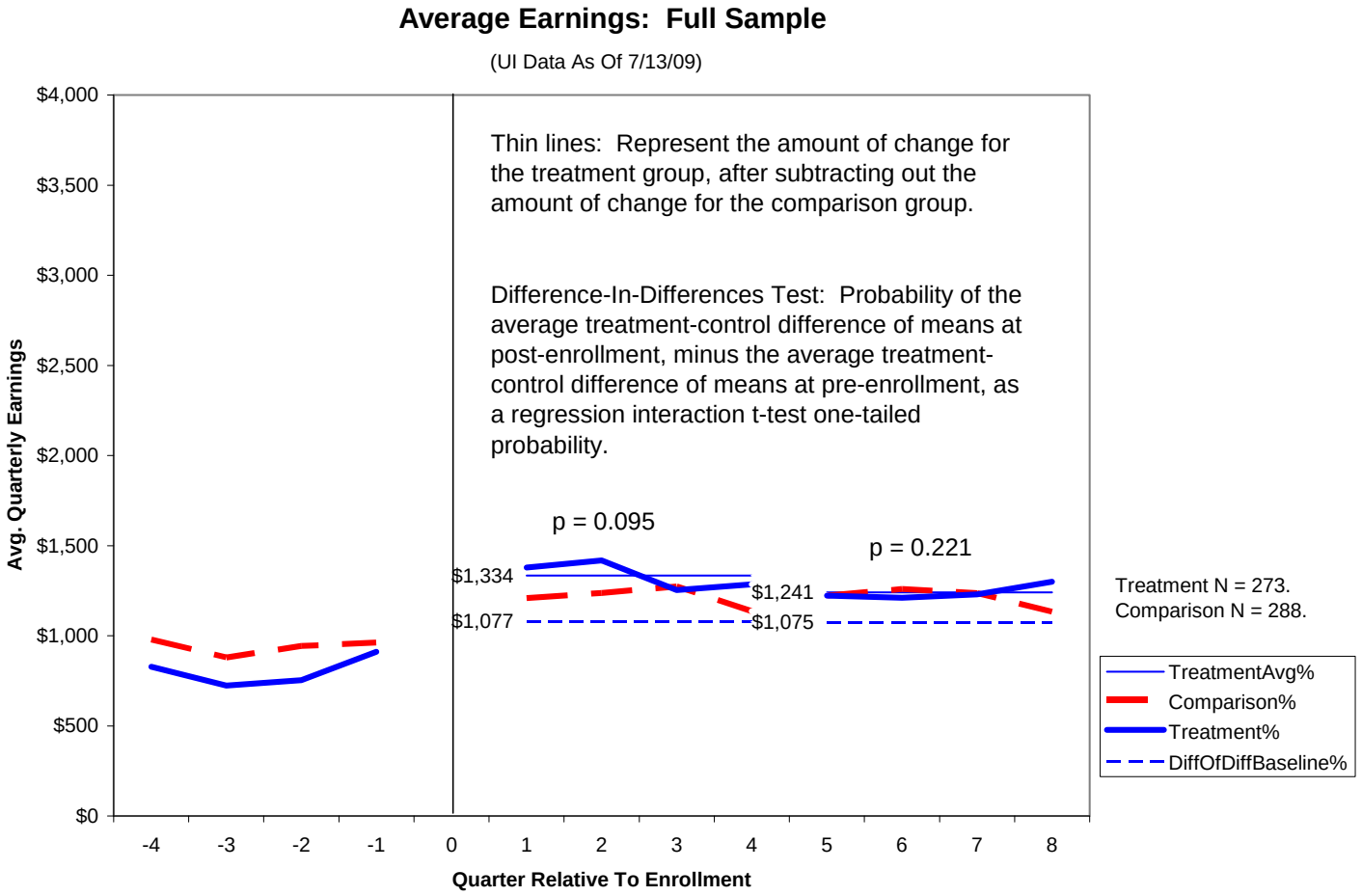
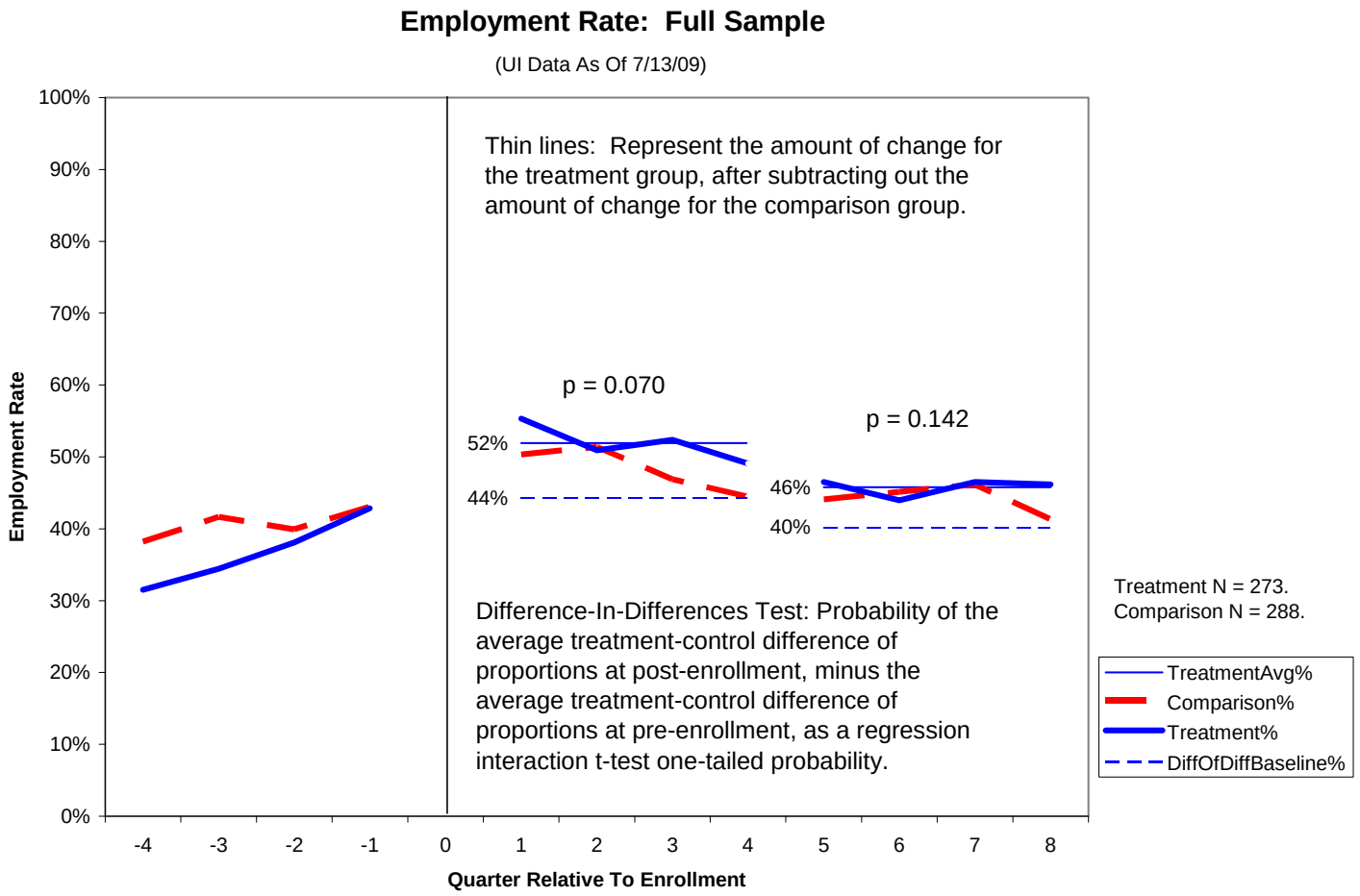

Average Earnings: Full Sample
(UI Data As Of 7/13/09)
Avg. Quarterly Earnings
$4,000
$3,500
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
Quarter Relative To Enrollment
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
Difference-In-Differences Test: Probability of the average treatment-control difference of means at post-enrollment, minus the average treatment-control difference of means at pre-enrollment, as a regression interaction t-test one-tailed probability.
p = 0.095
p = 0.221
$1,334
$1,077
$1,241
$1,075
Treatment N = 273.
Comparison N = 288.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%

Figure 50.


Employment Rate: Full Sample
(UI Data As Of 7/13/09)
Employment Rate
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
Quarter Relative To Enrollment
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
p = 0.070
p = 0.142
52%
44%
46%
40%
Difference-In-Differences Test: Probability of the average treatment-control difference of proportions at post-enrollment, minus the average treatment-control difference of proportions at pre-enrollment, as a regression interaction t-test one-tailed probability.
Treatment N = 273.
Comparison N = 288.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%

Subgroup: Baseline Medicaid Buy-In

For the baseline Medicaid Buy-In subgroup, we found a significant treatment effect on SGA rate in the first year following the quarter of enrollment, with a larger effect size of 13.7 percentage points, representing 51% of the post-enrollment SGA rate for the treatment group. We found no significant effect on SGA rate in the second year following enrollment, and no significant effects during the first or second years post-enrollment for average earnings or employment rate.

Figure 51.

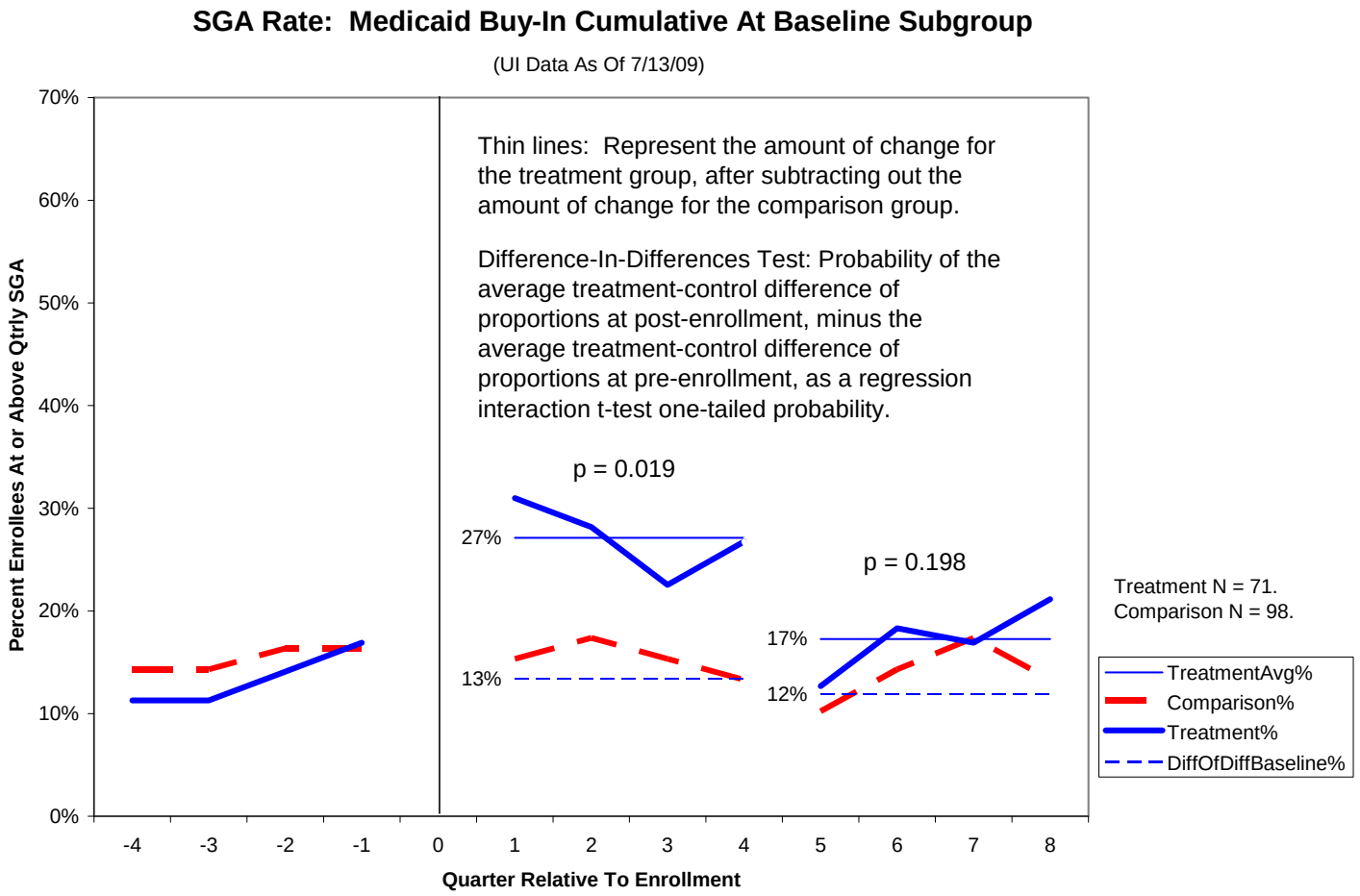

SGA Rate: Medicaid Buy-In Cumulative At Baseline Subgroup
(UI Data As Of 7/13/09)
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
Difference-In-Differences Test: Probability of the average treatment-control difference of proportions at post-enrollment, minus the average treatment-control difference of proportions at pre-enrollment, as a regression interaction t-test one-tailed probability.
p = 0.019
p = 0.198
27%
13%
17%
12%
Treatment N = 71.
Comparison N = 98.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%
Percent Enrollees At or Above Qtrly SGA
70%
60%
50%
40%
30%
20%
10%
0%
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
Quarter Relative To Enrollment

Figure 52.

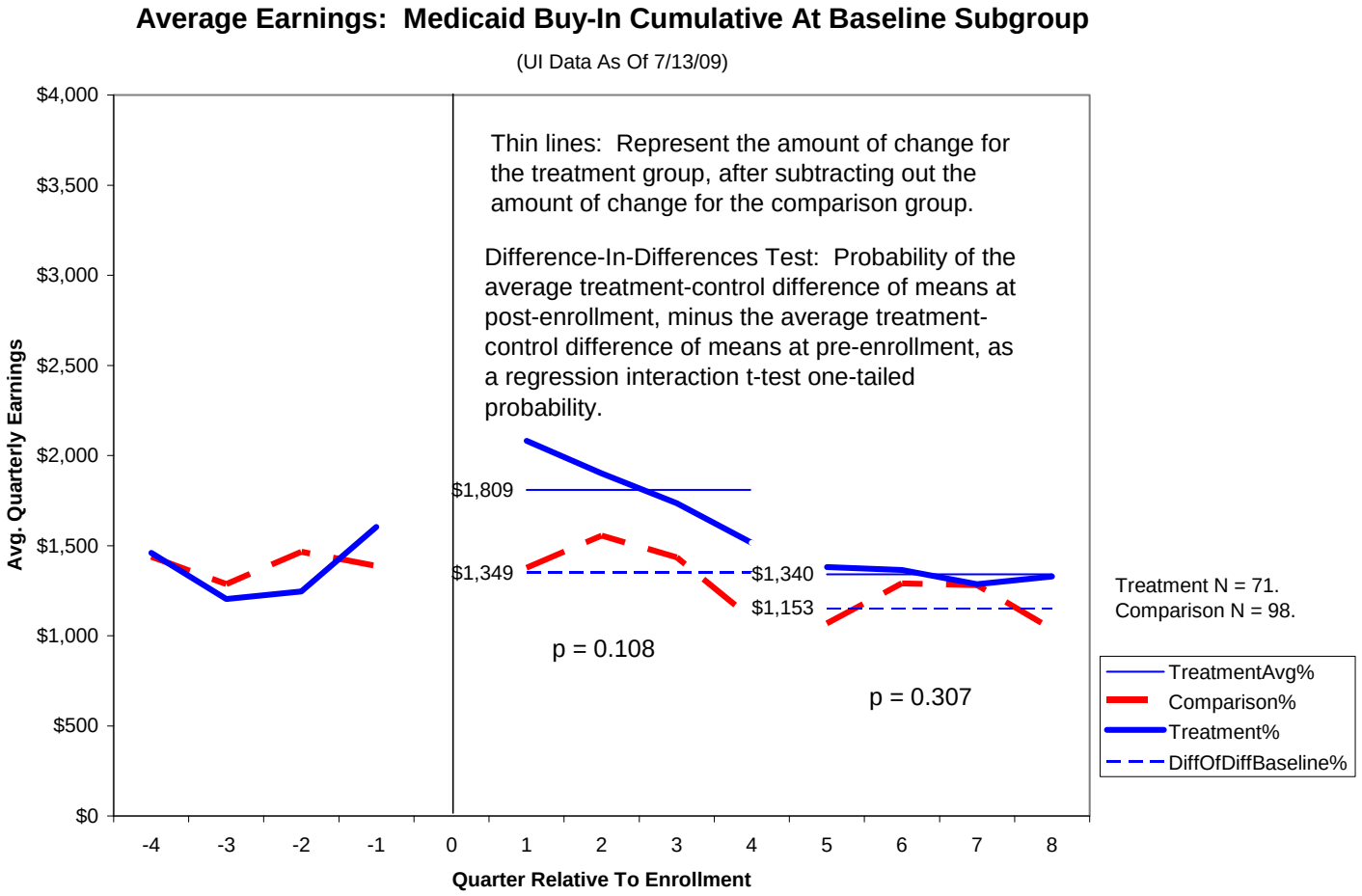
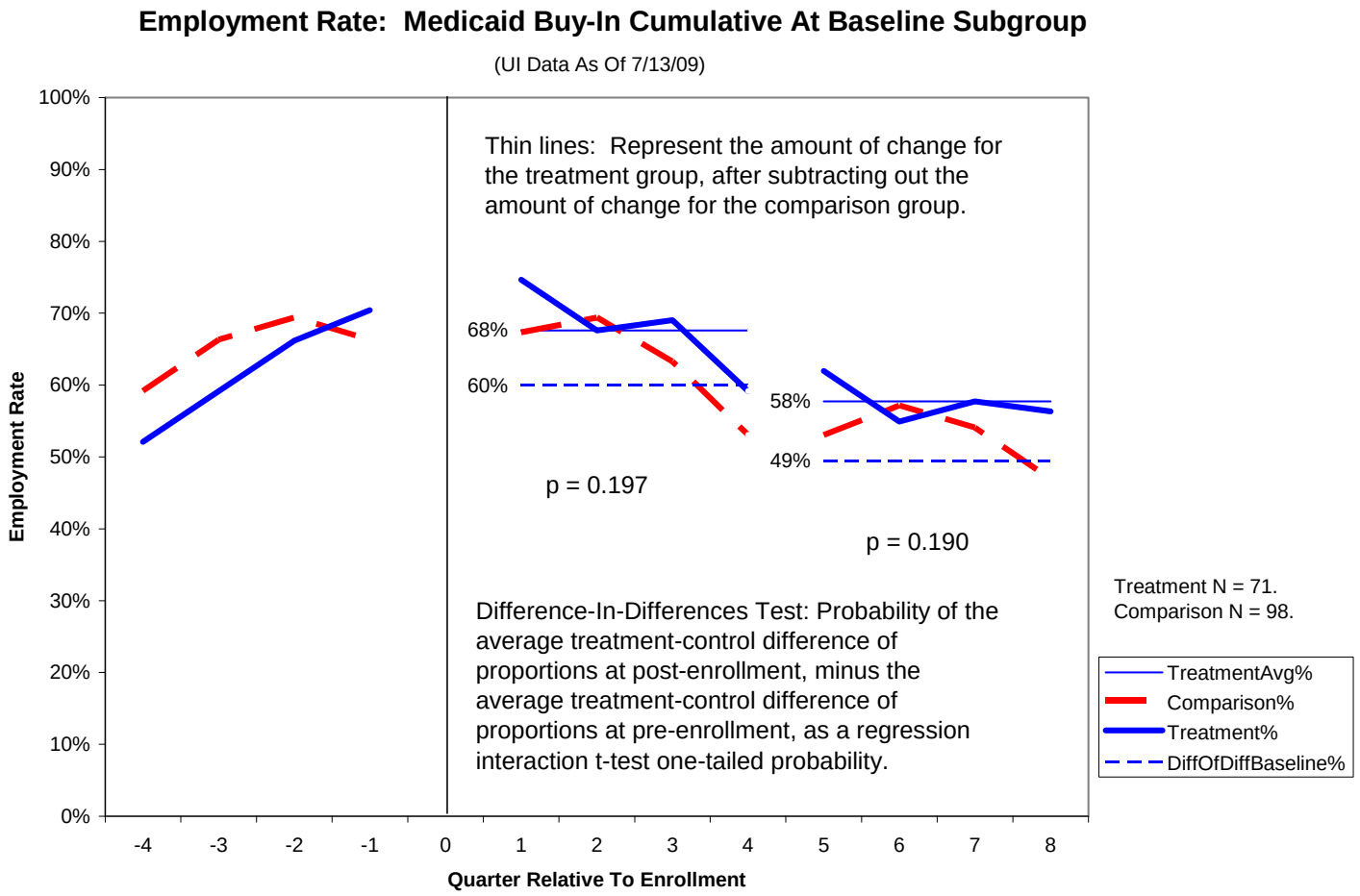

