

SOCIAL SECURITY DISABILITY BENEFICIARIES WITH WORK-RELATED GOALS AND EXPECTATIONS

by Gina A. Livermore*

This study examines working-age Social Security Disability Insurance and Supplemental Security Income beneficiaries who report having work goals or expectations, referring to these individuals as “work-oriented.” The study uses data from the 2004 National Beneficiary Survey matched to administrative data spanning 2004–2007 to identify work-oriented beneficiaries and to analyze their sociodemographic, health, and employment characteristics, as well as their earnings-related benefit suspensions and terminations. Relative to other disability beneficiaries, the 40 percent classified as work-oriented were younger and more educated, had been on the disability rolls a shorter time, had lower income from public assistance, and were healthier. Just over half had recently engaged in work or in work preparation activities at interview, about half had earnings at some point during 2004–2007, and 10 percent left the disability rolls because of earnings for at least 1 month during that period. The findings show that a large share of beneficiaries have work goals, most are attempting to work, and many experience some success.

Introduction

The Social Security Administration (SSA) administers two programs that provide income support to about 12 million working-age people with disabilities—the Social Security Disability Insurance (DI) program and the Supplemental Security Income (SSI) program.¹ To qualify for either program, applicants must demonstrate that they are unable to work at substantial levels because of a long-term medically determinable impairment. Over the past decade, Congress has instituted a number of initiatives designed to promote employment among disability beneficiaries.² The passage of the Ticket to Work and Work Incentives Improvement Act of 1999 prompted numerous changes in SSI and DI intended to encourage and facilitate work among program participants. Ticket to Work greatly expanded the types of organizations that SSA would pay to support beneficiaries’ employment efforts.

Ticket to Work program evaluations have reported results of a national survey in which a large minority

of beneficiaries—about 40 percent—stated that their personal goals included work or that they saw themselves working in the near future (Thornton and others 2007; Stapleton and others 2008). This figure seems especially high because the disability programs’ stringent eligibility requirements suggest that beneficiaries face formidable obstacles to employment; yet those studies also show that about half of these individuals (or about 20 percent of all beneficiaries) reported recent employment or work preparation

Selected Abbreviations

DI	Disability Insurance
IRS	Internal Revenue Service
NBS	National Beneficiary Survey
PIA	primary insurance amount
SSA	Social Security Administration
SSI	Supplemental Security Income

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Selected Abbreviations—*Continued*

TRF	Ticket Research File
VIF	variance inflation factor

activities. Thus, the 40 percent figure might not be unrealistic.

This article focuses on SSI and DI beneficiaries who report having work goals and expectations, assesses how they differ from other disability beneficiaries, and analyzes their work activity and the extent to which they meet their short-term employment expectations. Hereafter, these individuals are referred to as “work-oriented” beneficiaries. Data from the 2004 National Beneficiary Survey (NBS) are used to classify working-age (18 to 64) SSI and DI beneficiaries by their work-orientation status and to analyze their characteristics. The study also matches Social Security administrative data for 2004–2007 to the 2004 NBS to analyze employment activity during the NBS interview year and in the three following years. The analysis addresses the following issues:

- What are the characteristics of work-oriented beneficiaries and how do they differ from those of other disability beneficiaries? Among work-oriented beneficiaries, are there important differences across the SSI and DI programs?
- To what extent do work-oriented beneficiaries find work and leave the disability rolls during the years including and following their 2004 NBS interview?
- To what extent do work-oriented beneficiaries meet their short-term employment expectations?

Work-oriented beneficiaries are examined for two primary reasons. First, the policies designed to encourage employment are most relevant for this group. A better understanding of the characteristics and experiences of the SSI and DI beneficiaries most likely to demand and use employment supports might help SSA and other federal agencies improve their programs and better target their efforts. Second, prior analysis that compared work-related activities, goals, and expectations across 3 years of the NBS (Livermore, Stapleton, and Roche 2009) found a statistically significant increase in the share of beneficiaries reporting interest in employment, from 43 percent in 2004 to 48 percent in 2006. Most of this increase was due to changes in reported work goals and expectations. Perhaps SSA’s efforts to promote employment changed beneficiaries’ goals and expectations about work, and

provided an important first step toward success. The study analyzes the employment outcomes of work-oriented beneficiaries and allows us to assess how realistic their work goals and expectations turned out to be over an extended (4-year) period. This analysis defines beneficiaries as work-oriented if they report having work goals and expectations, regardless of whether they are currently engaged in work-related activities.³

The analysis found that work-related activities were highly concentrated among the 40 percent of beneficiaries classified as work-oriented. With all else held constant, work-oriented beneficiaries were significantly more likely to be enrolled in DI and not in SSI, have higher average lifetime earnings, be younger, be more educated, and report being in better health. They were also more likely to have been on the disability rolls a shorter time in their most recent period of entitlement and to have lower levels of non-Social Security assistance. Among work-oriented beneficiaries, just over half had recently worked or engaged in work preparation activities at the time they were interviewed in 2004. About half of work-oriented beneficiaries had earnings at some point from 2004 through 2007, and of those with earnings, about half had earnings in all 4 years. Although many were working, only 10 percent of work-oriented disability beneficiaries had earnings sufficient to suspend or terminate their cash benefits for at least 1 month from 2004 through 2007. Although many work-oriented beneficiaries fell short of their employment goals, the findings suggest that most were actively attempting to work, and many had some success.

Background

The SSI and DI programs are designed to provide income support to individuals who have significant disabilities and are unable to work at levels considered by SSA to be substantial, as determined by earnings amount, hours worked, and nature of work. To qualify for either program, an applicant must demonstrate an inability to engage in substantial gainful activity (SGA) due to a medically determinable impairment that is expected to last at least 12 months or result in death. As of 2011, earnings above \$1,000 per month qualify as SGA for most applicants.⁴ DI eligibility also requires accumulating a sufficient number of recent and lifetime quarters of Social Security-covered employment. The DI benefit level is based on past earnings—individuals with higher lifetime earnings are eligible for higher DI benefits. By contrast, SSI is a means-tested program;

that is, eligibility is subject to strict income and resource limits. The amount of monthly SSI cash assistance is based on the individual's income and living arrangement. Individuals may qualify for both SSI and DI if their income (including DI benefits) and assets do not exceed SSI limits. Eligibility for either program can also provide access to public health insurance. DI beneficiaries qualify for Medicare coverage after a 24-month waiting period, and most SSI recipients are eligible for Medicaid automatically.

Although initial eligibility for both programs is contingent on limited work activity, DI and SSI differ markedly in their treatment of earnings in determining monthly cash payments and ongoing program eligibility. In the DI program, individuals are permitted to work and earn at any level for up to 9 months without losing eligibility for benefits. This 9-month period is referred to as the trial work period.⁵ In 2011, individuals are considered to be in a trial work period if monthly earnings exceed \$720 or if they work more than 80 self-employed hours per month. If individuals earn more than the SGA level in any month after completing this period, they become ineligible for any DI benefits, but remain eligible for Medicare (if they completed the 24-month Medicare waiting period prior to losing DI eligibility).

SSI payments are reduced by \$1 for every \$2 of earnings above \$65 per month; thus, SSI payments decline gradually as earnings rise. SSI program provisions, known by their Social Security Act section numbers, allow certain participants with earnings above the SGA level to remain eligible for SSI payments (Section 1619(a)) or for Medicaid benefits even after SSI cash payments cease because of earnings (Section 1619(b)).

Elements of the SSI and DI programs can create disincentives for employment. Beneficiaries may not wish to jeopardize their cash or health insurance benefits by working, or may be willing to work only at limited levels so they will not lose benefits. This may be particularly true among DI-only beneficiaries with high benefits, some of whom might also be receiving benefits for dependents.⁶ Fear of losing benefits because of increased earnings is just one of a long list of potential barriers to employment that beneficiaries may face. Others include

- poor health or functioning that limits the ability to work or reduces productivity;
- inadequate education, skills, training, or job-related experience;

- lack of reliable transportation;
- lack of specific work-enabling supports;
- inaccessible workplaces and inflexible employment situations;
- discrimination and employer misconceptions of disability;
- insufficient wages or benefits offered with employment;
- lack of information about employment-related supports and resources available;
- lack of information about the effect of earnings on cash and in-kind benefits; and
- inadequate job search and interview skills or information.