Average Earnings: Medicaid Buy-In Cumulative At Baseline Subgroup
(UI Data As Of 7/13/09)
Avg. Quarterly Earnings
$4,000
$3,500
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
Quarter Relative To Enrollment
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
Difference-In-Differences Test: Probability of the average treatment-control difference of means at post-enrollment, minus the average treatment-control difference of means at pre-enrollment, as a regression interaction t-test one-tailed probability.
$1,809
$1,349
$1,340
$1,153
p = 0.108
p = 0.307
Treatment N = 71.
Comparison N = 98.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%

Figure 53.


Employment Rate: Medicaid Buy-In Cumulative At Baseline Subgroup
(UI Data As Of 7/13/09)
Employment Rate
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
Quarter Relative To Enrollment
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
68%
60%
58%
49%
p = 0.197
p = 0.190
Difference-In-Differences Test: Probability of the average treatment-control difference of proportions at post-enrollment, minus the average treatment-control difference of proportions at pre-enrollment, as a regression interaction t-test one-tailed probability.
Treatment N = 71.
Comparison N = 98.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%

Subgroup: Baseline TWP Completed

For the baseline-TWP-completed subgroup, we found a significant treatment effect on SGA rate in the first year following the quarter of enrollment, with a relatively large effect size of 17.0 percentage points, representing 46% of the post-enrollment SGA rate for the treatment group. We found no significant effect on SGA rate in the second year following enrollment, and no significant effects during the first or second year post-enrollment for average earnings or employment rate.

While not statistically significant at the annual level, for average earnings and employment rate, we did observe a reversal trend toward negative treatment effects in the second post-enrollment year, consistent with the pattern found using SSA net-impact models.

Figure 54.

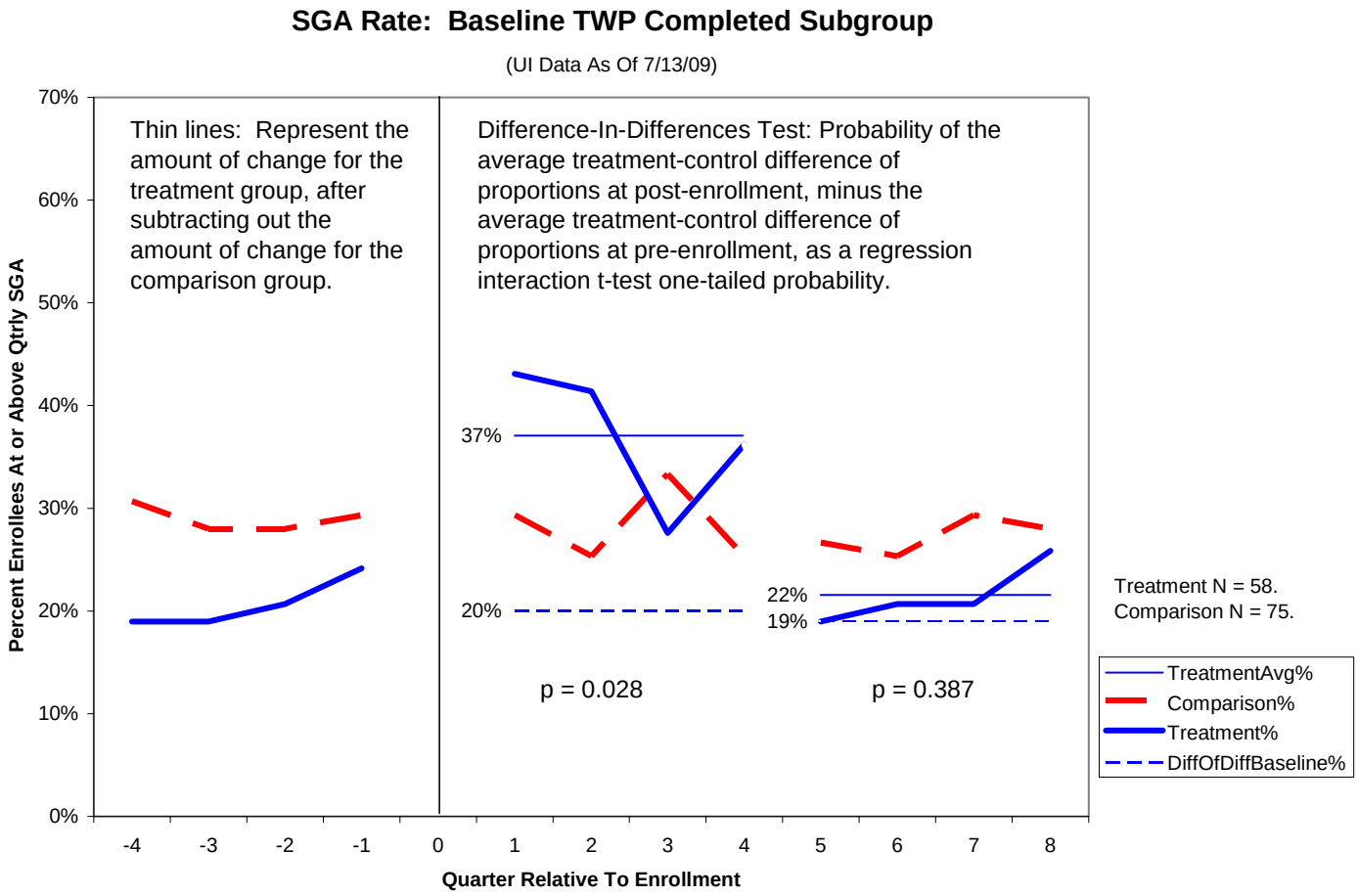

SGA Rate: Baseline TWP Completed Subgroup
(UI Data As Of 7/13/09)
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
Difference-In-Differences Test: Probability of the average treatment-control difference of proportions at post-enrollment, minus the average treatment-control difference of proportions at pre-enrollment, as a regression interaction t-test one-tailed probability.
37%
20%
22%
19%
p = 0.028
p = 0.387
Treatment N = 58.
Comparison N = 75.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%
Percent Enrollees At or Above Qtrly SGA
70%
60%
50%
40%
30%
20%
10%
0%
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
Quarter Relative To Enrollment

Figure 55.

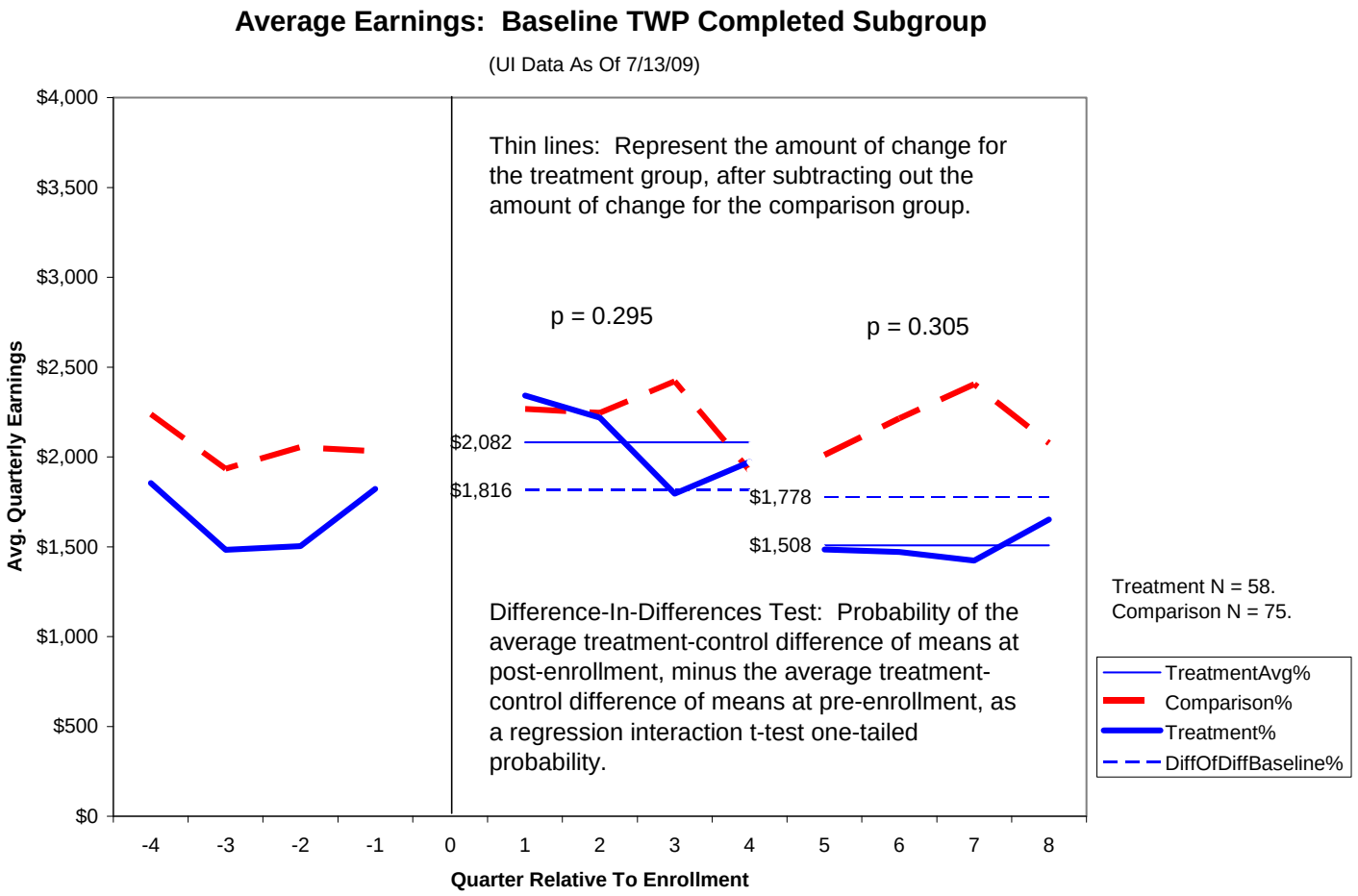
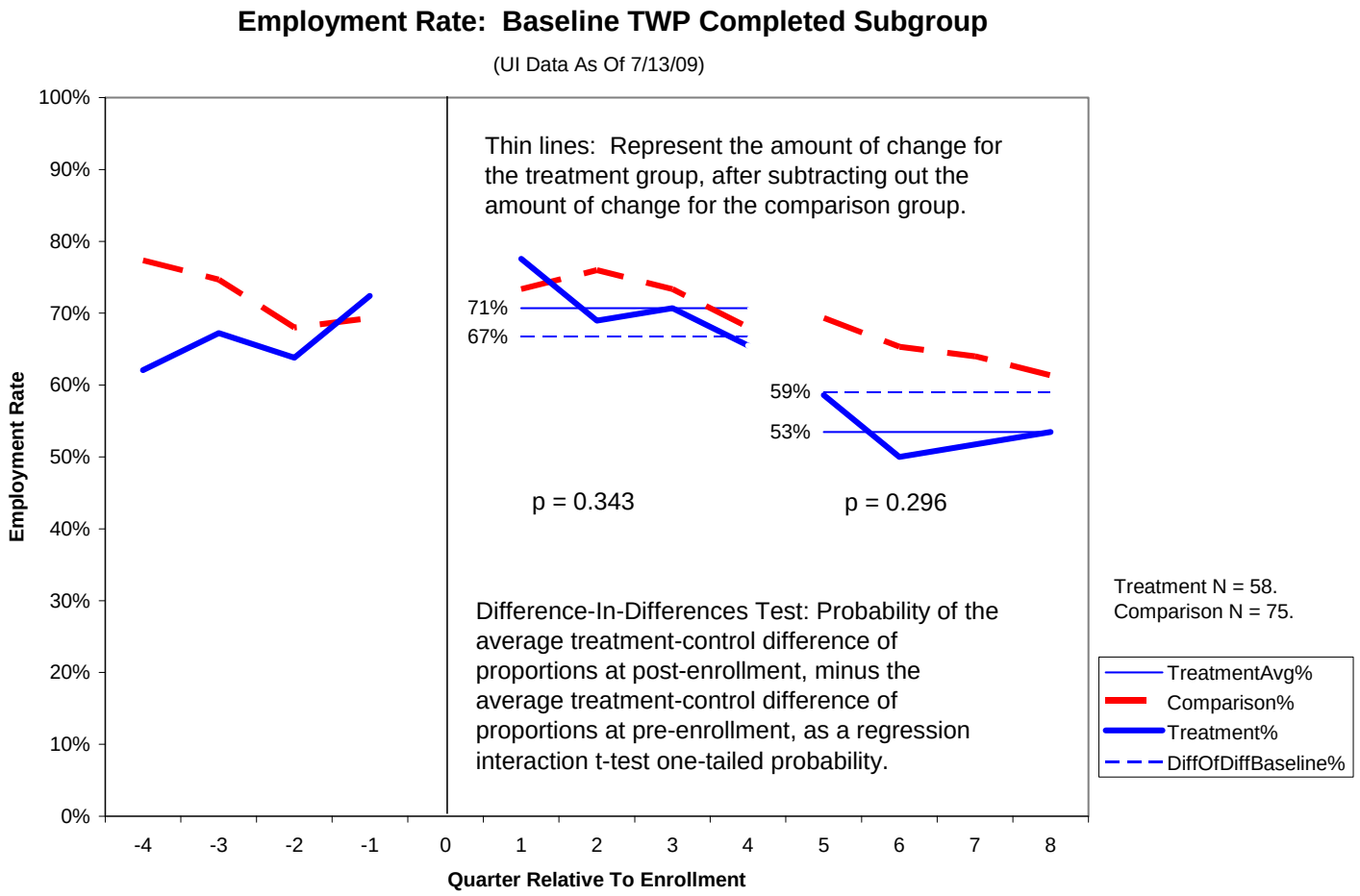

Average Earnings: Baseline TWP Completed Subgroup
(UI Data As Of 7/13/09)
Avg. Quarterly Earnings
$4,000
$3,500
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
p = 0.295
p = 0.305
$2,082
$1,816
$1,778
$1,508
Difference-In-Differences Test: Probability of the average treatment-control difference of means at post-enrollment, minus the average treatment-control difference of means at pre-enrollment, as a regression interaction t-test one-tailed probability.
-4 -3 -2 -1 0 1 2 3 4 5 6 7 8
Quarter Relative To Enrollment
Treatment N = 58.
Comparison N = 75.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%

Figure 56.


Employment Rate: Baseline TWP Completed Subgroup
(UI Data As Of 7/13/09)
Employment Rate
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
Quarter Relative To Enrollment
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
71%
67%
59%
53%
p = 0.343
p = 0.296
Difference-In-Differences Test: Probability of the average treatment-control difference of proportions at post-enrollment, minus the average treatment-control difference of proportions at pre-enrollment, as a regression interaction t-test one-tailed probability.
Treatment N = 58.
Comparison N = 75.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%

Subgroup: Baseline Earners

For the baseline-earners subgroup, we found only a borderline significant treatment effect on SGA rate in the first year following the quarter of enrollment (for an effect size of 8.6 percentage points). We found no significant effect on SGA rate in the second year following enrollment, and no significant effects during the first or second year post-enrollment for average earnings or employment rate. In general, the outcomes for the baseline-earners group did not look substantially different from those for the full sample.

Figure 57.

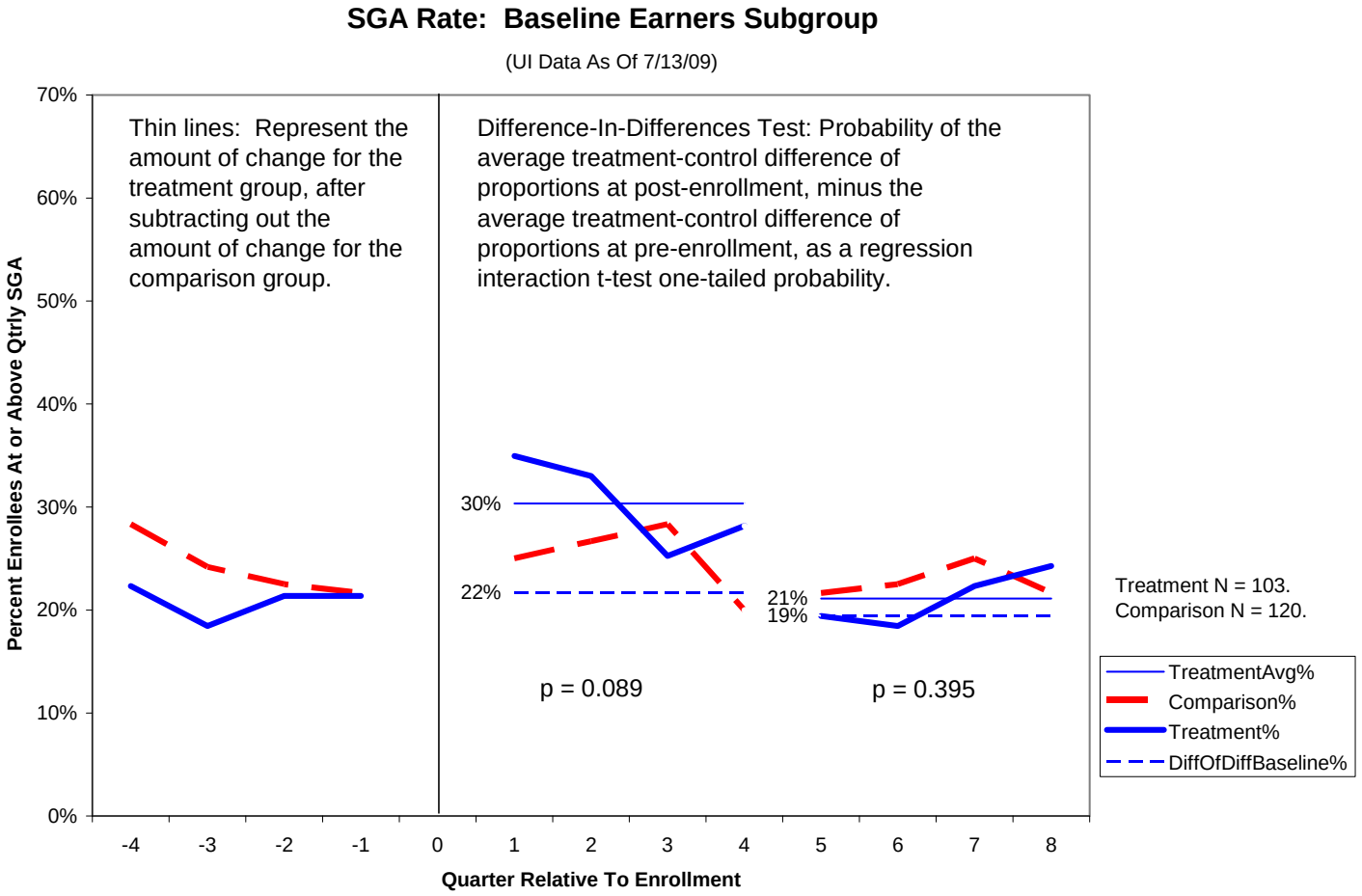

SGA Rate: Baseline Earners Subgroup
(UI Data As Of 7/13/09)
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
Difference-In-Differences Test: Probability of the average treatment-control difference of proportions at post-enrollment, minus the average treatment-control difference of proportions at pre-enrollment, as a regression interaction t-test one-tailed probability.
Percent Enrollees At or Above Qtrly SGA
70%
60%
50%
40%
30%
20%
10%
0%
30%
22%
21%
19%
p = 0.089
p = 0.395
-4 -3 -2 -1 0 1 2 3 4 5 6 7 8
Quarter Relative To Enrollment
Treatment N = 103.
Comparison N = 120.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%

Figure 58.

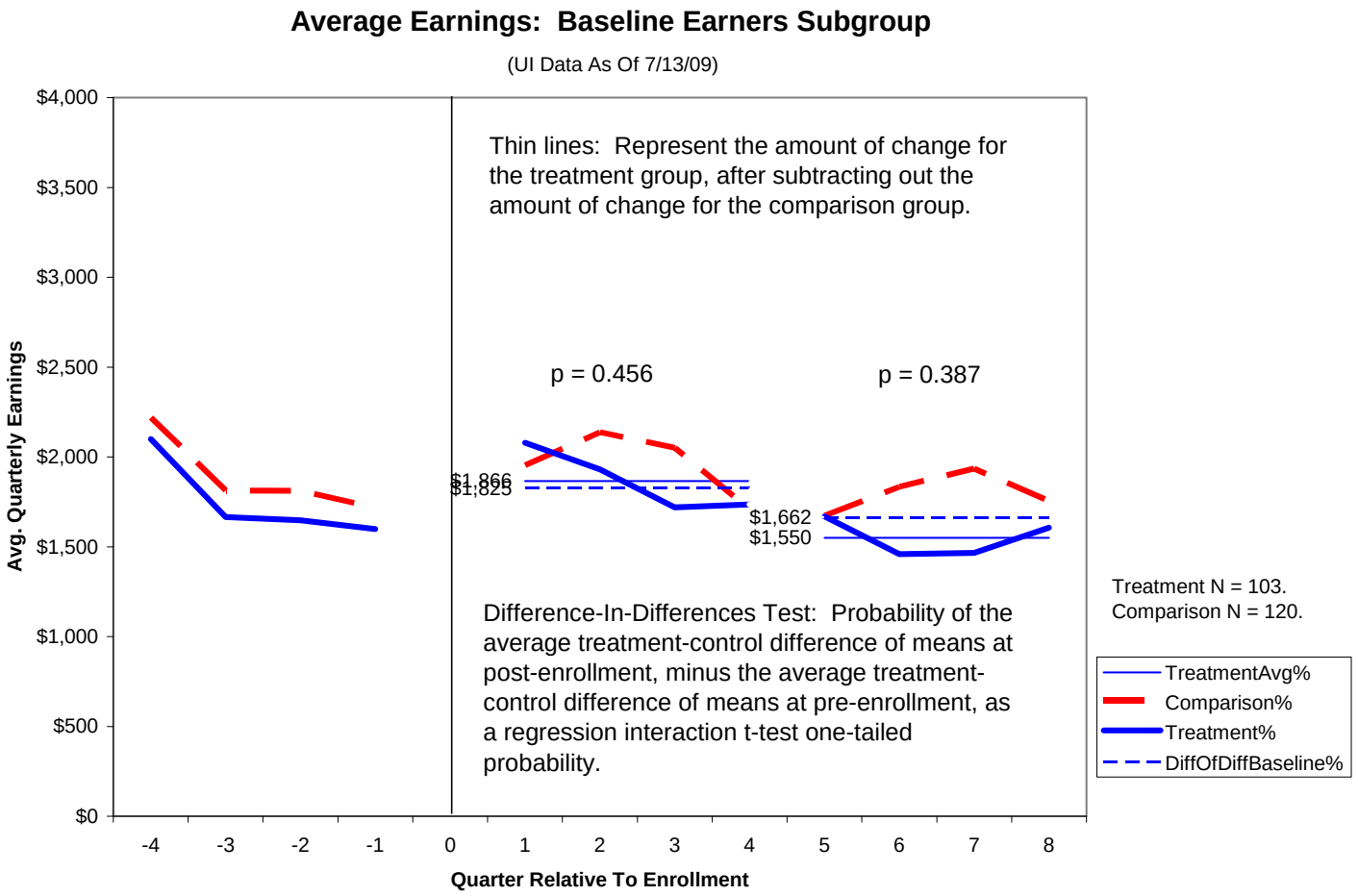

Average Earnings: Baseline Earners Subgroup
(UI Data As Of 7/13/09)
Avg. Quarterly Earnings
$4,000
$3,500
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
Quarter Relative To Enrollment
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
p = 0.456
p = 0.387
$1,866
$1,825
$1,662
$1,550
Difference-In-Differences Test: Probability of the average treatment-control difference of means at post-enrollment, minus the average treatment-control difference of means at pre-enrollment, as a regression interaction t-test one-tailed probability.
Treatment N = 103.
Comparison N = 120.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%

Figure 59.


Employment Rate: Baseline Earners Subgroup
(UI Data As Of 7/13/09)
Employment Rate
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
Quarter Relative To Enrollment
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
68%
67%
60%
56%
p = 0.431
p = 0.303
Difference-In-Differences Test: Probability of the average treatment-control difference of proportions at post-enrollment, minus the average treatment-control difference of proportions at pre-enrollment, as a regression interaction t-test one-tailed probability.
Treatment N = 103.
Comparison N = 120.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%

Subgroup: Calendar Year 2005 Enrollees

For calendar-year 2005 enrollees (i.e., early enrollees into the Pilot), we found a significant treatment effect on SGA rate across not only the first and second years post-enrollment, but also the third year post-enrollment (Figure 60). And the effect sizes for SGA were large: 20.6 percentage points in the first year post-enrollment, 16.5 percentage points in the second year, and 20.5 percentage points in the third year (representing 55%, 48%, and 60% of the post-enrollment SGA rate for the treatment group, respectively).

For average earnings (Figure 61), we found a borderline-significant effect in the first year following enrollment, with an effect size of $823 in additional quarterly earnings (36% of post-enrollment mean earnings for the treatment group), and a fully significant effect in the third year following enrollment, with an effect size of $1,042 in additional quarterly earnings (47% of post-enrollment mean earnings for the treatment group).

For employment rate, there were no significant effects during the first, second, or third years post-enrollment.

These results show that the benefit offset intervention had a strong, enduring treatment effect on SGA rate for at least a subset of SSDI enrollees, and that this effect occurred primarily through an increase in average earnings among beneficiaries who were already employed, rather than through individuals entering the job market for the first time. It appears that these strong effects were diluted out in the full sample, however.

These findings were consistent with anecdotal reports from the Vermont Pilot's benefits counselors regarding possible differences between early enrollees and later enrollees in terms of work-readiness and/or work motivation.

To allow for an examination of the characteristics of this subgroup of early enrollees, SSA-defined baseline characteristics (demographic and other) for the calendar-year 2005 enrollees are presented in Table 43 below. Comparing these baseline characteristics to those for the full sample (presented in Table 11 above), a couple of differences stand out. More CY 2005 enrollees had completed their TWP prior to enrollment than in the full sample, and the CY 2005 subgroup had higher average earnings and a higher SGA rate in the two quarters immediately prior to enrollment into the Pilot.

Figure 60.

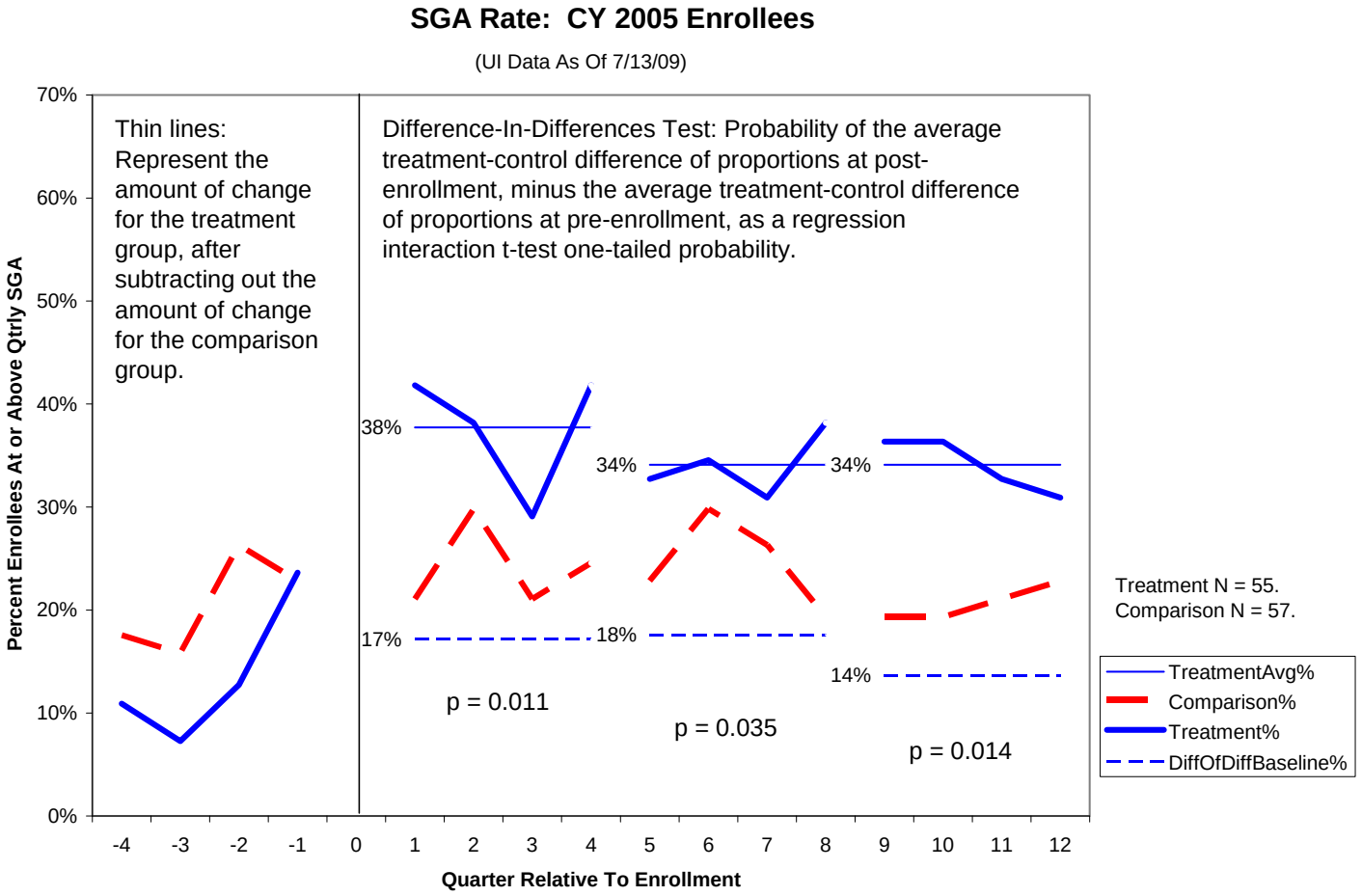

SGA Rate: CY 2005 Enrollees
(UI Data As Of 7/13/09)
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
Difference-In-Differences Test: Probability of the average treatment-control difference of proportions at post-enrollment, minus the average treatment-control difference of proportions at pre-enrollment, as a regression interaction t-test one-tailed probability.
Percent Enrollees At or Above Qtrly SGA
70%
60%
50%
40%
30%
20%
10%
0%
38%
34%
34%
17%
18%
14%
p = 0.011
p = 0.035
p = 0.014
-4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12
Quarter Relative To Enrollment
Treatment N = 55.
Comparison N = 57.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%

Figure 61.