A number of SSI and DI provisions help beneficiaries in their efforts to work.⁷ Most are intended to allow beneficiaries to maintain eligibility for public health insurance and to keep more of their cash disability benefits while working or preparing for work, but others help beneficiaries enhance their ability to work or their knowledge of the resources available to support their work efforts. Despite these supports, relatively few beneficiaries (about 9 percent) are employed at any given time (Livermore, Stapleton, and Roche 2009) and very few earn enough for cash benefits to cease in a given year.⁸

Given the large proportion of beneficiaries who report having work goals or expectations (40 percent), it may be surprising that so few are actually working at any given time. However, many beneficiaries share certain characteristics that can limit the ability to secure and maintain employment despite their desire to do so (Thornton and others 2007; Stapleton and others 2008; Livermore, Stapleton, and Roche 2009). Aside from poor health, large shares have less than a high school education, live in poverty, and report a variety of obstacles such as lack of reliable transportation, inaccessible workplaces, and discouragement of work either from others or through their own experiences. Survey respondents may also exaggerate their interest in work.

This article builds on previous studies of the employment of SSI and DI beneficiaries by presenting descriptive statistics on the characteristics and employment outcomes of beneficiaries who report having work goals and expectations, and by drawing comparisons with those who do not. It also conducts multivariate analyses to explore the characteristics associated with being work-oriented and the

determinants of leaving the disability benefit rolls because of earnings. Linking the survey data to administrative data sources also allows for an assessment of the extent to which work-oriented beneficiaries met their goals during the period following their survey interview.

Data

Four rounds of the NBS have been conducted as part of the Ticket to Work program evaluation. A new, nationally representative sample of beneficiaries aged 18 to 64 is selected for each round; for the first round, conducted in 2004, the sample comprised 7,603 respondents.⁹ Each sample provides a wealth of information about the characteristics, service use, and employment activities of Social Security disability beneficiaries.

The analyses presented here are based on the 2004 NBS. The earliest round was selected because it provided the longest observation period into which the Social Security administrative data could be incorporated. Records in the 2004 NBS were matched to data contained in the 2007 Ticket Research File (TRF). The TRF consists of data extracts from a number of Social Security administrative files and contains records for all individuals aged 10 to 64 who have participated in the SSI and DI programs since 1996 (including those who entered SSI or DI prior to 1996). These data permit the analysis of information on mortality, the use of SSA work supports, and the number of months that cash benefits were suspended or terminated because of work.

The 2004 NBS data also were matched to annual Internal Revenue Service (IRS) records to analyze the earnings of NBS respondents during 2004–2007.¹⁰ The earnings data come from SSA’s Master Earnings

File, which contains wage and salary items from the employer-filed W-2 form and information on other earnings not subject to Federal Insurance Contributions Act (FICA) Social Security and Medicare taxes.¹¹

The 2004 NBS sample sizes are shown in Table 1.¹² Beneficiaries are categorized by work orientation based on self-reported goals and expectations. Respondents were asked if their personal goals included getting a job, moving up in a job, or learning new job skills. They were also asked if they saw themselves working for pay in the next year and in the next 5 years. Respondents providing a positive response to any of these questions were classified as work-oriented. The specific NBS questions (and results) were as follows:

- Do your personal goals include [(if not working) getting a job,] moving up in a job, or learning new job skills? (30 percent responded positively.)
- Please tell me how much you agree with the following statements. Would you say you strongly agree, agree, disagree, or strongly disagree?
 - You see yourself [(if working) continuing to work/(if not working) working] for pay in the next year. (20 percent agreed or agreed strongly.)
 - You see yourself [(if working) continuing to work/ (if not working) working] for pay in the next five years. (26 percent agreed or agreed strongly.)

Forty percent of the sample provided a positive response to at least one of these questions and was classified as work-oriented. In this study, many statistics are shown by program type to identify any differences in the experiences of work-oriented beneficiaries

Table 1.
2004 NBS sample sizes, by work orientation and program type

Measure	All beneficiaries	Nonwork-oriented beneficiaries	Work-oriented beneficiaries			
			All	DI-only	Concurrent	SSI-only
Number						
Unweighted	7,603	3,170	4,433	1,790	909	1,734
Weighted	8,786,823	5,308,163	3,478,660	1,643,854	645,556	1,189,250
Percentage distribution of weighted samples						
All disability beneficiaries	100	60	40	19	7	14
Work-oriented beneficiaries	...	...	100	47	19	34

SOURCE: Author’s calculations, 2004 National Beneficiary Survey.

NOTES: ... = not applicable.

Rounded components of percentage distributions do not necessarily sum to 100.

between DI and SSI participants. Program types are DI-only, SSI-only, and concurrent (participating in both programs). The weighted and unweighted sample sizes for all subgroups are shown in Table 1.

All estimates were derived using the relevant survey sampling weights, and all standard errors used to compute tests of statistical significance account appropriately for the survey's complex sampling design.¹³ The statistics represent all working-age SSI and DI beneficiaries on the disability rolls as of June 2003.

Personal Characteristics

A variety of personal characteristics have been shown to be associated with beneficiary work-related activity and employment success. Previous analyses have examined the characteristics associated with employment, service use, and Ticket to Work program participation (Thornton and others 2007; Stapleton

and others 2008). Those studies showed that age, health status, and time on the disability rolls were significantly correlated with these outcomes. This section focuses on work-oriented beneficiaries and examines how their program participation, sociodemographic, and health characteristics differ from those of nonwork-oriented beneficiaries. A multivariate analysis of the predictors of work orientation follows, in which other characteristics are held constant and program type is treated as a characteristic potentially differentiating work-oriented from nonwork-oriented beneficiaries.

Work-oriented beneficiaries differed somewhat from other disability beneficiaries in terms of their distribution by SSA program type and average benefit amounts (Table 2). Relative to those without work goals or expectations, work-oriented beneficiaries were significantly less likely to be DI-only beneficiaries

Table 2.
Disability beneficiary program participation and sociodemographic characteristics, by work orientation and program type

Characteristic	All beneficiaries	Work-oriented beneficiaries				Nonwork-oriented beneficiaries			
		All	DI-only	Con-current	SSI-only	All	DI-only	Con-current	SSI-only
Program participation characteristics									
Program type at interview (%)									
DI-only	53.3	47.3*	100.0	...	...	57.2	100.0	...	...
Concurrent	16.2	18.6*	...	100.0	...	14.7	...	100.0	...
SSI-only	30.5	34.2*	...	...	100.0	28.1	...	...	100.0
Mean monthly benefit amount (\$)	788.0	741.7**	962.2	645.8	489.1	818.2	1,014.4	652.5	505.1
Months since initial award (%)									
Fewer than 24	3.8	4.5	6.1	4.3	2.4	3.3	4.3	2.1	1.9
24–59	19.8	20.0	29.0	13.8	11.0	19.6	28.0	9.1	7.9
60–119	23.2	22.1	23.9	18.5	21.5	23.8	27.8	17.1	19.2
120 or more	53.3	53.4	41.0	63.4	65.1	53.2	39.8	71.6	70.9
Mean months since initial award	148.8	146.2	122.3	173.1	164.7	150.4	121.8	204.5	180.3
Months since most recent award (%)									
Fewer than 24	9.3	9.5*	8.3	16.7	7.4	9.2	9.7	14.9	5.3
24–59	25.3	27.6*	31.1	30.1	21.4	23.8	27.1	20.8	18.6
60–119	26.1	25.7*	25.1	29.2	24.7	26.3	27.8	25.9	23.4
120 or more	39.3	37.1*	35.6	24.0	46.5	40.7	35.4	38.5	52.8
Mean months since most recent award	113.3	109.0**	107.8	85.5	123.5	116.2	108.3	104.0	138.5
Sociodemographic characteristics									
Mean age (years)	48.7	43.5**	48.3	41.0	38.3	52.0	54.7	49.2	48.1
Percentage distributions:									
By sex									
Men	49.7	51.0	54.3	51.3	46.1	48.8	54.9	44.0	39.0
Women	50.3	49.0	45.7	48.7	53.9	51.2	45.1	56.0	61.0

(Continued)

Table 2.
Disability beneficiary program participation and sociodemographic characteristics, by work orientation and program type—Continued