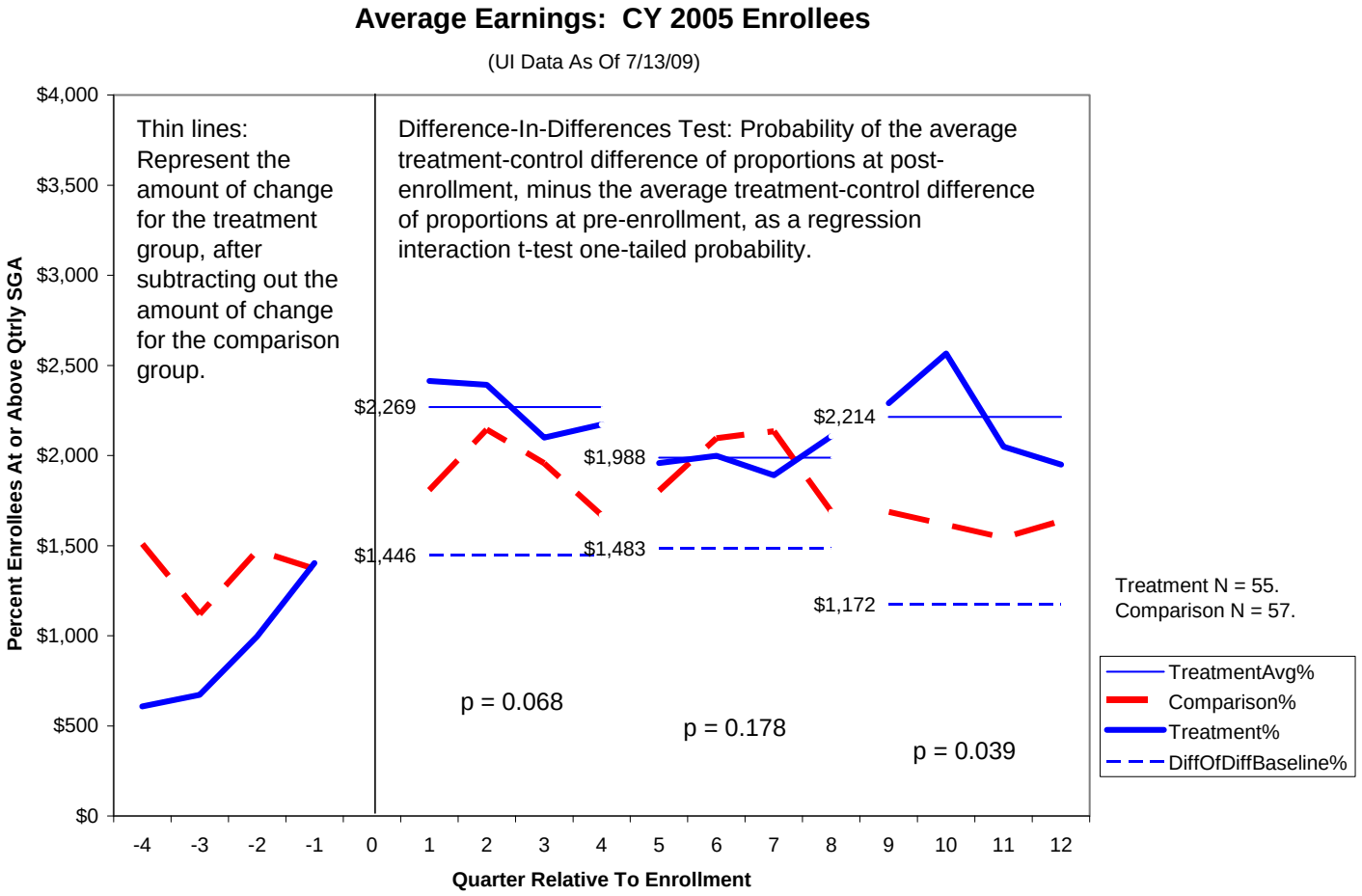

Average Earnings: CY 2005 Enrollees
(UI Data As Of 7/13/09)
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
Difference-In-Differences Test: Probability of the average treatment-control difference of proportions at post-enrollment, minus the average treatment-control difference of proportions at pre-enrollment, as a regression interaction t-test one-tailed probability.
$2,269
$1,988
$2,214
$1,446
$1,483
$1,172
p = 0.068
p = 0.178
p = 0.039
Treatment N = 55.
Comparison N = 57.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%
Percent Enrollees At or Above Qtrly SGA
$4,000
$3,500
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
-4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12
Quarter Relative To Enrollment

Figure 62.

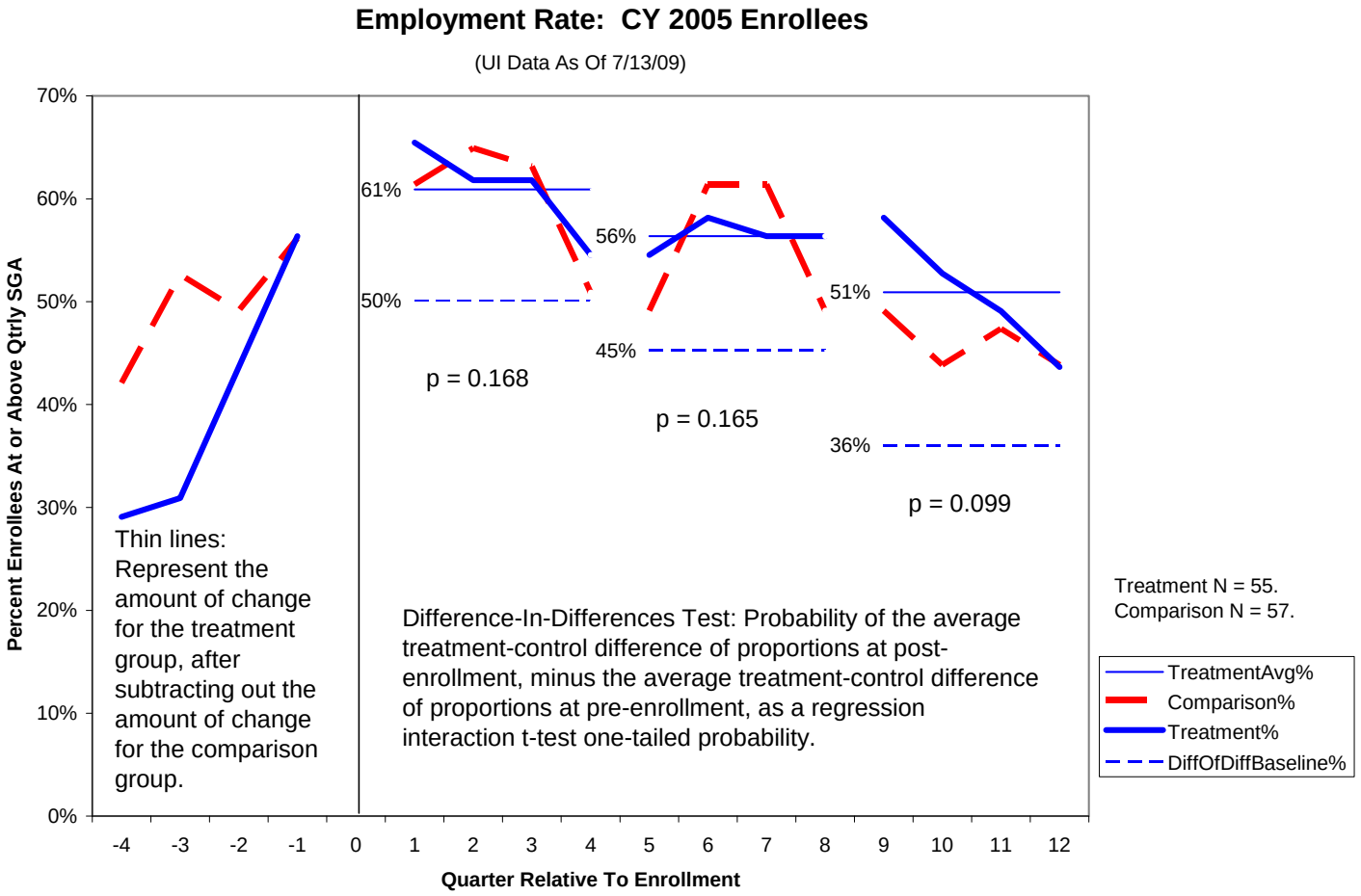

Employment Rate: CY 2005 Enrollees
(UI Data As Of 7/13/09)
Percent Enrollees At or Above Qtrly SGA
70%
60%
50%
40%
30%
20%
10%
0%
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
9
10
11
12
Quarter Relative To Enrollment
61%
50%
56%
45%
51%
36%
p = 0.168
p = 0.165
p = 0.099
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
Difference-In-Differences Test: Probability of the average treatment-control difference of proportions at post-enrollment, minus the average treatment-control difference of proportions at pre-enrollment, as a regression interaction t-test one-tailed probability.
Treatment N = 55.
Comparison N = 57.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%

Table 43. Calendar Year 2005 Enrollees: Baseline Descriptive Statistics of Beneficiaries, by Group[23][24]

	Control Group				Benefit Offset Group				Difference		
Characteristic	n	X	Estimate	Std. Err.	n	X	Estimate	Std. Err.	Estimate	Std. Err.	2-Tailed P
Female	57	33	57.9%	6.5%	57	36	63.2%	6.4%	5.3%	9.1%	0.565
Male	57	24	42.1%	6.5%	57	21	36.8%	6.4%	-5.3%	9.1%	0.565
Ages 34 and younger	57	6	10.5%	4.1%	57	8	14.0%	4.6%	3.5%	6.1%	0.568
Ages 35 to 44	57	16	28.1%	6.0%	57	12	21.1%	5.4%	-7.0%	8.0%	0.383
Ages 45 to 54	57	20	35.1%	6.3%	57	21	36.8%	6.4%	1.8%	9.0%	0.845
Ages 55 and up	57	15	26.3%	5.8%	57	16	28.1%	6.0%	1.8%	8.3%	0.833
Race Non-White.	48	1	2.1%	2.1%	48	1	2.1%	2.1%	0.0%	2.9%	1.000
Years since entitlement: <= 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Years since entitlement: > 2 and < 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Years since entitlement: >= 5 and < 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Years since entitlement: >= 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impairment type: Musculoskeletal	47	11	23.4%	6.2%	54	13	24.1%	5.8%	0.7%	8.5%	0.937
Impairment type: Neurological	47	5	10.6%	4.5%	54	3	5.6%	3.1%	-5.1%	5.5%	0.353
Impairment type: Mental - Mental Retardation	47	0	0.0%	0.0%	54	0	0.0%	0.0%	0.0%	0.0%	#DIV/0!
Impairment type: Mental - Not Mental Retardation	47	21	44.7%	7.3%	54	24	44.4%	6.8%	-0.2%	9.9%	0.981
Impairment type: All Others	47	10	21.3%	6.0%	54	14	25.9%	6.0%	4.6%	8.4%	0.582

[23] Reduced sample sizes are the result of missing or unavailable data for particular cases.
[24] Valid data regarding years since entitlement was not available at the time of this report.

	Control Group				Benefit Offset Group				Difference		
Characteristic	n	X	Estimate	Std. Err.	n	X	Estimate	Std. Err.	Estimate	Std. Err.	2-Tailed P
Education less than HS	46	8	17.4%	5.6%	50	3	6.0%	3.4%	-11.4%	6.5%	0.081
Education HS	46	11	23.9%	6.3%	50	18	36.0%	6.8%	12.1%	9.3%	0.191
Education more than HS	46	27	58.7%	7.3%	50	29	58.0%	7.0%	-0.7%	10.1%	0.945
Earner ($1200/quarter in at least one of 4 quarters before enrollment	57	28	49.1%	6.6%	57	25	43.9%	6.6%	-5.3%	9.3%	0.573
TWP completed before enrollment	57	24	42.1%	6.5%	57	18	31.6%	6.2%	-10.5%	9.0%	0.241
Medicaid Buy-In participant before enrollment	57	24	42.1%	6.5%	57	15	26.3%	5.8%	-15.8%	8.8%	0.072
Any earnings t-4	57	24	42.1%	6.5%	57	16	28.1%	6.0%	-14.0%	8.8%	0.112
Any earnings t-3	57	30	52.6%	6.6%	57	17	29.8%	6.1%	-22.8%	9.0%	0.011
Any earnings t-2	57	28	49.1%	6.6%	57	24	42.1%	6.5%	-7.0%	9.3%	0.451
Any earnings t-1	57	32	56.1%	6.6%	57	31	54.4%	6.6%	-1.8%	9.3%	0.851
SGA earnings t-4	57	10	17.5%	5.0%	57	6	10.5%	4.1%	-7.0%	6.5%	0.278
SGA earnings t-3	57	9	15.8%	4.8%	57	4	7.0%	3.4%	-8.8%	5.9%	0.137
SGA earnings t-2	57	15	26.3%	5.8%	57	7	12.3%	4.3%	-14.0%	7.3%	0.054
SGA earnings t-1	57	13	22.8%	5.6%	57	13	22.8%	5.6%	0.0%	7.9%	1.000
Mean earnings t-4	57	n/a	$1,509	$409	57	n/a	$586	$157	-$923	$438	0.035
Mean earnings t-3	57	n/a	$1,120	$227	57	n/a	$648	$157	-$471	$276	0.088
Mean earnings t-2	57	n/a	$1,472	$301	57	n/a	$961	$214	-$511	$369	0.167
Mean earnings t-1	57	n/a	$1,370	$309	57	n/a	$1,353	$250	-$17	$398	0.966

Employment And Earnings Findings

The net-impact analyses of the Vermont SSDI $1-for-2 Benefit Offset Demonstration Pilot examined inflation-adjusted UI earnings and employment measures across 4 pre-enrollment quarters and a minimum of 8 post-enrollment quarters, as of July, 2009. The findings were generally consistent with those obtained using SSA's net-impact models, and can be summarized as follows:

- Of the three dependent variables derived from UI wage reports (SGA rate, average earnings, and employment rate), SGA rate appeared to be the most sensitive measure of offset treatment effects, associated with the greatest statistical significance observed and the widest findings across samples.
- For the full sample of enrollees, there was a significant effect of the offset intervention on SGA rate in the first year following the quarter of enrollment, with a modest effect size of 7 percentage points, representing 35% of the post-enrollment SGA rate for the treatment group. There were only borderline-significant effects on average earnings or employment rate in the first year following enrollment, and there were no significant effects across any measure during the second year post-enrollment.
- For the baseline Medicaid Buy-In subgroup, there was a significant treatment effect on SGA rate in the first year following the quarter of enrollment, with a larger effect size of 13.7 percentage points, representing 51% of the post-enrollment SGA rate for the treatment group. There was no significant effect on SGA rate in the second year following enrollment, and no significant effects during the first or second years post-enrollment for average earnings or employment rate. Enrollees with a history of exposure to the healthcare safety net of the Medicaid Buy-In, in conjunction with benefits counseling, may have been somewhat more prepared to take advantage of the opportunity offered by the benefit-offset intervention.
- For the baseline-TWP-completed subgroup, there was a significant positive treatment effect on SGA rate in the first year following the quarter of enrollment, with a relatively large effect size of 17.0 percentage points, representing 46% of the post-enrollment SGA rate for the treatment group. There was no significant effect on SGA rate in the second year following enrollment, and no significant effects during the first or second year post-enrollment for average earnings or employment rate. While not statistically significant at the annual level, for average earnings and employment rate, there was some evidence of a reversal trend toward negative treatment effects in the second post-enrollment year. That is, in the second year post-enrollment, the offset treatment may have been weakly associated with an actual drop in average earnings and employment. This reversal trend for the baseline-TWP-completed subgroup may have been largely responsible for the elimination of positive treatment effects in the second post-enrollment year for the full sample.
- For the baseline-earners subgroup, there was only a borderline-significant, modest treatment effect on SGA rate in the first year following the quarter of enrollment, and no other significant effects. In general, outcomes for the baseline-earners group did not look substantially different from those for the full sample.
- For calendar-year 2005 enrollees (i.e., early enrollees into the Pilot), there were large, statistically significant treatment effects on SGA rate across not only the first and second years post-enrollment, but also the third year post-enrollment. The effects on

SGA rate were 20.6 percentage points in the first year post-enrollment, 16.5 percentage points in the second year, and 20.5 percentage points in the third year (representing 55%, 48%, and 60% of the post-enrollment SGA rate for the treatment group, respectively). There was a borderline-significant effect on average earnings in the first year following enrollment, with an effect size of $823 in additional quarterly earnings (36% of post-enrollment mean earnings for the treatment group), and a fully significant effect in the third year following enrollment, with an effect size of $1,042 in additional quarterly earnings (47% of post-enrollment mean earnings for the treatment group). There were no significant effects on employment rate during the first, second, or third years post-enrollment.

- The findings for early enrollees show that the benefit offset intervention had a large, enduring treatment effect on SGA rate for at least a subset of SSDI beneficiaries, and that this effect occurred primarily through an increase in average earnings among individuals who were already employed, rather than through individuals entering the job market for the first time. It appears that these strong effects were diluted out in the full sample, however. These findings were consistent with anecdotal reports from the Vermont Pilot's benefits counselors regarding possible differences between early enrollees and later enrollees in terms of work-readiness and/or work motivation.
- More of the early enrollees had completed their TWP prior to enrollment than in the full sample, and the early-enrollees subgroup had higher average earnings and a higher SGA rate in the two quarters immediately prior to enrollment into the Pilot.