Characteristic	All beneficiaries	Work-oriented beneficiaries				Nonwork-oriented beneficiaries			
		All	DI-only	Con-current	SSI-only	All	DI-only	Con-current	SSI-only
Sociodemographic characteristics (cont.)									
Percentage distributions:									
By race									
White	71.3	66.5*	75.2	66.1	54.7	74.4	80.1	71.9	64.1
Black	22.4	27.2*	20.9	25.8	36.7	19.3	15.7	20.5	25.9
Other race	6.3	6.3*	3.9	8.1	8.7	6.3	4.2	7.6	9.9
By ethnicity									
Hispanic origin	10.6	11.6	8.4	16.3	13.5	9.9	5.4	15.0	16.2
Non-Hispanic	89.4	88.4	91.6	83.7	86.5	90.1	94.6	85.0	83.8
By educational attainment									
Did not finish high school	41.9	37.9*	26.5	39.8	52.6	44.5	31.5	61.1	62.4
High school diploma or equivalent	35.3	35.5*	37.5	36.8	31.9	35.2	41.2	26.8	27.1
Education beyond high school	22.8	26.6*	36.0	23.4	15.5	20.3	27.3	12.1	10.5
By living arrangement									
Lives alone or with unrelated others	35.7	35.8*	31.2	47.9	35.6	35.6	28.4	43.9	45.9
Lives with spouse/other relatives, no children	50.0	46.8*	52.3	36.8	44.6	52.1	59.7	45.1	40.0
Lives with spouse and own children	8.1	9.2*	10.6	7.7	8.2	7.4	8.9	4.9	5.6
Unmarried and lives with own children	6.3	8.2*	5.9	7.6	11.6	5.0	3.0	6.1	8.5
By household income in 2003 as a percentage of federal poverty threshold									
Less than 100	48.5	49.5	30.2	65.6	67.6	47.9	27.4	73.8	76.0
100–299	38.6	38.9	52.1	28.7	26.4	38.4	51.4	23.3	20.0
300 or more	12.8	11.5	17.8	5.7	6.0	13.7	21.2	2.9	4.0

SOURCE: 2004 NBS linked to the 2007 TRF.

NOTES: Sample size = 7,603.

... = not applicable.

Rounded components of percentage distributions do not necessarily sum to 100.

* = Significantly different from the distribution of all nonwork-oriented beneficiaries at the 0.05 level, chi-square test.

** = Significantly different from all nonwork-oriented beneficiaries at the 0.05 level, two-tailed test.

and more likely to be SSI recipients. SSI payments are lower, on average, than DI benefits, which might contribute to the finding that the average Social Security benefit amount for work-oriented beneficiaries was significantly lower than that of nonwork-oriented beneficiaries. Work-oriented beneficiaries in each program had lower benefit amounts than their nonwork-oriented counterparts. Elapsed time since initial disability award did not differ significantly according to work orientation: About 53 percent of both groups

received their initial award 10 or more years before the NBS interview. This finding holds for DI-only beneficiaries, but the average time since initial award for work-oriented SSI-only and concurrent beneficiaries was shorter than that of their nonwork-oriented counterparts by 15.6 and 31.4 months, respectively. However, the average time elapsed since work-oriented beneficiaries' most *recent* award was significantly shorter (by 7 months) than that of nonwork-oriented beneficiaries. This finding holds for concurrent and

SSI-only beneficiaries, but average time since most recent award did not differ between work-oriented and other DI-only beneficiaries.

Table 2 also shows that work-oriented beneficiaries differed from those without work goals or expectations in terms of certain sociodemographic characteristics. On average, work-oriented beneficiaries were significantly younger and were more likely to be nonwhite. They also were more likely to have at least finished high school. These findings do not change when the groups are compared by program. In terms of living arrangements, work-oriented beneficiaries were as likely to live alone as those without work goals or expectations, but were more likely to be living with children. When compared by program, work-oriented SSI-only recipients were much less likely to live alone than their nonwork-oriented counterparts. For disability beneficiaries overall, the likelihood of living in households with incomes below the federal poverty level did not differ according to work orientation. However, work-oriented SSI-only and concurrent beneficiaries were less likely to be in poverty than their nonwork-oriented counterparts were.

By a variety of indicators, work-oriented beneficiaries appear to be in better health than beneficiaries without work goals or expectations (Table 3), and this is true regardless of program type. Overall, work-oriented beneficiaries were significantly less likely to report being in poor or very poor health (30.2 percent versus 51.6 percent), to report that their health was worse than last year (29.3 percent versus 48.1 percent), and to report difficulty with 10 out of 13 specific activities. Administrative data also indicate that work-oriented beneficiaries were significantly less likely to have died during the 3-plus years following the NBS interview in 2004 (5.8 percent compared with 10.5 percent). Beneficiaries with and without work goals or expectations were similar in the extent to which they experienced difficulties with selected social and cognitive activities such as getting along with others, concentrating, and coping with stress.

The differences in health status might in part reflect the age difference between the two groups, as well as the nature of the underlying conditions causing disability. In addition to being younger on average (Table 2), work-oriented beneficiaries, regardless of program, were significantly more likely to report that their disabilities began during childhood (Table 3). Work-oriented beneficiaries were significantly more likely to report mental illness and intellectual disability as conditions limiting their daily activities, and

less likely to report musculoskeletal disorders as a limiting factor. With the scope narrowed to SSI-only recipients, the likelihood of reporting mental illness was about equal for those with and without work goals or expectations; the same was true for intellectual disability among concurrent and SSI-only beneficiaries. Thus, the overall differences by work orientation appear to be due to the relatively higher prevalence of mental illness and intellectual disability among work-oriented DI-only beneficiaries, and a higher prevalence of mental illness among work-oriented concurrent beneficiaries compared with their nonwork-oriented counterparts.

Predictors of Work Orientation

This section describes the general findings of a logistic regression model constructed to determine which characteristics were significantly associated with being work-oriented. The appendix discusses the model's explanatory variables; Table 4 presents its results. The model's findings are summarized for the following categories of characteristics, holding all other characteristics constant:¹⁴

Program type and benefit level. DI-only beneficiaries were generally more likely to be work-oriented than other beneficiaries, but DI beneficiaries with higher than average lifetime earnings were significantly less likely to be work-oriented.¹⁵ DI eligibility requires recent and sufficient work history at the time of disability onset. Thus, finding that DI-only beneficiaries are more likely to be work-oriented might indicate that, with all else held constant, those with stronger labor market histories are more likely to be work-oriented after entering disability programs. Work history and unobserved characteristics such as motivation to work are both likely to affect current work goals and expectations.¹⁶ Finding that those with higher lifetime earnings are less likely to be work-oriented might seem counterintuitive. Perhaps because higher earners face greater opportunity costs for leaving the labor force because of disability, they might have relatively more severe disabilities than lower earners by the time they enter DI, and therefore be less likely to be work-oriented after program entry.

Social Security benefit levels are not significant work orientation predictors after controlling for other characteristics, but individuals receiving more than \$500 per month in non-Social Security benefits were significantly less likely to report having work goals or expectations. Time on the disability rolls for the most recent period of entitlement is also a significant

predictor of work orientation. After the first year on the rolls, the more time had elapsed since the most recent award, the less likely beneficiaries were to report having work goals or expectations.

Age and sex. The likelihood of being work-oriented decreased markedly with age. Sex is not a significant predictor of work orientation.

Race and ethnicity. Beneficiaries who are black and those who are Hispanic were significantly more likely to be work-oriented than beneficiaries of other races or ethnicity.

Education. The likelihood of being work-oriented increased with level of education.

Table 3.
Disability beneficiary health and functional status indicators, by work orientation and program type (in percent)

Indicator	All beneficiaries	Work-oriented beneficiaries				Nonwork-oriented beneficiaries			
		All	DI-only	Con-current	SSI-only	All	DI-only	Con-current	SSI-only
Childhood disability onset	22.8	31.5*	17.2	40.1	46.8	17.0	8.4	29.5	28.0
General health									
Excellent or very good	10.0	16.0**	12.6	17.3	20.0	6.0	4.9	6.3	8.1
Good or fair	46.9	53.8**	54.4	59.1	50.1	42.4	40.7	48.1	43.0
Poor or very poor	43.1	30.2**	33.1	23.6	29.9	51.6	54.4	45.6	48.9
Current health compared to last year									
Better	16.1	23.3**	22.1	25.1	23.9	11.4	10.5	11.7	13.2
About the same	43.2	47.4**	46.5	48.6	48.0	40.5	38.5	43.8	42.8
Worse	40.7	29.3**	31.4	26.3	28.1	48.1	51.0	44.5	44.0
Category of limiting condition(s)									
Musculoskeletal disorders	36.1	28.5*	33.5	26.6	22.6	41.0	45.1	37.9	34.2
Mental illness	31.0	34.8*	31.7	41.3	35.5	28.5	24.2	31.1	36.0
Other diseases of the nervous system	15.1	14.0	14.5	13.4	13.8	15.9	18.1	12.9	12.9
Sensory disorders	9.0	8.9	8.6	10.4	8.5	9.0	8.5	10.2	9.4
Intellectual disability	7.2	8.1*	5.3	11.7	10.2	6.5	3.4	12.3	9.9
Other	63.2	56.1*	58.2	50.4	56.3	67.8	69.6	66.0	65.0
No limiting conditions	4.6	7.9*	6.3	8.1	9.9	2.4	2.3	3.7	2.1
Difficulty with specific activities									
Walking 3 blocks, climbing 10 steps, standing 1 hour, or crouching	84.4	74.3*	79.9	71.0	68.4	91.0	94.0	87.0	86.9
Grasping, reaching, or lifting 10 pounds	67.5	54.5*	59.1	48.6	51.3	76.0	79.4	71.7	71.4
Speaking, hearing, or seeing	65.3	60.4*	60.5	58.5	61.3	68.4	66.7	69.1	71.7
Coping with stress	58.7	56.9	53.3	61.2	59.6	59.9	54.8	67.8	66.1
Concentrating	55.1	54.6	52.9	53.4	57.7	55.5	50.7	59.2	63.4
Getting around outside of the home	46.6	36.1*	38.4	32.5	34.8	53.5	53.1	51.0	55.6
Shopping for personal items	37.1	28.9*	29.1	30.6	27.9	42.4	39.1	46.1	47.2
Preparing meals	38.0	31.4*	30.0	33.4	32.3	42.3	39.3	48.7	45.3
Getting into or out of bed	37.2	29.1*	33.2	24.9	25.6	42.5	45.7	31.8	41.6
Bathing or dressing	28.7	21.5*	24.3	17.7	19.6	33.5	32.8	31.7	35.9
Getting along with others	26.4	28.0	22.1	33.9	33.1	25.4	20.9	29.3	32.3
Getting around inside the house	22.8	16.2*	18.4	13.7	14.6	27.2	28.8	22.4	26.2
Eating	15.4	11.2*	10.8	11.0	12.0	18.2	17.3	21.7	18.0
Died between interview and December 2007	8.6	5.8*	7.5	4.1	4.2	10.5	11.4	9.1	9.3

SOURCE: 2004 NBS linked to the 2004 TRF.

NOTES: Sample size = 7,603.

Rounded components of percentage distributions do not necessarily sum to 100.

* = Significantly different from all nonwork-oriented beneficiaries at the 0.05 level, two-tailed test.

** = Significantly different from the distribution of all nonwork-oriented beneficiaries at the 0.05 level, chi-square test.

Living arrangement. Living arrangement, defined based on marital status, children, and living with others, is not a significant predictor of work orientation after controlling for other characteristics, with the exception of those living with their own children aged 6 or younger, who were significantly more likely to be work-oriented than others.

Health status. Specific health conditions are not predictive of work orientation, but a variety of health status measures are significant predictors. With one exception, these measures indicated that those in better health were significantly more likely to be work-oriented than were those in poorer health. The exception was the variable reflecting indicators of

Table 4.
Logit model estimates of the likelihood of being work-oriented

Variable	Coefficient	Standard error	Odds ratio
Constant	-1.68	0.23	0.19
<i>Program participation characteristics</i>			
Program type			
Concurrent	0.11	0.11	1.12
DI-only	0.23*	0.11*	1.26*
Social Security benefits monthly amount			
PIA greater than \$1,200	-0.47*	0.13*	0.63*
\$500–\$1,000	-0.04	0.12	0.97
Greater than \$1,000	-0.08	0.14	0.92
Non-Social Security benefits monthly amount			
\$1–\$199	0.00	0.10	1.00
\$200–\$499	0.01	0.15	1.01
\$500 or more	-0.37*	0.15*	0.69*
Months on disability benefit rolls			
0–12	-0.13	0.26	0.88
13–24	0.50*	0.16*	1.65*
25–60	0.27*	0.11*	1.32*
61–120	-0.04	0.10	0.96
<i>Sociodemographic characteristics</i>			
Age			
18–24	2.11*	0.15*	8.22*
25–39	1.36*	0.12*	3.91*
40–54	0.83*	0.11*	2.30*
Sex, race, and ethnicity			
Male	0.03	0.08	1.03
Black	0.39*	0.10*	1.48*
Other race	0.14	0.17	1.15
Hispanic origin	0.36*	0.13*	1.44*
Educational attainment and income			
Completed high school or equivalent	0.21*	0.09*	1.23*
Education beyond high school	0.81*	0.12*	2.24*
Family income = 300 percent or more of federal poverty threshold	-0.10	0.12	0.91
Living arrangements			
Lives with spouse or other relatives, no children	-0.07	0.11	0.93
Married, lives with children	-0.08	0.16	0.92
Unmarried, lives with children	0.15	0.15	1.17
Lives with children younger than age 6	0.31*	0.17*	1.37*

(Continued)

Table 4.
Logit model estimates of the likelihood of being work-oriented—Continued

Variable	Coefficient	Standard error	Odds ratio
<i>Health characteristics</i>			
Cause of limiting condition			
Mental illness	0.08	0.09	1.08
Intellectual disability	-0.19	0.14	0.83
Musculoskeletal disorders	0.03	0.08	1.03
Sensory disorders	0.11	0.15	1.12
Other disorders of the nervous system	-0.05	0.10	0.95
Other condition causing limitation	-0.01	0.08	0.99
No condition causing limitation	0.51*	0.22*	1.66*
Health status ^a			
MCS score 44–51	0.16	0.12	1.17
MCS score greater than 51	0.10	0.09	1.11
PCS score 44–51	0.30*	0.11*	1.35*
PCS score greater than 51	0.47*	0.14*	1.59*
MCS and PCS scores both greater than 51	0.37*	0.16*	1.45*
Presence or type of limitation			
No ADL, IADL, or functional limitations	0.44*	0.23*	1.55*
At least one ADL/IADL requiring assistance	-0.26*	0.09*	0.77*
At least one severe physical limitation	-0.41*	0.08*	0.67*
Other health indicator			
Obesity	0.08	0.08	1.09
Substance abuse	0.55*	0.18*	1.74*

SOURCE: Author's calculations based on 2004 NBS.

NOTES: Sample size = 7,603.

PIA = primary insurance amount; MCS = Medical Component Summary; PCS = Physical Component Summary; ADL = activities of daily living; IADL = instrumental activities of daily living.

* = Statistically significant at the 0.05 level.

a. The MCS and PCS measures were developed by designers of the SF-8 Health Survey. MCS and PCS scores for the general adult population both have a mean of 50 and a standard deviation of 10. For more information about the SF-8, see Ware and others (2001).

substance abuse. Those reporting such indicators were significantly more likely to be work-oriented than others.

Many of the differences in characteristics between beneficiaries who were and were not work-oriented still hold after controlling for other characteristics, but some do not. For example, although work-oriented beneficiaries were less likely to be enrolled in DI only, after controlling for other characteristics, DI-only status is a significant and positive predictor of being work-oriented. Likewise, Hispanic ethnicity is a significant predictor of being work-oriented after controlling for other characteristics. As shown earlier, some of the differences are due to differences in the characteristics of beneficiaries across programs. The multivariate analysis allows us to see which characteristics are significantly associated with work

orientation after controlling for program and other characteristics.

Consistent with findings on the determinants of work activity and work-orientation status presented in other studies (Thornton and others 2007; Stapleton and others 2008), the model indicates that younger ages, shorter time on the disability rolls, and higher educational attainment are important positive predictors of beneficiaries having work goals or expectations. Age in particular is a strong predictor. Those aged 18 to 24 were most likely to report having work goals or expectations (8.22 odds ratio). The findings suggest that targeting information about employment supports and interventions to beneficiaries with these characteristics might lead to significant improvements in employment outcomes and reduced reliance on benefits.

Employment Outcomes and Benefit Cessation

This section presents information about the employment-related activities of beneficiaries, focusing on differences by work orientation. Because SSI and DI differ significantly in terms of eligibility requirements and the treatment of earnings, employment outcomes for work-oriented beneficiaries also are examined by program.

Overview of Employment-Related Activities

Not surprisingly, work-oriented beneficiaries were much more likely to engage in work-related activities than other beneficiaries (Table 5). About one-quarter of work-oriented beneficiaries received training or other services during the previous year that were specifically intended to enhance their employment prospects, and 41 percent reported that they recently worked or actively sought work. By comparison, only 4 percent of nonwork-oriented beneficiaries reported any employment service or training activities and only 3 percent indicated any recent work or job searches. Just over half (52 percent) of work-oriented

beneficiaries reported participating in any sort of recent employment-related activities, compared with only 6 percent of nonwork-oriented beneficiaries.