Earnings Above SGA

It is consistent with the conceptual model of the benefit offset intervention that the most sensitive measure to offset effects was not employment rate or average earnings, but SGA rate—i.e., earnings at a level that can affect the benefit check. One question that arises in looking at earnings above SGA in the control group is why so many people in the control group were working over SGA. There are several factors to consider. First, there was little or no risk in working over SGA for people who hadn't used up their TWP and who had the aid of a benefits counselor in understanding and managing their benefits (at least 66% of the control group had TWP months remaining at enrollment). It is also quite possible that enrollees either chose to go off benefits with the aid of benefits counseling services, or were not monitoring their earnings and may eventually receive a notice of overpayment. It is also quite possible that what may have appeared to be above-SGA earnings in the UI data may not have been. There are many complicating factors in trying to test UI earnings data against the SGA threshold. The aggregation of UI wages to a quarterly amount complicates testing earnings against a monthly value such as SGA. Even if that weren't an issue, the earnings reported through UI can rarely be expected to match what is countable for SSDI, due to the use of work incentives, averaging, unsuccessful work attempt determinations, exclusion of vacation payouts, eligibility to use the higher blind SGA amount, etc. However, all of these would presumably affect the treatment and control groups equally.

Potential Confounding Variables Affecting Employment Outcomes

There are a number of potential confounding variables which may have affected employment outcomes in the Pilot. These include the following:

1. Self-selection for work-readiness or work motivation. There was a clear and substantial difference in employment-related outcomes between early enrollees into the pilot (i.e., calendar year 2005 enrollees, who signed up in the first two quarters of the enrollment period) and later (calendar year 2006) enrollees. Early enrollment was associated with enduring, consistently greater offset effects, and this association apparently overpowered all other variables. These findings were consistent with anecdotal reports from the Vermont Pilot's benefits counselors that there may have been sampling differences between early enrollees into the project versus later ones, in terms of work-readiness and/or work motivation. At the beginning of the enrollment period, there was pent-up demand among consumers and referral sources who were aware of the Pilot and who were eager to make use of new offset rules. Following enrollment of an initial cohort of individuals who tended to be more motivated or work-ready, however, the project attempted to recruit as many SSDI beneficiaries as possible who met the Pilot eligibility criteria, whether or not they had any proximate plans to use an offset, in case they might want to utilize the option at some time in the future. Those later enrollees may have been less work-ready or less motivated to work in the near term. Addition of those less work-ready or less motivated individuals to the sample later in the Pilot may have suppressed treatment effects for the full sample of enrollees. The outcomes for early enrollees show that an offset can have a significant, large effect on the SGA rate of certain beneficiaries, but the effects may be limited to a subset of individuals who are more work-ready and/or work-motivated than the average SSDI beneficiary.

2. Offset implementation errors. In calendar year 2008, which comprised most of the second-year post-enrollment quarters for enrollees, a substantial error rate for administration of the offset on beneficiary checks had accumulated. For those enrollees who went into offset status, a substantial majority experienced an error in their benefit check and, while SSA worked hard to correct the errors, the errors likely had an impact on the effectiveness of the offset. The errors not only affected enrollees' SSA cash benefits, but also their eligibility for other state and federal benefits, including, in some cases, health care. This may have frightened a significant number of those affected, and it is possible that other participants contemplating using the benefit offset heard about these errors. The high rate of treatment implementation errors may have suppressed treatment effects in the second post-enrollment year, as the errors became known to participants. While SSA staff worked hard to address these errors, we found that it was difficult to regain the trust in the benefit offset among beneficiaries. If SSA can develop a system that minimizes the errors, we believe that the benefit offset has the potential for larger impacts on employment than we found in our study. The pattern of outcomes for the baseline-TWP-completed subgroup was consistent with treatment implementation problems. Conceptually, the baseline-TWP-completed subgroup is the one which we would expect would be most responsive to an offset intervention, as those individuals would be most immediately affected by the difference in treatment for above-SGA earnings in the Pilot. What we observed in terms of outcomes, however, was responsiveness of this subgroup in both directions, in a sharp reversal pattern. In the first year post-enrollment, before many beneficiaries had substantial experience with the intervention (when their behavior could only have been affected by promises of the offset), there was a statistically significant and large, positive effect of the offset on SGA rate for this subgroup. In the second post-enrollment year, however, that positive effect not only disappeared, but offset effects on average earnings and employment actually started to become negative, achieving statistical significance in

individual quarters. That is, among beneficiaries who should have been most sensitive to the offset intervention, the offset was associated with decreased average earnings and a decreased employment rate in the second post-enrollment year. Compared to controls, treatment group members began reducing their earnings and employment rate, after experience with the offset had begun to accumulate. This reversal pattern of outcomes associated with treatment exposure points to a serious problem with the intervention itself. Outcomes for early enrollees suggest that only the most motivated or most prepared individuals persisted in above-SGA employment in the face of serious problems with offset implementation.

3. 2008 recession. Calendar year 2008, which comprised most of the second-year post-enrollment quarters for enrollees, was a recession year in Vermont, as well as in the rest of the nation. Almost by definition, a recessionary period is one in which increasing earnings or employment is much more difficult, particularly for those who are marginal to the labor market to begin with. Figure 63 shows the Vermont Department of Labor's data for monthly unemployment in Vermont, seasonally unadjusted, which shows elevated unemployment levels throughout 2008. Figures 64 and 65 show distribution of the recessionary quarters, relative to the quarter of enrollment for the full sample and for the subgroup of calendar year 2005 enrollees (the latter enrollees were not affected by the recession until their 3rd post-enrollment year). Prior to decreasing employment levels, employers tend to limit opportunities for increasing earnings for workers in existing jobs, such as might occur through increased hours, promotions, or raises. Unfortunately for this Pilot, the second post-enrollment year of the study for a majority of enrollees was confounded with a year in which increasing or maintaining newly-achieved higher levels of employment or earnings over baseline was much more difficult. As a consequence, it should be surprising if the 2008 recession did not suppress treatment effects on earnings or employment for all but the most motivated or market-competitive individuals.

4. Reduced recency effects for benefits counseling services. Past studies have suggested that benefits counseling by itself can have a significant and substantial effect on the employment and earnings levels of SSA disability beneficiaries.[25][26] Exposure to benefits counseling was likely more frequent and more intense for most Pilot enrollees around the time of enrollment into the project, and tended to fade toward maintenance and routine reporting activities later in the project. For this reason, benefits counseling could have served to enhance or intensify any marginal offset treatment effects in the first year post-enrollment, but may have played a diminished role in the second year post-enrollment, as intensive benefits counseling may have become less recent for many enrollees who did not seek continuation of those services later in the project.

[25] Tremblay T, Smith J, Xie H, et al: The impact of specialized benefits counseling services on Social Security Administration disability beneficiaries in Vermont. Journal of Rehabilitation 70(2):5–11, 2004.
[26] Tremblay, T., Smith, J., Xie, H., & Drake, R. (2006). Effect of Benefits Counseling Services on Employment Outcomes for People With Psychiatric Disabilities. Psychiatric Services, 57(6), 816-821.

Figure 63.

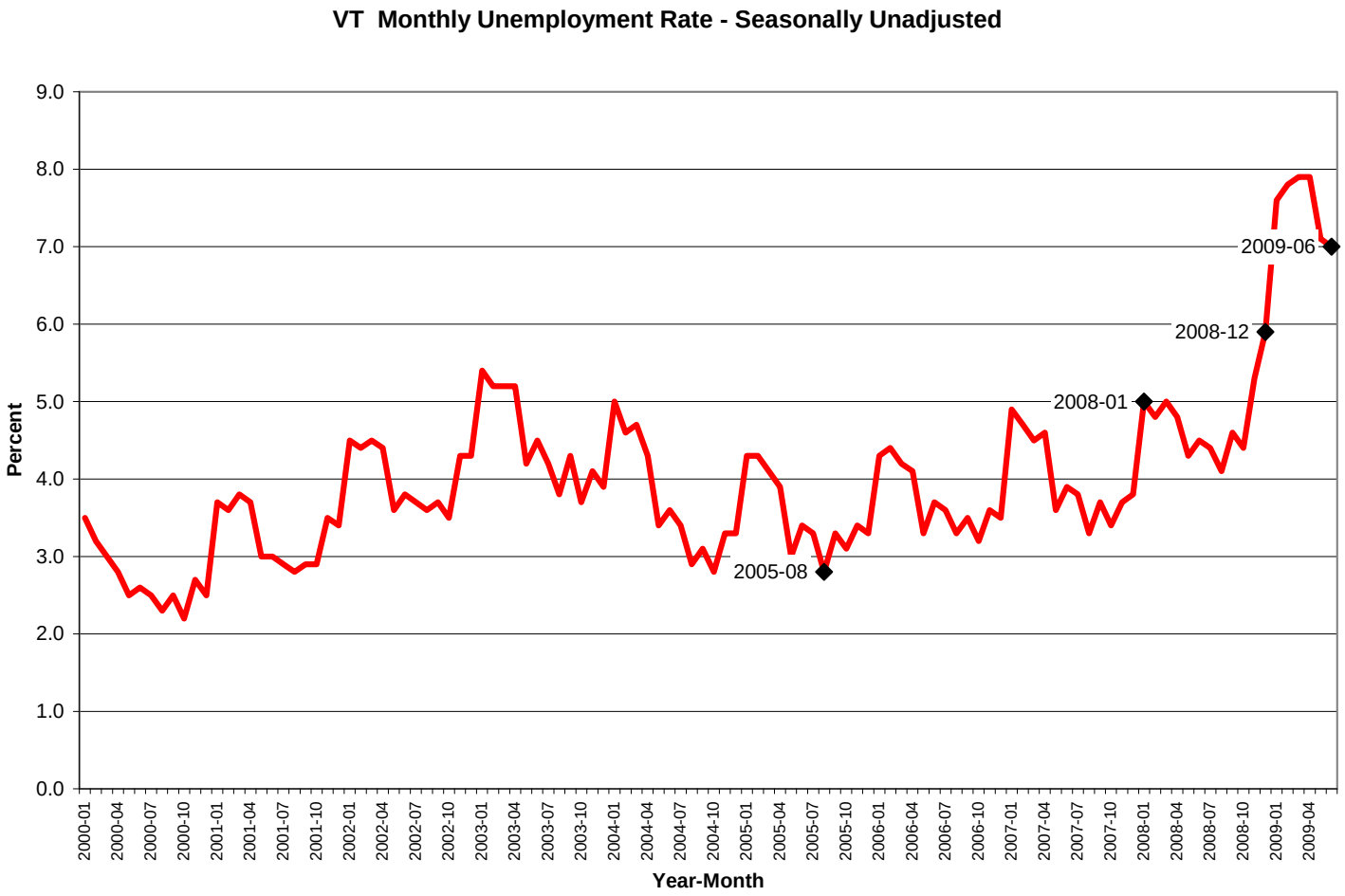

VT Monthly Unemployment Rate - Seasonally Unadjusted
Percent
Year-Month
2005-08
2008-01
2008-12
2009-06

Figure 64.

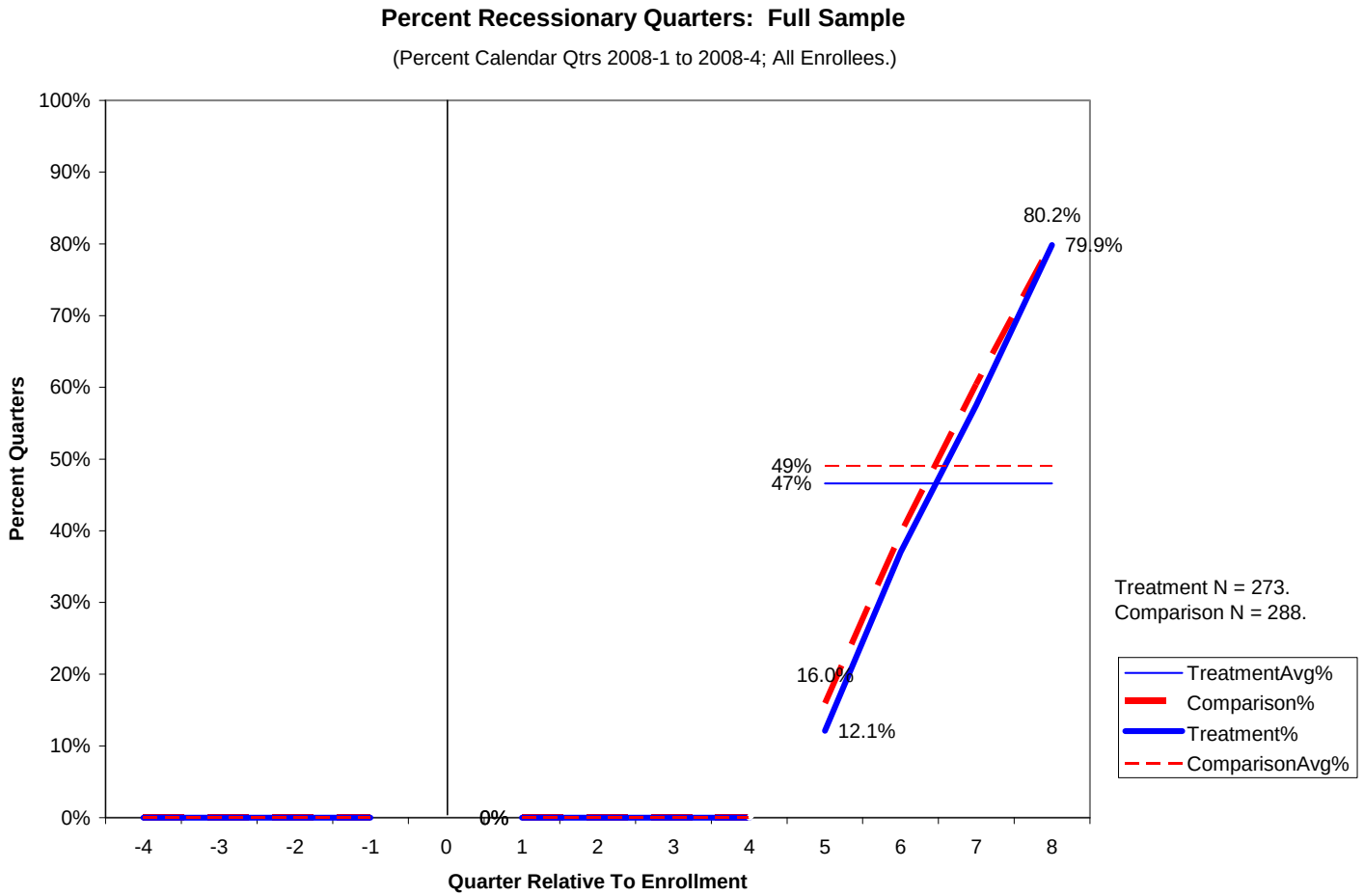
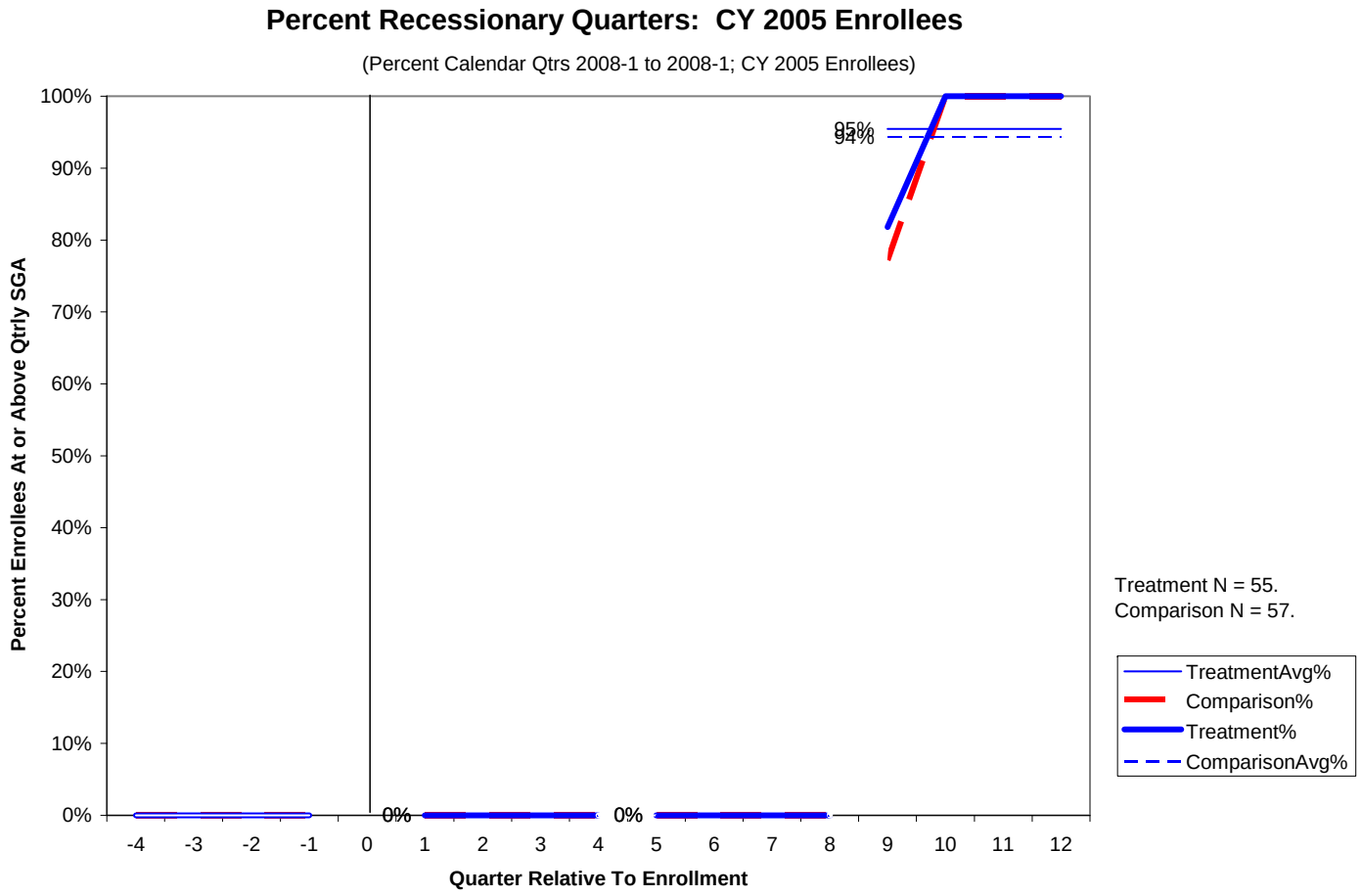

Percent Recessionary Quarters: Full Sample
(Percent Calendar Qtrs 2008-1 to 2008-4; All Enrollees.)
Percent Quarters
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
Quarter Relative To Enrollment
80.2%
79.9%
49%
47%
16.0%
12.1%
0%
Treatment N = 273.
Comparison N = 288.
TreatmentAvg%
Comparison%
Treatment%
ComparisonAvg%

Figure 65.