Analysis by program type reveals that SSI recipients were significantly more likely than DI-only beneficiaries to be looking for work or waiting to finish school or a training program at the time of the NBS interview. Although SSI recipients were more likely to be seeking a job, they were significantly less likely to have engaged in recent work-related activities overall. This may stem from their much lower employment rates, both at interview (15 percent for SSI-only recipients compared with 25 percent for DI-only beneficiaries) and during the previous year (22 percent versus 33 percent). These findings seem logical given the different eligibility criteria for the two programs. DI beneficiaries need more significant work histories to qualify for benefits, whereas SSI recipients' work histories are insufficient to qualify for DI benefits. The same factors that contributed to the differences in work histories likely contributed to the differences in their recent employment success.

Table 5.
Employment-related activities of disability beneficiaries, by work orientation and program type (in percent)

Activity	All beneficiaries	Nonwork-oriented beneficiaries	Work-oriented beneficiaries			
			All	DI-only	Concurrent	SSI-only
Employment service or training						
Used employment or training services in previous year	9	3	17*	18	21	14
Used employment or other services in previous year specifically for getting a job or increasing income	3	1	7*	7	9	5
Not working because waiting to finish school or training program	4	1	10*	6	11**	15**
Any employment service or training	12	4	24*	22	27	24
Work or job search						
Working at interview	9	1	21*	25	22	15**
Worked during the previous year	13	2	29*	33	33	22**
Looked for work in past 4 weeks	6	1	13*	10	17**	16**
Any work or job search	18	3	41*	42	45	36**
Any of the above activities	24	6	52*	51	56	50

SOURCE: 2004 NBS.

NOTES: Sample size = 7,603.

Rounded components of percentage distributions do not necessarily sum to 100.

* = Significantly different from nonwork-oriented beneficiaries at the 0.05 level, two-tailed test.

** = Significantly different from work-oriented DI-only beneficiaries at the 0.05 level, two-tailed test.

Earnings During 2004–2007

SSA staff analyzed annual IRS earnings data matched to the 2004 NBS to examine whether disability beneficiaries had earnings during 2004–2007, and if so, to determine the amounts (Table 6). Overall, 27 percent of beneficiaries had earnings in at least 1 of the 4 years, and among those with any earnings, 25 percent earned above the annualized SGA level for nonblind beneficiaries in at least 1 year.¹⁷ As expected, work-oriented beneficiaries were significantly more likely than other beneficiaries to have earnings. Nearly half (45 percent) of all work-oriented beneficiaries had earnings in at least 1 of the 4 years, compared with only 15 percent of nonwork-oriented beneficiaries. Among those with earnings, work-oriented beneficiaries had higher average earnings than nonwork-oriented beneficiaries (\$7,091 versus \$5,121), were significantly more likely to have worked above the annualized SGA level in at least 1 year (28 percent versus 19 percent), and were more likely to have earnings in multiple years (80 percent versus 66 percent). SSI-only recipients were significantly less likely than other work-oriented beneficiaries to have earnings in any of the 4 years, and both SSI-only and concurrent beneficiaries had lower average earnings and were significantly less likely to earn above the annualized SGA level in at least 1 of the 4 years than were work-oriented DI-only beneficiaries.¹⁸

When the earnings of beneficiaries with and without work goals or expectations are compared across individual years, two interesting patterns emerge (Table 7). First, the percentages who were working in each group remained constant across all years—about one-third of work-oriented beneficiaries and just under one-tenth of nonwork-oriented beneficiaries had earnings in each of the 4 years. Second, earnings increased each year among work-oriented beneficiaries, contrasting with the relatively flat earnings across the years for those who are not work-oriented. During the first year, the share of beneficiaries who worked was much greater among the work-oriented, but their average earnings and likelihood of earning above SGA level did not differ significantly from those of other beneficiaries with earnings. Over the next 3 years, there was a steady increase in both the average earnings and likelihood of earning above SGA level among work-oriented beneficiaries that was not evident among nonwork-oriented beneficiaries with earnings.

Months Without Cash Benefits Because of Work

Administrative data in the TRF were used to determine the share of beneficiaries whose DI and SSI cash benefits were suspended or terminated for at least 1 month during 2004–2007 because of work activity (Table 8).¹⁹ Although benefit cessation because of work

Table 6.
Earnings of disability beneficiaries during 2004–2007, by work orientation and program type

Earnings measure	All beneficiaries	Nonwork-oriented beneficiaries	Work-oriented beneficiaries			
			All	DI-only	Concurrent	SSI-only
No earnings 2004–2007 (%)	73	85	56*	51	49	63**
Earnings in 1 year only (%)	7	5	9*	8	12	9
Earnings in all 4 years (%)	11	5	21*	24	23	15**
Earnings in any year 2004–2007 (%)	27	15	45*	49	51	37**
Average annual earnings (\$) ^a	6,442	5,121	7,091*	8,605	4,781**	6,087**
Earners with earnings exceeding annualized SGA level in at least 1 year (%) ^b	25	19	28*	32	23**	26**

SOURCE: 2004 NBS matched to 2004–2007 IRS earnings data.

NOTES: Sample size = 7,603.

Earnings are expressed in 2007 dollars, adjusted based on the national Average Wage Index.

* = Significantly different from nonwork-oriented beneficiaries at the 0.05 level, two-tailed test.

** = Significantly different from work-oriented DI-only beneficiaries at the 0.05 level, two-tailed test.

a. Computed as the mean of the individual averages across all years with earnings among those with earnings in any of the 4 years.

b. The annualized nonblind SGA level was approximately \$11,000 (ranging from \$10,788 to \$11,017) in each year when expressed in 2007 dollars.

Table 7.
Selected earnings characteristics of disability beneficiaries with positive earnings, by work orientation, 2004–2007

Characteristic	All beneficiaries	Work-oriented beneficiaries	Nonwork-oriented beneficiaries
2004			
Percentage with—			
Any earnings	18	^a 33	9
Earnings exceeding annualized SGA level ^b	19	20	18
Average annual earnings (\$)	6,792	7,196	5,809
2005			
Percentage with—			
Any earnings	19	^a 33	9
Earnings exceeding annualized SGA level ^b	20	22	17
Average annual earnings (\$)	7,488	^a 8,110	5,972
2006			
Percentage with—			
Any earnings	18	^a 33	9
Earnings exceeding annualized SGA level ^b	22	^a 24	18
Average annual earnings (\$)	7,739	^a 8,649	5,574
2007			
Percentage with—			
Any earnings	18	^a 31	8
Earnings exceeding annualized SGA level ^b	23	^{a,c} 26	16
Average annual earnings (\$)	8,127	^{a,c} 9,159	5,580

SOURCE: 2004 NBS matched to 2004–2007 IRS earnings data.

NOTES: Sample size = 7,603.

Earnings are expressed in 2007 dollars based on the national Average Wage Index.

- a. Significantly different from nonwork-oriented beneficiaries at the 0.05 level, two-tailed test. Tests of significance were not performed on median values.
- b. The annualized nonblind SGA level was approximately \$11,000 (ranging from \$10,788 to \$11,017) in each year when expressed in 2007 dollars.
- c. Significantly different from the corresponding 2004 value at the 0.05 level, two-tailed test.

is generally infrequent, work-oriented beneficiaries were much more likely to experience it than nonwork-oriented beneficiaries were (9.7 percent versus 3.4 percent). Work-oriented beneficiaries with earnings sufficient to discontinue cash benefits for 1 year or longer constituted about half of work-oriented beneficiaries with at least 1 month of discontinued benefits and 4.5 percent of all work-oriented beneficiaries. Given the lack of work expectations and limited recent work-related activities observed among nonwork-oriented beneficiaries, it is perhaps surprising that even 3.4 percent had earnings sufficient to discontinue benefits for at least 1 month between 2004 and 2007. Possibly, circumstances and work expectations changed after the interview in 2004. For a small share of beneficiaries,

reporting recent work activity at the time of interview was not synonymous with having work-related goals or expectations. As shown in Table 5, 6 percent of nonwork-oriented beneficiaries reported engaging in recent employment-related activities when interviewed in 2004. Furthermore, nearly half (48 percent) of work-oriented beneficiaries had not engaged in any recent employment-related activities at interview. Just as work-related goals and expectations are not a universal indicator of work-related activity, their absence does not necessarily equate with a lack of work-related activity.

Although the administrative data are somewhat imprecise in attributing cash benefit suspensions and terminations to work activity,²⁰ the findings suggest

that work-oriented beneficiaries often overestimate the likelihood that they will work and earn enough to discontinue disability benefits. As Table 9 shows, 19 percent of all work-oriented beneficiaries saw themselves earning enough to discontinue benefits within 1 year, and 38 percent saw themselves doing so within 5 years. Administrative data for the interview year and the 3 following years indicate that only 10 percent had earned enough to discontinue benefits for at least 1 month. Although lower than their stated expectations, this still represents a significant number of cash benefit suspensions and terminations because of work, and suggests that the expectations of work-oriented beneficiaries are not entirely unrealistic.