Percent Recessionary Quarters: CY 2005 Enrollees
(Percent Calendar Qtrs 2008-1 to 2008-1; CY 2005 Enrollees)
Percent Enrollees At or Above Qtrly SGA
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
95%
94%
0%
0%
-4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12
Quarter Relative To Enrollment
Treatment N = 55.
Comparison N = 57.
TreatmentAvg%
Comparison%
Treatment%
ComparisonAvg%

Ticket-To-Work Outcomes: The Interaction Between the Benefit Offset Pilot and the Ticket to Work Program

Ticket Participation

The Ticket to Work Program has been in place since 2002. The Ticket Program pays providers (Employment Networks) if a beneficiary who has selected that program (assigned their Ticket) works above certain thresholds and/or stops receiving benefits because of employment. In larger more urban states a number of Employment Networks have emerged in addition to the State/Federal VR program and other traditional community rehabilitation providers to offer services to beneficiaries with Tickets. Part of the Ticket concept was to encourage such none traditional providers into the employment services area and provide beneficiaries interested in working additional choices.

It might be expected that the Ticket to Work and the Offset Pilot would interact in a couple of ways. For example:

- Beneficiaries in the offset (treatment) group might be more likely to seek out employment networks and assign their Tickets because they can work at higher levels.
- VR Agencies and Employment Networks may seek and recruit offset participants because they are more likely to work at higher levels, and the Employment Network is more likely to get paid.

Both of the above effects would result in a higher level of Ticket assignment for the offset (treatment) over the comparison group. Both effects might be expected with the much larger samples anticipated under BOND across a number of regions.

However, Vermont was not a good site to test such an interaction for the following reasons:

- Vermont already had the highest Ticket to work participation rate (approximately 7% of eligible beneficiaries) in the nation when the Offset Pilot was rolled out in 2005. This was largely because Vermont DVR had established a statewide Ticket Partnership with almost all the community rehabilitation agencies. As part of that arrangement, community agencies agreed that VR would be the EN of record for joint consumers.
- The pool of beneficiaries targeted for enrollment in the offset were almost all current or former VR consumers. As such they had in most cases already assigned their Ticket to the DVR Employment Network Partnership.

As a result we did not expect to see any difference in Ticket assignment rates between the offset treatment and control groups.

Ticket Payments to Employment Networks

Another interaction between the Ticket and the offset that might be expected would be related to payments. All of the beneficiaries in the Offset Pilot who assigned their Tickets to the DVR Employment Network, did so under the Ticket Outcome Payment Mechanism. Under the Outcome Mechanism payments are made under the following circumstance:

- SSA will make a payment for each month the beneficiary is earning above SGA and is in a zero payment status.

SSA had to institute a administrative patch to deal with the fact that treatment group participants would go into offset status and not zero out their benefits if they earned above SGA and were in their EPE. So SSA paid the DVR Employment Network a monthly Outcome when a treatment group beneficiary was earning above SGA and would have otherwise been in a zero payment status.

It might be expected that payments under the Ticket program would be higher for offset participants. This is because under the Ticket payment rules in effect during most of this period, payment was based primarily on earnings above SGA and the beneficiary being in a zero payment status. If offset treatment group participants are more likely to work above SGA then the DVR Employment Network might expect to generate increased payments for that group.

However, to date we have not found any significant difference in Ticket payments between the offset treatment and comparison groups (Tables 44 to 47 and Figures 66 to 69), either for the full sample, or for the subgroup with the greatest employment or earnings effects, early enrollees into the project (calendar year 2005 enrollees).

This study may have been to small and too short term to properly assess the impact of the offset Ticket payments for the following reasons:

- The DVR Employment Network billed for less than 10% of the treatment or participant groups under the Ticket program. The modest increases in earnings above SGA for the treatment group may have been too small to translate to increased payments for this subset of participants.
- Less that 50% of the treatment group went into EPE. Ticket outcome payments are only possible when beneficiaries are in their EPE or have completed their EPE. Therefore, the offset would have no impact on Ticket payments for this group.
- The study period was for only two years post enrollment. This may be too short a time period to evaluate changes in payment patterns.

Table 44. Differences-In-Differences; Comparing 4 Qtrs Pre to **First** 4 Qtrs Post; Ticket Payment Outcomes; Effect Estimates.

Sample	Measure	Nc	Nt	2TailP	1TailP	Signif.	EffectAs%PostT	EffectDiff
Full Sample	Avg Paymt	174	172	0.891	0.446		6.7%	$3
CY2005 Enrollees Subgroup	Avg Paymt	57	55	0.822	0.411		13.9%	$11
Full Sample	Pay Rate	174	172	0.940	0.470		3.9%	0.2%
CY2005 Enrollees Subgroup	Pay Rate	57	55	0.823	0.412		13.8%	1.1%

Table 45. Differences-In-Differences; Comparing 4 Qtrs Pre to **First** 4 Qtrs Post; Ticket Payment Outcomes; Means.

Sample	Measure	AdjMeanPreT	MeanPostT	MeanPreC	MeanPostC	MeanPreT	MeanPostT
Full Sample	Avg Paymt	$48	$51	$26	$70	$5	$51
CY2005 Enrollees Subgroup	Avg Paymt	$68	$79	$29	$90	$6	$79
Full Sample	Pay Rate	4.9%	5.1%	3.0%	7.3%	0.6%	5.1%
CY2005 Enrollees Subgroup	Pay Rate	7.1%	8.2%	3.5%	9.7%	0.9%	8.2%

Table 46. Differences-In-Differences; Comparing 4 Qtrs Pre to **Second** 4 Qtrs Post; Ticket Payment Outcomes; Effect Estimates.

Sample	Measure	Nc	Nt	2TailP	1TailP	Signif.	EffectAs%PostT	EffectDiff
Full Sample	Avg Paymt	174	172	0.901	0.451		-5.6%	-$4
CY2005 Enrollees Subgroup	Avg Paymt	57	55	0.798	0.399		15.4%	$16
Full Sample	Pay Rate	174	172	0.982	0.491		1.1%	0.1%
CY2005 Enrollees Subgroup	Pay Rate	57	55	0.720	0.360		21.6%	2.1%

Table 47. Differences-In-Differences; Comparing 4 Qtrs Pre to **Second** 4 Qtrs Post; Ticket Payment Outcomes; Means.

Sample	Measure	AdjMeanPreT	MeanPostT	MeanPreC	MeanPostC	MeanPreT	MeanPostT
Full Sample	Avg Paymt	$74	$70	$26	$95	$5	$70
CY2005 Enrollees Subgroup	Avg Paymt	$87	$103	$29	$109	$6	$103
Full Sample	Pay Rate	6.5%	6.5%	3.0%	8.9%	0.6%	6.5%
CY2005 Enrollees Subgroup	Pay Rate	7.5%	9.6%	3.5%	10.1%	0.9%	9.6%

Figure 66.

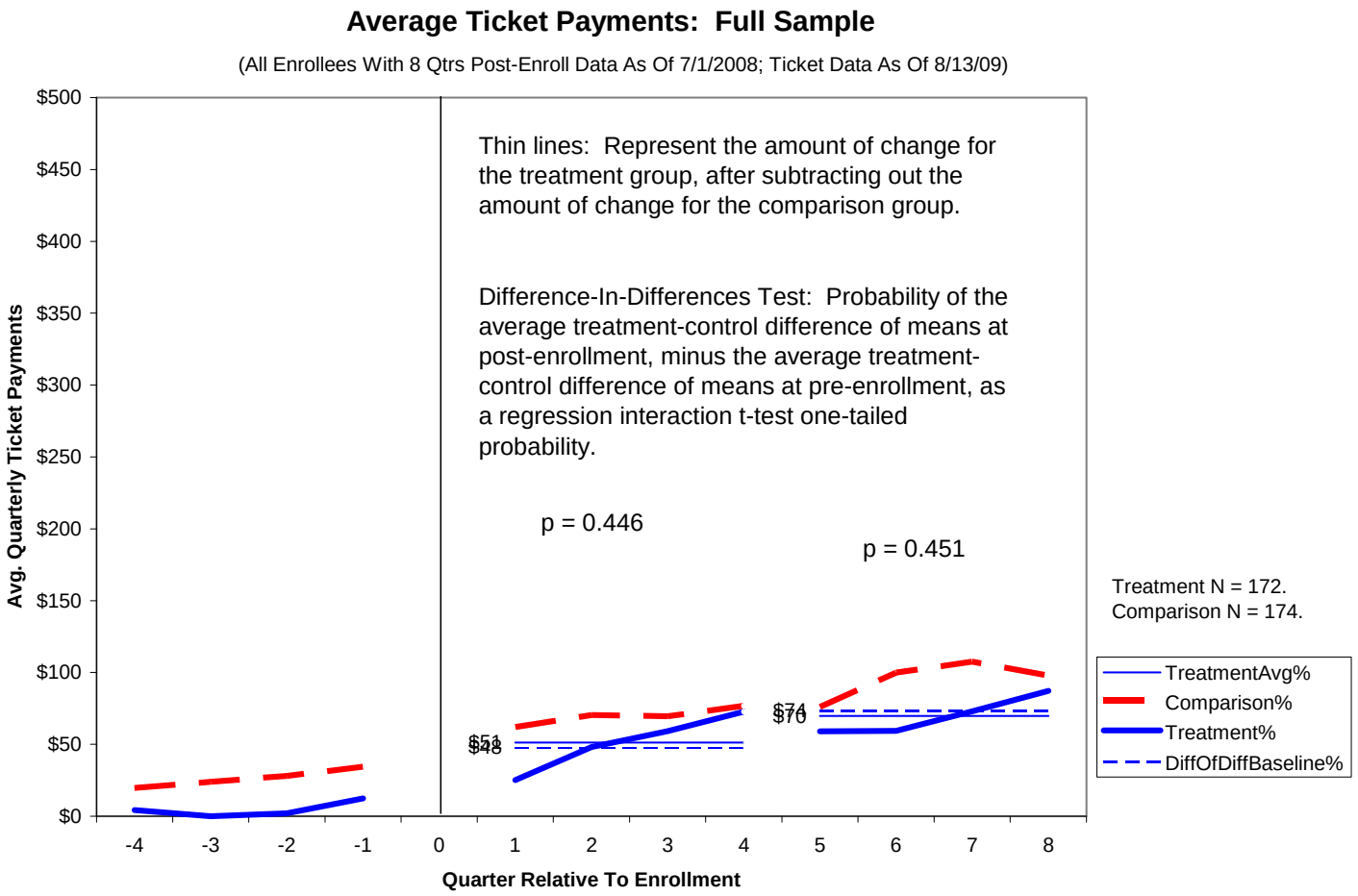

Average Ticket Payments: Full Sample
(All Enrollees With 8 Qtrs Post-Enroll Data As Of 7/1/2008; Ticket Data As Of 8/13/09)
Avg. Quarterly Ticket Payments
$500
$450
$400
$350
$300
$250
$200
$150
$100
$50
$0
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
Quarter Relative To Enrollment
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
Difference-In-Differences Test: Probability of the average treatment-control difference of means at post-enrollment, minus the average treatment-control difference of means at pre-enrollment, as a regression interaction t-test one-tailed probability.
p = 0.446
p = 0.451
$51
$48
$74
$70
Treatment N = 172.
Comparison N = 174.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%

Figure 67.

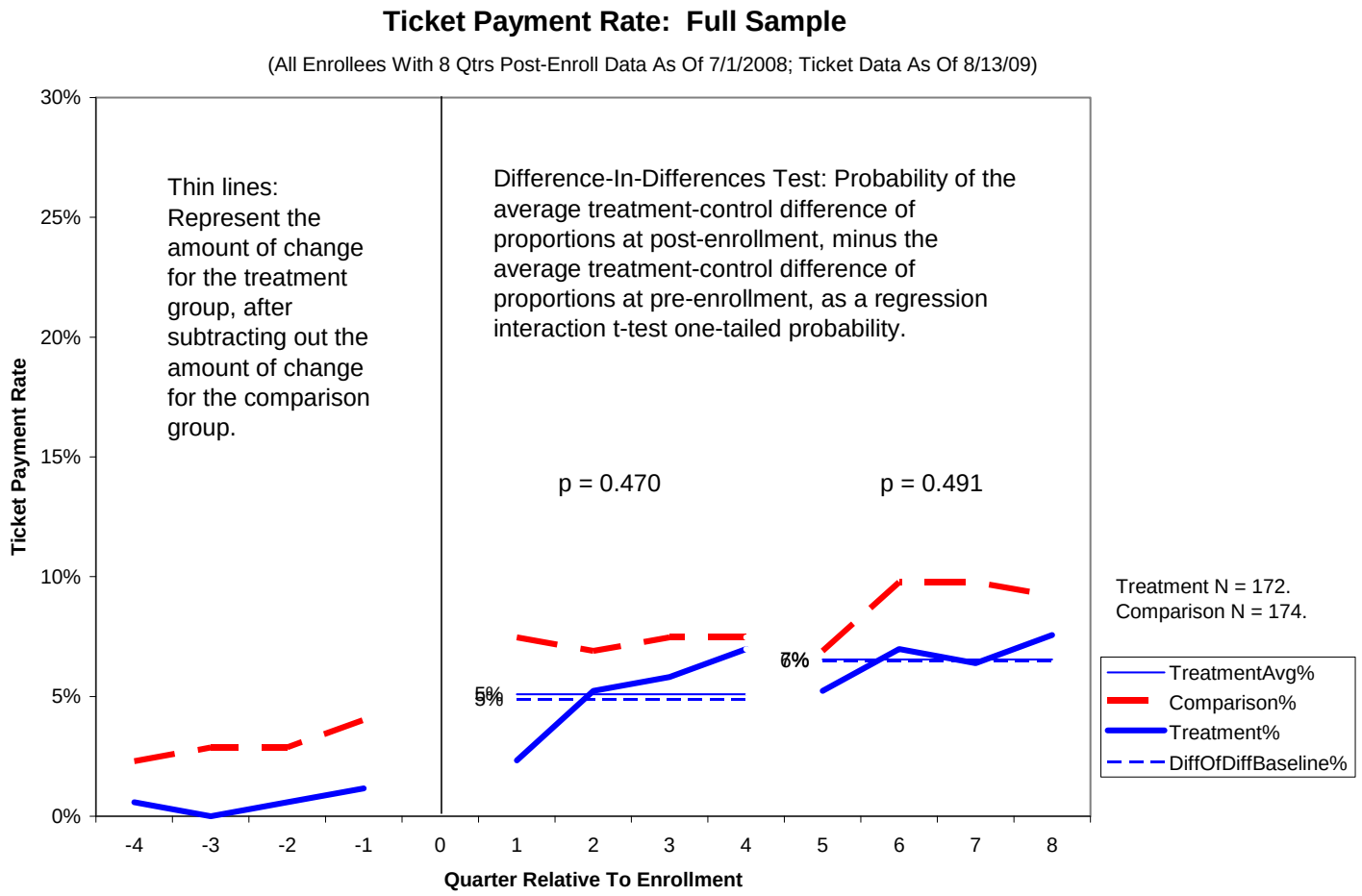

Ticket Payment Rate: Full Sample
(All Enrollees With 8 Qtrs Post-Enroll Data As Of 7/1/2008; Ticket Data As Of 8/13/09)
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
Difference-In-Differences Test: Probability of the average treatment-control difference of proportions at post-enrollment, minus the average treatment-control difference of proportions at pre-enrollment, as a regression interaction t-test one-tailed probability.
p = 0.470
p = 0.491
Treatment N = 172.
Comparison N = 174.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%
Ticket Payment Rate
Quarter Relative To Enrollment
30%
25%
20%
15%
10%
5%
0%
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8

Figure 68.