The likelihood of earning enough to discontinue benefits varied across programs (Table 8). Work-oriented SSI-only and concurrent beneficiaries were significantly more likely to discontinue cash benefits for at least 1 month because of work (about 11 percent)

than their DI-only counterparts were (8.0 percent). This may be because earnings affect SSI payments more readily than DI benefits, DI's 9-month trial work period delays the cessation of benefits, and those with high DI benefit levels might be unwilling or unable to earn enough to replace the benefits lost if earnings exceed SGA level.²¹

Determinants of Leaving the Disability Rolls Because of Work

This section describes the findings of a logistic regression model constructed to determine which characteristics were significantly associated with leaving the disability rolls because of work for 1 month or longer during 2004–2007. Model estimates are based on the full sample of beneficiaries regardless of work orientation. The appendix discusses the model's explanatory variables and Table 10 presents its results. The model's findings are summarized for the following categories

Table 8.
Months off the disability rolls because of work during 2004–2007, by work orientation and program type (in percent)

Months	All beneficiaries	Nonwork-oriented beneficiaries	Work-oriented beneficiaries			
			All	DI-only	Concurrent	SSI-only
0	94.1	96.6	90.3*	92.0	88.9**	88.8**
1–3	1.2	0.6	2.0*	1.3	2.4**	2.8**
4–12	2.0	1.2	3.1*	2.1	4.5**	3.9**
13–24	1.8	1.5	2.3*	1.1	3.1**	3.4**
25–48	0.9	0.1	2.2*	3.5	1.1**	1.2**

SOURCE: 2004 NBS matched to the 2007 TRF.

NOTES: Sample size = 7,603.

* = Significantly different from the distribution of nonwork-oriented beneficiaries at the 0.05 level, chi-square test.

** = Significantly different from the distribution of work-oriented DI-only beneficiaries at the 0.05 level, chi-square test.

Table 9.
Employment expectations among work-oriented disability beneficiaries, by program type (in percent)

Expectation	All	DI-only	Concurrent	SSI-only
Sees self working for pay within—				
1 year	51	51	54	49
5 years	65	62	69*	67*
Sees self working and earning enough to stop receiving disability benefits within—				
1 year	19	15	19	24*
5 years	38	34	39	43*

SOURCE: 2004 NBS.

NOTES: Sample size = 4,433.

* = Significantly different from DI-only beneficiaries at the 0.05 level, two-tailed test.

of characteristics, holding all other characteristics constant:

Program type and benefit level. SSI-only recipients were more likely than other beneficiaries to leave the disability rolls because of work. Those with low Social Security benefits (less than \$500 per month) were also significantly more likely to leave the rolls for at least 1 month during the 4-year observation period.

Time on the rolls for the most recent period of entitlement is a significant predictor; those observed during their second year on the rolls (months 13 to 24) were more likely to leave the rolls because of work than others were.

Age and sex. After controlling for other characteristics, neither age nor sex is a significant predictor of leaving the rolls because of work.

Table 10.
Logit model estimates of the likelihood of working enough to leave the disability rolls for at least 1 month during 2004–2007

Variable	Coefficient	Standard error	Odds ratio
Constant	-0.86	0.37	0.42
<i>Program participation characteristics</i>			
Program type			
Concurrent	-0.03	0.18	0.97
DI-only	-1.11*	0.23*	0.33*
Social Security benefits monthly amount			
PIA greater than \$1,200	-0.13	0.34	0.88
\$500–\$1,000	-0.95*	0.16*	0.39*
Greater than \$1,000	-0.83*	0.30*	0.43*
Non-Social Security benefits monthly amount			
\$1–\$199	0.03	0.19	1.03
\$200–\$499	-0.18	0.26	0.84
\$500 or more	-0.21	0.30	0.81
Months on disability benefit rolls			
0–12	-0.01	0.35	0.99
13–24	0.74*	0.27*	2.09*
25–60	0.29	0.19	1.33
61–120	0.23	0.18	1.26
<i>Sociodemographic characteristics</i>			
Age			
18–24	-0.12	0.26	0.89
25–39	0.13	0.22	1.14
40–54	-0.08	0.23	0.92
Sex, race, and ethnicity			
Male	-0.15	0.14	0.86
Black	-0.10	0.19	0.91
Other race	-0.81*	0.33*	0.44*
Hispanic origin	-0.32	0.25	0.72
Educational attainment and income			
Completed high school or equivalent	-0.29	0.15	0.75
Education beyond high school	0.25	0.21	1.29
Family income = 300 percent or more of federal poverty threshold	0.30	0.19	1.34
Living arrangements			
Lives with spouse or other relatives, no children	0.18	0.17	1.20
Married, lives with children	0.65*	0.23*	1.91*
Unmarried, lives with children	-0.26	0.24	0.77
Lives with children younger than age 6	-0.05	0.18	0.95

(Continued)

Table 10.**Logit model estimates of the likelihood of working enough to leave the disability rolls for at least 1 month during 2004–2007—Continued**

Variable	Coefficient	Standard error	Odds ratio
<i>Health characteristics</i>			
Cause of limiting condition			
Mental illness	-0.22	0.20	0.80
Intellectual disability	-0.54*	0.18*	0.58*
Musculoskeletal disorders	-0.09	0.20	0.91
Sensory disorders	0.17	0.28	1.18
Other disorders of the nervous system	-0.11	0.22	0.90
Other condition causing limitation	-0.38*	0.16*	0.68*
No condition causing limitation	-0.03	0.30	0.97
Health status ^a			
MCS score 44–51	0.02	0.20	1.02
MCS score greater than 51	-0.32	0.22	0.73
PCS score 44–51	0.15	0.21	1.17
PCS score greater than 51	-0.15	0.24	0.86
MCS and PCS scores both greater than 51	0.63*	0.29*	1.87*
Presence or type of limitation			
No ADL, IADL, or functional limitations	-0.07	0.28	0.93
At least one ADL/IADL requiring assistance	-0.55*	0.16*	0.57*
At least one severe physical limitation	-0.41*	0.15*	0.67*
Other health indicator			
Obesity	0.05	0.16	1.05
Substance abuse	-0.17	0.28	0.85

SOURCE: Author's calculations based on 2004 NBS.

NOTES: Sample size = 7,603.

PIA = primary insurance amount; MCS = Medical Component Summary; PCS = Physical Component Summary; ADL = activities of daily living; IADL = instrumental activities of daily living.

* = Statistically significant at the 0.05 level.

a. The MCS and PCS measures were developed by designers of the SF-8 Health Survey. MCS and PCS scores for the general adult population both have a mean of 50 and a standard deviation of 10. For more information about the SF-8, see Ware and others (2001).

Race and ethnicity. Those classified as “other” race were significantly less likely to leave the rolls than either black or white beneficiaries. Hispanic origin is not a significant predictor of leaving the rolls because of work.

Education. Education is not a significant predictor of leaving the rolls because of work.

Living arrangement. Married beneficiaries living with children were more likely than those in other living arrangements to leave the rolls.

Health status. Specific health conditions are generally not predictive of leaving the disability rolls because of work, with the exception of intellectual disability and conditions grouped in the “other” category. Beneficiaries in these categories were significantly less likely to leave the rolls than others were. Three health status

measures are also significant predictors. Beneficiaries with severe physical limitations and those requiring assistance with at least one activity or instrumental activity of daily living were significantly less likely than others to leave the disability rolls because of work, and those in good physical and mental health were significantly more likely to do so.²²

In general, few variables in the model are predictive of leaving the disability rolls because of work during the 4-year period. Some of the findings are consistent with those of previous studies that explored the characteristics associated with work orientation and employment, while others are not. For example, in this model, age is not a significant predictor of leaving the rolls because of work. This is surprising because age is a significant predictor of work orientation and employment in other studies.²³ Additionally, although

DI-only beneficiaries were less likely to leave the rolls because of work during the 4-year period, they were more likely to be work-oriented and employed at the time of the interview. Those with high Social Security benefit amounts and those with severe physical and activity limitations were significantly less likely to be working or to leave the rolls because of work. The finding that being in one's second year on the disability rolls is a significant predictor of leaving the rolls because of work is consistent with previous analyses that found that beneficiaries are more likely to be work-oriented and employed within their first 5 years on the rolls.²⁴

Finding that age is not a significant predictor of leaving the rolls bears further discussion. Previous studies have shown that age is an important predictor of work orientation and employment, and the likelihood of leaving the disability rolls declines with age among work-oriented beneficiaries.²⁵ However, after controlling for other characteristics, including program type and benefit levels, age is not a significant predictor of leaving the rolls because of work among all beneficiaries. The logit model findings suggest that the disability programs' benefit levels and treatment of earnings are more important than age in determining whether a beneficiary leaves the rolls.

Meeting Work Expectations

By definition, all work-oriented beneficiaries reported having work goals or expectations, but not all saw themselves working for pay in the near future, and only a minority saw themselves working and earning enough to leave the disability rolls in the next 5 years (Table 9). Overall, about half saw themselves working for pay in the next year, and two-thirds saw themselves doing so in the next 5 years. Relative to work-oriented DI-only beneficiaries, work-oriented concurrent and SSI-only beneficiaries were somewhat more likely to see themselves working in the next 5 years (69 percent and 67 percent, respectively, versus 62 percent). These small differences might be due to a couple of factors. First, because work-oriented DI-only beneficiaries are older on average than work-oriented concurrent and SSI-only beneficiaries,²⁶ more of them might expect to retire in the relatively near future. Second, as shown earlier, work-oriented SSI-only and concurrent beneficiaries were significantly more likely to indicate that they were not working at the time of the interview because they were waiting to finish school or training, suggesting they might have a longer time horizon for achieving employment than DI-only beneficiaries.

When asked about their prospects of working and leaving the disability rolls in the near future, 19 percent of work-oriented beneficiaries saw themselves earning enough to do so in the next year, and 38 percent believed they could do so in the next 5 years. Work-oriented SSI-only recipients were significantly more likely to see themselves earning enough to leave the disability rolls in 1 year and in 5 years. This might partly reflect the previously noted differences in the way earnings are treated in the two programs. Changes in earnings affect SSI payments more readily than they affect DI benefits.²⁷ In addition, those with high DI benefits might be unwilling (or believe they are unable) to earn enough to replace the benefits that are lost when earnings exceed the SGA level.

Among disability beneficiaries who reported expectations of working in the near future, about half (52 percent) met those expectations during 2004–2007 (Table 11). Work-oriented SSI-only recipients were significantly less likely to meet their expectations during the 4-year period than other beneficiaries.

Among disability beneficiaries who reported expectations of earning enough to leave the disability rolls, only a small minority met those expectations during 2004–2007 (Table 12). Overall, 14 percent of work-oriented beneficiaries who believed they would earn enough to leave the disability rolls in either the next year or the next 5 years had done so for at least 1 month during the 4-year period. The shares did not vary by program. It is interesting that, regardless of whether they saw themselves leaving the rolls within the next year or the next 5 years, the large majority of those who left the rolls for at least 1 month at any time did so by the end of the 2005, or within approximately 1.5 years of interview. This is particularly apparent among work-oriented beneficiaries who saw themselves leaving the rolls in the next year: Among the 21 percent who did so at any time over the 4-year period, over 90 percent had done so by the end 2005. Table 12 suggests that those who achieved their expectations did so quickly.

Discussion

A large minority of Social Security disability beneficiaries works and engages in work preparation activities, and many more see themselves working in the future. In 2004, 40 percent of all disability beneficiaries reported having work-related goals or expectations. Even if their employment expectations seem somewhat optimistic, they do not appear to be excessively so, given that roughly half reported engaging in recent

work and training activities. Tracking their employment activity over a longer period indicated that nearly half also worked at some time during 2004–2007.

A majority (60 percent) of 2004 NBS respondents had no plans or expectations of working. Another 20 percent reported interest in or expectations of

pursuing work, but did not and had not recently engaged in any work-related activities. Perhaps many in this group had exaggerated expectations, but many might also have dealt with health problems or other circumstances that limited their current ability to prepare or look for work. The remaining 20 percent of disability

Table 11.
Work-oriented disability beneficiaries who had any expectations of working either in the next year or within 5 years, and earnings outcomes, by program type

Beneficiaries	All	DI-only	Concurrent	SSI-only
Number (weighted)	2,664,587	1,242,785	513,470	908,332
Percentage of all disability beneficiaries (weighted)	30	14	6	10
Percentage who had earnings in at least 1 year during 2004-2007	52	56	58	44*

SOURCE: 2004 NBS matched to 2004–2007 IRS earnings data.

NOTES: Sample size = 3,693.

* = Significantly different from DI-only beneficiaries at the 0.05 level, two-tailed test.

Table 12.
Outcomes during 2004–2007 of work-oriented disability beneficiaries with expectations of leaving the disability rolls because of work, by program type

Outcome	All	DI-only	Concurrent	SSI-only
Beneficiaries who saw themselves earning enough to leave the rolls within 1 year				
Number (weighted)	648,682	242,666	122,600	283,416
Percentage of all disability beneficiaries (weighted)	7	3	1	3
Percentage who earned enough to leave disability rolls for at least 1 month in—				
2004–2005	19	22	17	17
2004–2007	21	23	22	19
Beneficiaries who saw themselves earning enough to leave the rolls within 5 years^a				
Number (weighted)	1,313,595	554,263	252,795	506,536
Percentage of all disability beneficiaries (weighted)	15	6	3	6
Percentage who earned enough to leave disability rolls for at least 1 month in—				
2004–2005	12	14	10	11
2004–2007	14	15	14	14
Beneficiaries who saw themselves earning enough to leave the rolls within either 1 or 5 years^a				
Number (weighted)	1,426,051	604,900	268,364	552,787
Percentage of all disability beneficiaries (weighted)	16	7	3	6
Percentage who earned enough to leave disability rolls for at least 1 month in—				
2004–2005	12	13	11	11
2004–2007	14	14	14	14

SOURCE: 2004 NBS matched to the 2007 TRF.

NOTE: Sample size = 3,693.

a. Because most NBS respondents were interviewed in mid-2004, data available as of year-end 2007 cover only about 3.5 years and not the full 5-year period for which respondents were asked about their employment expectations.

beneficiaries were actively pursuing their work goals and expectations. Policies designed to promote and support work will be most successful for the latter group, and could be instrumental in converting members of the second group into members of the third. Perhaps structuring the programs in ways that provide greater economic incentives for employment could benefit both the government and the program participants.

The findings suggest that beneficiaries with certain characteristics should be targeted for more intensive information or intervention efforts. In particular, addressing the employment obstacles of younger beneficiaries, and of all beneficiaries very early in their tenure on the disability rolls, could be successful long-run strategies. Age and time on the disability rolls are significant predictors of a variety of employment-related outcomes in the analyses presented here and in other studies. However, age is not a significant predictor of leaving the disability rolls because of work, and DI-only status combined with high benefit levels is a significant and negative predictor. These findings also suggest that even if beneficiaries are working, the structure of the DI program might provide incentives to keep earnings below the level that would reduce benefits to zero.

Appendix: Regression Variables

The logistic regression models used for estimating the predictors of being work-oriented and of working enough to leave the disability rolls for at least 1 month use an array of binary variables, listed below. For each variable, if the identifying characteristic applies to a disability beneficiary, a value of 1 is assigned; otherwise, the indicator value is 0. Social Security administrative data were used to determine the values for variables describing program type at interview, lifetime earnings, monthly Social Security benefit amounts, and elapsed months on the disability rolls.

The variables are arranged categorically, as follows:

Program Participation Characteristics

Program type at interview: concurrent; DI-only. The SSI-only variable is omitted.

Lifetime earnings: PIA is greater than \$1,200.

Monthly Social Security benefit amount: \$500–\$1,000; greater than \$1,000. The variable for benefit amounts under \$500 is omitted.

Monthly value of other benefits that could be affected by earnings (food stamps; energy, housing, or

other in-kind assistance; public assistance; workers' compensation; veterans' benefits; private disability insurance; unemployment insurance; and pension income among those under age 59): \$1–\$199; \$200–499; \$500 or more. The variable for zero non-Social Security benefits is omitted.

Elapsed months on the disability rolls: 0–12; 13–24; 25–60; 61–120. The variable for 121 months or more is omitted.

Sociodemographic Characteristics

Age: 18–24; 25–39; 40–54. The variable for 55 or older is omitted.

Sex: male.

Race and ethnicity: black; other race; Hispanic origin. The variable for white is omitted.

Education: high school diploma or equivalent; some postsecondary education. The variable for not finishing high school or equivalent is omitted.

Income: family income relative to federal poverty level is 300 percent or more.

Living arrangements: living with spouse, partner, or other relatives, no children; living with spouse or partner with children; unmarried with children. The variable for living alone or with unrelated others and no children is omitted.