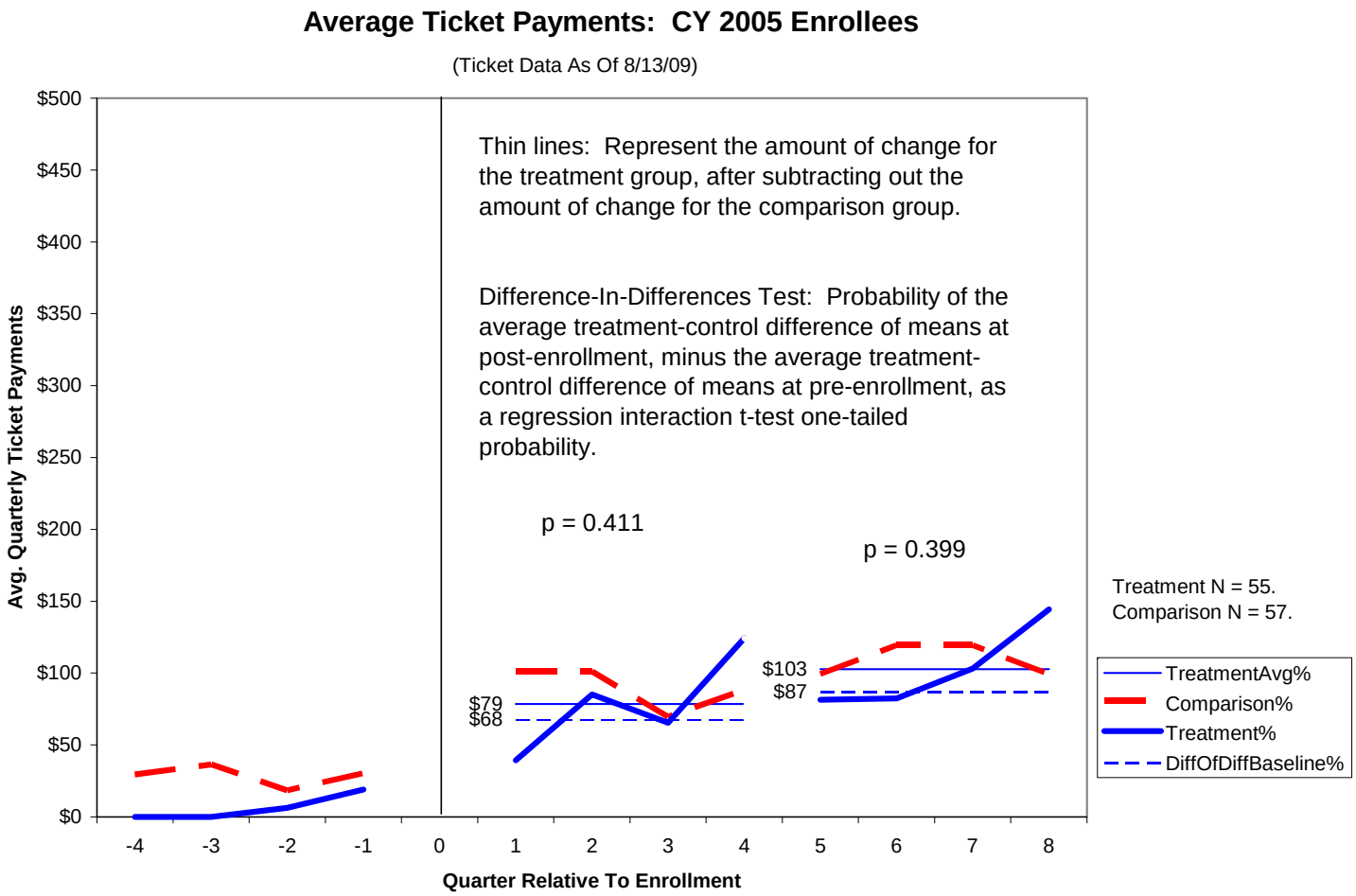
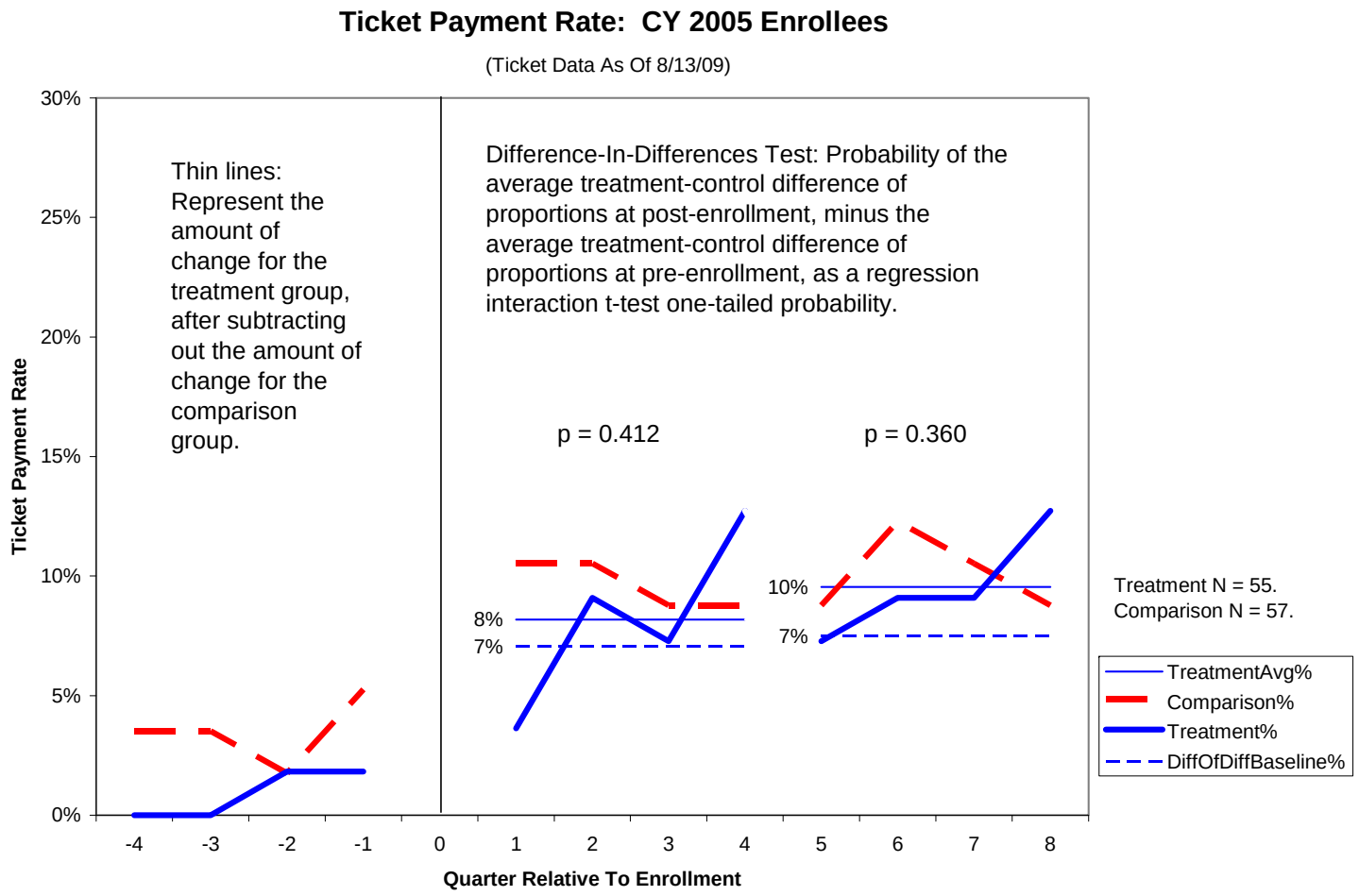

Average Ticket Payments: CY 2005 Enrollees
(Ticket Data As Of 8/13/09)
Avg. Quarterly Ticket Payments
$500
$450
$400
$350
$300
$250
$200
$150
$100
$50
$0
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
Quarter Relative To Enrollment
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
Difference-In-Differences Test: Probability of the average treatment-control difference of means at post-enrollment, minus the average treatment-control difference of means at pre-enrollment, as a regression interaction t-test one-tailed probability.
p = 0.411
p = 0.399
$79
$68
$103
$87
Treatment N = 55.
Comparison N = 57.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%

Figure 69.


Ticket Payment Rate: CY 2005 Enrollees
(Ticket Data As Of 8/13/09)
Thin lines: Represent the amount of change for the treatment group, after subtracting out the amount of change for the comparison group.
Difference-In-Differences Test: Probability of the average treatment-control difference of proportions at post-enrollment, minus the average treatment-control difference of proportions at pre-enrollment, as a regression interaction t-test one-tailed probability.
p = 0.412
p = 0.360
8%
7%
10%
7%
Treatment N = 55.
Comparison N = 57.
TreatmentAvg%
Comparison%
Treatment%
DiffOfDiffBaseline%
Ticket Payment Rate
30%
25%
20%
15%
10%
5%
0%
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
Quarter Relative To Enrollment

Employment Service Utilization

In adopting the initial requirement that pilot enrollees be current or recent VR consumers, Vermont's intent was to ensure we had a good chance of capturing consistent data on the employment services being used by both the treatment and control groups and thereby be able to test whether treatment and control were getting differential access to employment services. Although this requirement was later dropped, 97% of enrollees had current or past involvement with VR by early 2008, which made it possible to compare the services they used after pilot enrollment from the public VR system, ticket participation, and their use of supported employment through the designated agencies for mental health and developmental disability services (which DVR funds).

The timeframe for the following analyses of employment service utilization was as of March, 2008, so the analyses primarily describe the status and behavior of beneficiaries through the first year post-enrollment (for the majority of enrollees).

VR Participation and Types of Services Provided

Although 97% of participants had had exposure to VR services, not all had active cases during the pilot period. Nearly two-thirds were open in VR at the time of enrollment, and an additional 8% initiated a VR case after enrollment, so there were 70% of participants with VR involvement during the pilot period. There did not appear to be any significant difference between treatment and control in history of involvement with VR at enrollment, the phase of their VR case at the time enrollment, or their employment outcomes for cases closed since the pilot began. Nor did there appear to be a significant difference in the kinds of paid VR case services they were receiving, or in their access to supported employment services.

Ticket-To-Work Participation

Out of the 558 pilot participants with any history of VR involvement as of March, 2008, 43% had not yet assigned their Ticket to VR (this typically happens when an Individualized Plan for Employment is signed, and they may not have reached that stage in their VR case, or they may be other reasons the ticket has not been assigned). Most entered the pilot with a ticket assigned to VR (46%) and some subsequently assigned it (11%). There was no significant difference between treatment and control groups in ticket status at enrollment or in post-enrollment ticket assignment.

Benefits Counseling Participation

The Vermont pilot also required that participants enroll in the benefits counseling program as a means of providing equal access to employment services as a baseline for testing the added impact of the benefit offset. However, some differentiation in involvement with benefits counseling between the treatment and control group was unavoidable, due to the additional (and unusual) role the counselors took on as SSA agents collecting earnings estimates and monthly wage data from treatment group members. The benefits counseling needs for treatment group members were also quite different and intensive, particularly for those working at high enough levels to need CDR work development done and to need help dealing with the dizzying array of problems that arose as SSA applied the offset.

Given that this perforce changed the relationship and intensified the number and frequency of contacts, it was hard to find a reliable metric for determining whether control group members made equivalent use of the traditional benefits counseling aspect of services as the treatment

group members. Benefits counselor practices in recording contact notes in the database were variable—some preferred handwritten notes and rarely recorded a contact in the database, but the majority used the database for notes with enough regularity to at least use it as a rough measure for whether a client had been in contact with a benefits counselor. We avoided using frequency of contact as a measure, since treatment group cases were more closely monitored by the pilot coordinator and more notes were recorded in the database. However, the existence of any service note during a given time period reflected contact between client and benefits counselor, and we adopted this measure to compare continuing involvement with benefits counseling among the treatment and control groups.

Under normal circumstances, interaction with benefits counselors is very episodic and variable among participants, depending on their situations. There may be a flurry of contacts the initial month of enrollment as a precipitating issue is worked through, then nothing for half a year or more while situations are stable, then another flurry of contacts. About one-third of benefits counseling program enrollees have no contact after the initial month or two after enrollment. This is consistent with the behavior of control group members, though the situations are not comparable since the "enrollment" for pilot participants was a random assignment process, rather than the initiation of benefits counseling services which may already happened months or years previous to random assignment. The pattern of contacts for treatment group participants is the opposite, since wage reporting drives frequent and regular contact with the benefits counselor. This very different pattern is reflected in Table 48 below.

Table 48. Benefits Counseling Involvement After Pilot Enrollment.

Benefits Counseling Involvement After Pilot Enrollment	Treatment	(%)	Control	(%)
Last BC contact noted was in month of pilot enrollment	5	1.8	125	42.7
Had BC contact noted after month of pilot enrollment	279	98.2	168	57.3
Had BC contact noted within past 6 months (includes disenrolled treatment group members)	241	84.9	68	23.2

Over half the control group (57%) maintained contact with benefits counselors in the months after random assignment. When considering the 43% who didn't, it is important to remember that we recruited heavily from former benefits counseling program clients, for whom it may have made no sense to continue involvement with benefits counseling without the opportunity presented by the offset pilot. Indeed, when we looked at who did maintain contact, they were typically those who had earnings in the half-year after enrollment, or those who were employed at the time of random assignment and had either enrolled in benefits counseling within the previous year or more than three years ago and—in other words, hadn't recently completed working through their benefits counseling issues. We believe this shows that control group members had equivalent access and made equivalent use of standard benefits counseling services.

Work Incentive Utilization for the Treatment Group

Some analyses of outcomes after enrollment in the pilot can only be made for treatment group members, due to the differing availability of data between treatment and control. This is particularly the case for utilization of SSA work incentives in light of difficulty of tracking TWPs and work incentive utilization and obtaining work CDRs for control group members

who may or may not have had reason to continue with a benefits counselor after random assignment.

The timeframe for the following analyses of work incentive utilization was as of March, 2008, so the analyses primarily describe the status and behavior of beneficiaries through the first year post-enrollment (for the majority of enrollees).

Utilization of TWP Months and Offset After Enrollment

The majority of treatment group members (76%) entered the pilot with all or some TWP months remaining. Of these 216 individuals, 108 (50%) used some or all of their TWP since entering the pilot. Most used them all up (28%). Although we could not compare this against the control group, this appeared to be a significant amount of progress for the treatment group, and it is worth noting that fully 28% were willing to exhaust their TWP and enter their EPE in the relatively short time frame of the pilot, and the majority (84%) sustained their work effort into the EPE and had above-SGA earnings after entering their EPE. Out of the 61 participants who entered their EPE during the pilot, 24 went into offset and CDRs were pending for at least 13 more. The 68 participants[27] who entered the pilot having already used up their TWP also made significant gains: 25 went into offset (37%) .

Table 49. TWP Usage By Status At Enrollment

Status at enrollment →	In EPE	TWP Started	TWP Not Started
	68	59	157
TWP usage post enrollment (for those with TWP at enrollment) ↓			
No TWP Months Used		13	95
Some TWP Months Used		14	33
All TWP Months Used		32	29
Went into offset	25	19	5

It is important to note that our data on TWP usage was based on data we collect and was not always verified by SSA. What looked like a TWP month may in the end be judged an "Unsuccessful Work Attempt" by SSA or be offset by factors that are unknown to pilot staff until SSA conducts a CDR and issues an official determination. Generally we did not request that a CDR be initiated until it appeared to us that someone had used up all their TWP months and was poised to have a cessation month and go into offset. Hence the data on TWP utilization for those that hadn't gone into cessation and the offset was our best judgement based on the monthly earnings data we collected.

Other Work Incentives Utilization

Some of the beneficiaries were using other work incentives such as IRWE and Subsidy. In most cases even using other work incentives the beneficiaries were still earning enough money that their benefit was offset. Some of the beneficiaries did not feel they needed to worry about using other work incentives because they were not trying to stay under SGA to avoid suspension or termination of their benefits. They felt with the offset, it was not worth the amount of time and energy they spent keeping track of IRWEs and getting Subsidies approved. They felt they are getting a "good deal" with the offset.

[27] Prior to attrition.

Impact of the End of the Extended EPE

As of March, 2008, we had only had a few beneficiaries who had come to the end of their extended EPE but in all instances the beneficiary had reduced their income under SGA. As reported to their benefits counselor, most beneficiaries felt that due to their disability they can not work enough hours to make up for the total loss of their SSDI benefit. They felt even though they could earn over SGA, without the offset they would be worse off financially. As of March, 2008, we had seven beneficiaries in the treatment group reach the end of their extended EPE. All of them that were in offset at the time the EPE ended immediately reduced their earnings under SGA.

4. Summary and Conclusions

Impacts of Offset Provisions

Given the opportunity of an SSDI benefit offset for earnings above SGA, 22% of the treatment group utilized the provision and started an offset before 1/1/2009, which was approximately 2 years post-enrollment for the majority of enrollees. Among early enrollees, for whom that time point was approximately 3 years post-enrollment, the offset utilization rate was 41%.

Of the various outcome measures examined, SGA rate appeared to be the most sensitive or most responsive to offset treatment effects, which is consistent with the hypothesis that the primary effect of removing the cash cliff of SSDI would be to reduce the "parking" of beneficiary earnings below SGA, rather than prompting non-working beneficiaries to enter the labor market.

For the full sample of enrollees, there was a significant effect of the offset intervention on SGA rate in the first year following the quarter of enrollment, with a modest effect size of 7 percentage points, representing 35% of the post-enrollment SGA rate for the treatment group. There were only borderline-significant effects on average earnings or employment rate in the first year following enrollment, and there were no significant effects across any measure during the second year post-enrollment.

The baseline Medicaid Buy-In subgroup showed a similar pattern of results, but with a larger effect size in the first year following enrollment: 13.7 percentage points, representing 51% of the post-enrollment SGA rate for the treatment group. Enrollees who have been exposed to the healthcare safety net of the Medicaid Buy-In, in conjunction with benefits counseling, may be more prepared to utilize a benefit offset.

The baseline-Trial-Work-Period-completed subgroup, which might be expected to be the sample most sensitive to offset effects, showed a reversal pattern. In the first year post-enrollment, that group showed a relatively large effect on SGA rate of 17.0 percentage points, representing 46% of the post-enrollment SGA rate for the treatment group. In the second year post-enrollment, as beneficiaries began to experience more errors in their benefit checks due to offset implementation problems, the offset was actually associated with negative effects on average earnings and employment rate, and those negative effects reached statistical significance in several quarters. This reversal trend suggests a problem with the intervention itself, and may have been largely responsible for the elimination of positive treatment effects in the second post-enrollment year for the full sample.

Younger enrollees and men had somewhat stronger outcomes than older enrollees or women respectively, but the effect differences were not large. Outcomes for the baseline-earners group did not look substantially different from those for the full sample.

There was a dramatic difference in employment-related outcomes between early enrollees into the Pilot and later enrollees. For calendar-year 2005 enrollees, who enrolled in the first two calendar quarters of the Pilot enrollment period, there were large, statistically significant treatment effects on SGA rate across not only the first and second years post-enrollment, but also the third year post-enrollment. The effects on SGA rate were 20.6 percentage points in the first year post-enrollment, 16.5 percentage points in the second year, and 20.5 percentage points in the third year (representing 55%, 48%, and 60% of the post-enrollment SGA rate for the treatment group, respectively). There was a borderline-significant effect on average

earnings in the first year following enrollment, with an effect size of $823 in additional quarterly earnings (36% of post-enrollment mean earnings for the treatment group), and a fully significant effect in the third year following enrollment, with an effect size of $1,042 in additional quarterly earnings (47% of post-enrollment mean earnings for the treatment group). These findings were consistent with anecdotal reports from the Vermont Pilot's benefits counselors that early enrollees into the project tended to be more work-ready or more work-motivated than later enrollees, due to pent-up demand for an offset provision in the state. More of the early enrollees had completed their TWP prior to enrollment than in the full sample, and the early-enrollees subgroup had higher average earnings and a higher SGA rate in the two quarters immediately prior to enrollment into the Pilot. Enrollment of less work-ready or less motivated individuals later in the Pilot may have suppressed treatment effects for the full sample of enrollees. The outcomes for early enrollees show that an offset can have a significant, large effect on the SGA rate of certain beneficiaries, but the effect may be limited to a subset of individuals who are more able and/or more motivated to work than the average SSDI beneficiary.

The finding of significant offset effects in this Pilot is a remarkable result, given the relatively short time frame of the study, the small proportion of the study group who reached their EPE and were in a position to take advantage of the offset, and the lack of complete and equivalent data for treatment and control group members on their progress in using TWP months and reaching cessation in the EPE.

This positive result derives in good measure from the tremendous effort Vermont Pilot staff devoted to supporting participants and keeping them engaged as benefit checks were unpredictably changed, large checks arrived that had to be returned, and a succession of overpayment notices arrived.

It remains to be seen whether the positive outcomes demonstrated in this Pilot will continue into the future. SSA's administration of the offset has improved, but participants will always need a high level of support in managing their participation in the benefit offset, and it may be many years before some of them reach the point of having an offset applied. Without experienced local benefits counselors to help them, participants may flounder and end up withdrawing from the pilot.

Limitations of This Study

There were several important limitations to this Pilot as a study of offset outcomes.

1. Beneficiaries who were more than 72 months beyond the end of their Trial Work Period were excluded from enrollment. Such beneficiaries, given extensive work attempts and work histories, may be among those who would be most responsive to an offset option. This Pilot design feature may have excluded the most persistent earners among SSDI beneficiaries.
2. Beneficiaries knew that the Pilot was time-limited. Beneficiaries may have been unwilling to commit to higher paying career paths knowing that the offset would end within a few years.
3. Implementation of the offset was hampered by many technical issues that likely had an impact on the effectiveness of the benefit offset. For those enrollees who went into offset status, a substantial majority experienced an error in their benefit check. While SSA staff worked hard to correct the technical issues, the development of an automated payment system that minimizes them would likely improve the effectiveness of the offset.

Implications for BOND

Benefits counseling may affect outcomes

Outcomes related to use of the offset provision may vary depending on the availability of high-quality local benefits counseling services. Involvement with a benefits counselor was a key factor in Vermont's implementation of the offset pilot. The policy and administration structure in which the BOND operates may, we earnestly hope, be simpler than the one the four state pilots operated within. But even so, the offset provision will take effect within a complicated and contingent real world that is in inescapably different from the world of policy. The offset changed the impact of employment on other benefits received by pilot participants and their families. This additional complexity proved challenging for the beneficiaries and their benefits counselors to understand and resolve problems. It takes the skills of a benefits counselor in the trenches to understand uniquely variable situations and intervene to straighten them out for beneficiaries. Their presence or absence will likely impact outcomes in the BOND.

Implementation issues may threaten the "evaluability"

If not planned for and resolved, operational issues at SSA implementing an offset may threaten the "evaluability" of the BOND intervention. Vermont put considerable resources into rescuing pilot participants from problems arising out of SSA's administration of the pilot. Our staff took on the dual function of case managers and SSA agents for offset participants. This allowed for a single point of contact for participants to report wages, develop earnings estimates, and understand and resolve benefit related issues. Wage information gathering for offset application and to assist SSA in work development proved to be a significant challenge to benefits counselors and project coordinators. The implication for a national project is that for participants to take advantage of an offset, there needs to be a simple method of wage reporting and a reliable (ideally local) contact for problem resolution. Even with those conditions met, the challenges of wage reporting and "managing" beneficiaries' cases to insure wage accuracy is a time-consuming effort. Without this attention, there are greater risks for overpayments and underpayments.

The SSA payment system has proven cumbersome in the application of an offset because offset participants don't quite "fit". Unanticipated issuances were made, creating overpayments in several cases. Offsets were not applied timely in virtually all cases due the anomaly of the cases. In order for a national offset to be effective, SSA will need to have a system in place that is responsive and accurate. Without an accurate and responsive system there is great risk the BOND will lose credibility if beneficiaries lose faith that the offset will work as advertised.

Furthermore, as Utah pilot staff have noted, there is a danger of "death by evaluation" if implementation problems prevent the intervention from having reached a mature stage before being evaluated. The serious problems all four states experienced with SSA's administration of the offset raise pressing questions about the evaluability of the BOND intervention. Of course, this is what these pilots were meant to do. But if lessons learned in these small-scale studies are ignored—about the need to simplify the policy context for the offset, provide support to beneficiaries, and streamline SSA's administration of the work CDRs and benefits adjustment—there is a chance a promising policy change will fall victim to failed implementation.

Work behavior changes may be small, variable, and incremental

The BOND should design the evaluation anticipating that changes in work behavior and participation rates in the offset may be small, variable, and incremental. Vermont's experience with pilot participants has shown that SSDI beneficiaries with an awareness of SSDI work incentives and work rules have become accustomed to limiting their earnings to remain below SGA. Participation in the pilot required a change in the mindset of limiting earnings. It will be important for the national demonstration to anticipate the need to convince SSDI beneficiaries they will not lose benefits by exceeding SGA and to put resources towards that effort.

Experience has also shown that SSDI beneficiaries do not have consistent earnings. They start and stop work, have fluctuating hours, and are sometimes employed in seasonal work. Even when beneficiaries clearly intended to increase their employment, it took time for them to find new jobs or increase their hours at existing jobs. Beneficiaries' return to work efforts were often interrupted by illness or exacerbation of a disabling condition. This points out the need to have a system that is flexible and responsive to accommodate earnings changes. It also suggested that the BOND evaluation should allow sufficient time to measure the impact of the offset.

Data collection strategies should be designed to support certain subgroup analyses

Data collection strategies for the BOND evaluation should be designed to permit subgroup analyses, particularly with regard to TWP/EPE status. To the extent the policy context for the evaluation can be simplified, particularly for voluntary participant group members, the BOND evaluation may have more immediate success in demonstrating the impact of the policy. Vermont found some of the most substantial work behavior changes among individuals who had completed their Trial Work Period and were in or beyond their Extended Period of Eligibility, but was hampered in this analysis by the differential availability of data between treatment and control groups. Another subgroup the BOND may want to pay attention to (and ensure data availability for) is participants in or eligible for State Medicaid Buy-In programs.

The BOND should seek partnerships to provide employment services

The BOND should seek partnerships at the state and local level around the provision of employment services. Vermont's offset design targeted SSDI beneficiaries with current or recent connection to public vocational rehabilitation services. As a result 96% of pilot participants in Vermont had been served by VR within three years of enrollment in the pilot. The connection to VR indicated an interest in employment, but for most enrollees the connection with employment services predated enrollment in the pilot, and thus did not pose a problem of "induced entry" into the state employment service system. In a national offset pilot, consideration should be given to providing beneficiaries with information necessary to access employment services. But in doing so, the BOND needs to anticipate the potential for creating additional pressure on the employment service system as more SSDI beneficiaries seek employment to take advantage of an offset pilot.

5. List of Appendices

SPSS Statistical Outputs By File Number:

1. SSA UI Outcomes, Simple (Uncontrolled) Comparisons at Baseline, Full Sample, SGA Rate.
2. SSA UI Outcomes, Simple (Uncontrolled) Comparisons at Baseline, Full Sample, Average Earnings.
3. SSA UI Outcomes, Simple (Uncontrolled) Comparisons at Baseline, Full Sample, Employment Rate (Any Earnings).
4. SSA UI Outcomes, Simple (Uncontrolled) Comparisons at Post-Enrollment, Full Sample, SGA Rate.
5. SSA UI Outcomes, Simple (Uncontrolled) Comparisons at Post-Enrollment, Full Sample, Average Earnings.
6. SSA UI Outcomes, Simple (Uncontrolled) Comparisons at Post-Enrollment, Full Sample, Employment Rate (Any Earnings).
7. SSA UI Outcomes, Regressions and Predicted Means, Full Sample, SGA Rate.
8. SSA UI Outcomes, Regressions and Predicted Means, Full Sample, Average Earnings.
9. SSA UI Outcomes, Regressions and Predicted Means, Full Sample, Employment Rate (Any Earnings).
10. SSA UI Outcomes, Regressions and Predicted Means, Baseline Medicaid Buy-In, SGA Rate.
11. SSA UI Outcomes, Regressions and Predicted Means, Baseline Medicaid Buy-In, Average Earnings.
12. SSA UI Outcomes, Regressions and Predicted Means, Baseline Medicaid Buy-In, Employment Rate (Any Earnings).
13. SSA UI Outcomes, Regressions and Predicted Means, Under Age 45 At Enrollment, SGA Rate.
14. SSA UI Outcomes, Regressions and Predicted Means, Under Age 45 At Enrollment, Average Earnings.
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16. SSA UI Outcomes, Regressions and Predicted Means, Age 45 And Older At Enrollment, SGA Rate.
17. SSA UI Outcomes, Regressions and Predicted Means, Age 45 And Older At Enrollment, Average Earnings.
18. SSA UI Outcomes, Regressions and Predicted Means, Age 45 And Older At Enrollment, Employment Rate (Any Earnings).
19. SSA UI Outcomes, Regressions and Predicted Means, Males, SGA Rate.
20. SSA UI Outcomes, Regressions and Predicted Means, Males, Average Earnings.

21. SSA UI Outcomes, Regressions and Predicted Means, Males, Employment Rate (Any Earnings).
22. SSA UI Outcomes, Regressions and Predicted Means, Females, SGA Rate.
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24. SSA UI Outcomes, Regressions and Predicted Means, Females, Employment Rate (Any Earnings).
25. SSA UI Outcomes, Regressions and Predicted Means, Baseline TWP Completed, SGA Rate.
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36. SSA UI Outcomes, Regressions and Predicted Means, Calendar Year 2006 Enrollees, Employment Rate (Any Earnings).
37. VT UI Outcomes, Regressions and Means, Full Sample, SGA Rate, Post-Enrollment Year 1.
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41. VT UI Outcomes, Regressions and Means, Full Sample, Employment Rate (Any Earnings), Post-Enrollment Year 1.
42. VT UI Outcomes, Regressions and Means, Full Sample, Employment Rate (Any Earnings), Post-Enrollment Year 2.

43. VT UI Outcomes, Regressions and Means, Baseline Medicaid Buy-In, SGA Rate, Post-Enrollment Year 1.
44. VT UI Outcomes, Regressions and Means, Baseline Medicaid Buy-In, SGA Rate, Post-Enrollment Year 2.
45. VT UI Outcomes, Regressions and Means, Baseline Medicaid Buy-In, Average Earnings, Post-Enrollment Year 1.
46. VT UI Outcomes, Regressions and Means, Baseline Medicaid Buy-In, Average Earnings, Post-Enrollment Year 2.
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49. VT UI Outcomes, Regressions and Means, Baseline TWP Completed, SGA Rate, Post-Enrollment Year 1.
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53. VT UI Outcomes, Regressions and Means, Baseline TWP Completed, Employment Rate (Any Earnings), Post-Enrollment Year 1.
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55. VT UI Outcomes, Regressions and Means, Baseline Earners, SGA Rate, Post-Enrollment Year 1.
56. VT UI Outcomes, Regressions and Means, Baseline Earners, SGA Rate, Post-Enrollment Year 2.
57. VT UI Outcomes, Regressions and Means, Baseline Earners, Average Earnings, Post-Enrollment Year 1.
58. VT UI Outcomes, Regressions and Means, Baseline Earners, Average Earnings, Post-Enrollment Year 2.
59. VT UI Outcomes, Regressions and Means, Baseline Earners, Employment Rate (Any Earnings), Post-Enrollment Year 1.
60. VT UI Outcomes, Regressions and Means, Baseline Earners, Employment Rate (Any Earnings), Post-Enrollment Year 2.
61. VT UI Outcomes, Regressions and Means, Calendar Year 2005 Enrollees, SGA Rate, Post-Enrollment Year 1.
62. VT UI Outcomes, Regressions and Means, Calendar Year 2005 Enrollees, SGA Rate, Post-Enrollment Year 2.

63. VT UI Outcomes, Regressions and Means, Calendar Year 2005 Enrollees, SGA Rate, Post-Enrollment Year 3.
64. VT UI Outcomes, Regressions and Means, Calendar Year 2005 Enrollees, Average Earnings, Post-Enrollment Year 1.
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67. VT UI Outcomes, Regressions and Means, Calendar Year 2005 Enrollees, Employment Rate (Any Earnings), Post-Enrollment Year 1.
68. VT UI Outcomes, Regressions and Means, Calendar Year 2005 Enrollees, Employment Rate (Any Earnings), Post-Enrollment Year 2.
69. VT UI Outcomes, Regressions and Means, Calendar Year 2005 Enrollees, Employment Rate (Any Earnings), Post-Enrollment Year 3.
70. VT UI Outcomes, Regressions and Means, Calendar Year 2006 Enrollees, SGA Rate, Post-Enrollment Year 1.
71. VT UI Outcomes, Regressions and Means, Calendar Year 2006 Enrollees, SGA Rate, Post-Enrollment Year 2.
72. VT UI Outcomes, Regressions and Means, Calendar Year 2006 Enrollees, Average Earnings, Post-Enrollment Year 1.
73. VT UI Outcomes, Regressions and Means, Calendar Year 2006 Enrollees, Average Earnings, Post-Enrollment Year 2.
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75. VT UI Outcomes, Regressions and Means, Calendar Year 2006 Enrollees, Employment Rate (Any Earnings), Post-Enrollment Year 2.
76. SSA UI Outcomes, Simple (Uncontrolled) Comparisons at Baseline, Calendar Year 2005 Enrollees, SGA Rate.
77. SSA UI Outcomes, Simple (Uncontrolled) Comparisons at Baseline, Calendar Year 2005 Enrollees, Average Earnings.
78. SSA UI Outcomes, Simple (Uncontrolled) Comparisons at Baseline, Calendar Year 2005 Enrollees, Employment Rate (Any Earnings).
79. SSA UI Outcomes, Simple (Uncontrolled) Comparisons at Post-Enrollment, Calendar Year 2005 Enrollees, SGA Rate.
80. SSA UI Outcomes, Simple (Uncontrolled) Comparisons at Post-Enrollment, Calendar Year 2005 Enrollees, Average Earnings.
81. SSA UI Outcomes, Simple (Uncontrolled) Comparisons at Post-Enrollment, Calendar Year 2005 Enrollees, Employment Rate (Any Earnings).
82. VT Ticket-To-Work Payment Outcomes, Regressions and Means, Full Sample, Average Payments, Post-Enrollment Year 1.

6. Revision/Correction Notes

March 26, 2010: Terminology and acronyms were corrected for references to Disabled Widow/widower's Benefits (DWB). References to the Office of Central Operations (OCO) and its staff were revised to refer to the correct organizational unit.

April 2, 2010: Descriptions of benefit offset payment problems were clarified.

April 27, 2010: Page 53, Regression-Adjusted Impact Estimates, Full Sample. Corrected the following sentence to be consistent with the information presented in Table 16: "On the measure of quarterly SGA rate for the full sample, we observed significant differences between treatment and control at the 1st, 2nd, and **3rd** quarters following the quarter of enrollment." The corrected version now reads: "On the measure of quarterly SGA rate for the full sample, we observed significant differences between treatment and control at the 1st, 2nd, and **4th** quarters following the quarter of enrollment."