Age of children: living with own children younger than age 6.

Health Characteristics

Limiting conditions: mental illness; intellectual disability; musculoskeletal disorders; sensory disorders; other diseases of the nervous system; other limiting conditions; no limiting conditions.

Mental Component Summary (MCS) and Physical Component Summary (PCS) health status scores: MCS 44–51; MCS greater than 51; PCS 44–51; PCS greater than 51; both MCS and PCS greater than 51. The variables for MCS less than 45 and PCS less than 45 are omitted.

Activities of daily living (ADLs), instrumental ADLs (IADLs), or functional limitations: none; at least one ADL or IADL for which assistance is required; at least one severe physical limitation.

Obesity: body mass index is 30 or greater, calculated based on self-reported weight and height.

Substance abuse: presence of one more symptoms.

Notes

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¹ SSI also serves children with disabilities and individuals aged 65 or older.

² Examples include expedited reinstatement of benefits after unsuccessful work attempts, abolishing continuing disability reviews triggered by work activity, and establishing the Area Work Incentives Coordinator position, the Work Incentives Planning and Assistance program, the Mental Health Treatment Study, and the Benefit Offset National Demonstration.

³ A general limitation of this work-orientation measure is that it represents goals and expectations only at a specific time, and the NBS does not provide information on how individuals' goals and expectations change over time.

⁴ For blind beneficiaries, the monthly SGA level is \$1,640.

⁵ The 9 months need not be consecutive but must occur within a rolling 60-month period.

⁶ DI beneficiaries with dependent children younger than age 18 or still in high school receive additional benefits up to a family limit.

⁷ See SSA (2011) for a description of the DI and SSI work-support provisions.

⁸ Less than one-half of 1 percent of DI beneficiaries discontinue benefits each year because of work (SSA 2008).

⁹ The surveys include both cross-sectional and longitudinal samples of Ticket to Work participants. All statistics reported in this article were derived from the 2004 cross-sectional sample.

¹⁰ Because access to the IRS data is restricted, the IRS-NBS record linkage and earnings data analyses presented here were performed by SSA staff.

¹¹ The primary source of information for the Master Earnings File is the W-2 form sent by employers directly to SSA. W-2 forms arrive at SSA continuously and the Master Earnings File is updated with new W-2 information on a weekly basis. The unposted detail segment contains detailed records of earnings not subject to FICA tax, such as deferred Medicare earnings, self-employment earnings, and earnings paid into retirement plans. Two variables from this detailed earnings record are used: W2_BOX5_WGE_MED, corresponding to the amount contained in Box 5 of the form W-2, which includes taxable tips; and SEI_MED,

corresponding to any Medicare-covered self employment. The detailed earning record may include multiple employers per year; these earnings are summed to obtain total wages per year and total self-employment earnings per year. These total annual wage and self-employment values are then summed to obtain total earnings for the year.

¹² For further information about the 2004 NBS, see Thornton and others (2007, Appendix B).

¹³ To meet the objectives of the survey efficiently, the sample design incorporates geographic primary sampling units and strata defined by age, Ticket to Work participation status, phase of Ticket to Work rollout, and payment system. The relevant weights and the primary sampling unit and strata indicators must be used to produce statistics that are representative of all working-age SSI and DI beneficiaries, and to generate standard errors of the estimates that are adjusted for the sample design. See Bethel and Stapleton (2002) and Thornton and others (2007, Appendix B) for detailed descriptions of the survey objectives and sample design.

¹⁴ Because of the large number of explanatory variables included in the model, and because a few of the variables might be highly correlated with one another, variance inflation factors (VIFs) were computed to assess the degree to which multicollinearity might occur. The VIF measures the impact of collinearity among the explanatory variables on the precision of a regression model's estimates. A VIF value greater than 10 is believed to be of concern, but lower values (such as 2.5 or 5) also have been proposed as more conservative thresholds for indicating potential multicollinearity. In the model estimating the likelihood of being work-oriented, all variables except one had VIFs of 2.5 or less. The exception, the variable representing Social Security monthly benefits greater than \$1,000, had a VIF of 3.5.

¹⁵ Higher-than-average lifetime earnings is defined as having a DI primary insurance amount (PIA) greater than \$1,200. The PIA is determined using lifetime Social Security-covered earnings and therefore represents a rough indicator of the individual's lifetime labor market success. Higher PIAs reflect higher lifetime earnings and DI benefit amounts. In our sample, only 15 percent of disability beneficiaries had a PIA greater than \$1,200 in 2004.

Although related, PIA and Social Security benefit levels are not collinear. First, all SSI-only recipients have a PIA of zero but have SSI payments that vary substantially depending on other income and living arrangements; second, DI benefits may be based on a spouse's or a parent's PIA (rather than one's own); and third, DI benefit amounts can be affected by the number of dependents. As mentioned in note 14, the VIF for the variable representing monthly Social Security benefits greater than \$1,000 was higher than the VIFs for other variables in the model, perhaps because of its relationship to the PIA; however, it is still considered low relative to commonly used standards for identifying multicollinearity.

¹⁶ The effect of earnings on SSI payments may convert some concurrent beneficiaries to DI-only status and further contribute to the finding that DI-only beneficiaries are more likely to be work-oriented.

¹⁷ The annualized SGA levels for nonblind beneficiaries were \$9,720 in 2004, \$9,960 in 2005, \$10,320 in 2006, and \$10,800 in 2007.

¹⁸ The finding that SSI-only recipients were less likely than DI-only beneficiaries to work above SGA level is inconsistent with the findings of a previous study based on NBS data (Livermore, Stapleton, and Roche 2009). Respondent-reported earnings data indicate that SSI-only recipients who were working at the time of the interview were significantly more likely to report monthly earnings above SGA level than their DI-only counterparts (36 percent compared with 20 percent). The difference might be attributed to several factors. First, the survey data represent respondent-reported earnings and there may be differences in the propensities for SSI recipients and DI beneficiaries to misreport earnings. Second, the survey data represent a snapshot in time, whereas the administrative data follow beneficiaries for 4 years. As SSI-only recipients are less likely to be working in all 4 years (Table 6), they may be less likely to be working above SGA level in at least 1 of the 4 years. Third, the survey data represent *monthly* earnings and are compared with the *monthly* SGA level, whereas the earnings obtained from administrative data are *annual* amounts compared with an *annualized* SGA level (the monthly SGA level multiplied by 12). With all else constant, if employment among SSI-only recipients is shorter-term or more sporadic than that of DI-only beneficiaries, then one would expect the average monthly earnings based on annual data to be less than the actual monthly earnings during the months when they are employed. This would contribute to the finding that more are working above SGA level when analyzing monthly values than when analyzing annual values.

¹⁹ The TRF variables used to identify those whose cash benefits were discontinued because of work are monthly indicators based on administrative data showing that DI or SSI cash benefits were either suspended or terminated because of earnings. For concurrent beneficiaries to be classified as having cash benefits discontinued because of work, both SSI and DI cash benefits must have ceased in a given month, with the cessation in at least one of the programs due to work.

²⁰ The TRF variables used to construct the indicators of discontinuing DI and SSI cash benefits because of work are likely imprecise for two primary reasons. First, work activity not reported by beneficiaries or not processed by SSA at the time the TRF file was created will not be reflected in the indicators. Second, in some instances, the reason noted for benefit cessation may be other than work (for example, medical improvement), but employment could have been concurrent with or material to the documented reason for benefit cessation. Both factors will lead to underestimates

of months off the disability rolls because of work in our sample.

²¹ Cross-sectional statistics provide a different view of employed beneficiaries (see Livermore, Roche, and Prenovitz 2009, Exhibit A-3). At a given time, employed DI-only beneficiaries and SSI-only recipients are about equally likely to have cash benefits cease because of work, and both of these groups are more likely than employed concurrent beneficiaries to have their benefits cease because of work. It is interesting that among all SSI-only recipients whose benefits were suspended or terminated because of work at the time of the interview, only 45 percent were presently employed, compared with 81 percent of all DI-only beneficiaries. It is unclear why the employment rate among SSI-only recipients was so low.

²² Physical and mental health status was determined using measures constructed by developers of the SF-8 Health Survey. For more information, see Ware and others (2001).

²³ See Thornton and others (2007, Appendix B).

²⁴ Given the model's 4-year observation period, beneficiaries in their second year on the rolls at the time of the interview in 2004 were observed until well into their fourth or early into their fifth year on the rolls by the end of 2007.

²⁵ Among work-oriented beneficiaries, the likelihood of leaving the disability rolls because of work over the 4-year period declines from 10 percent among those aged 18–24 to 6 percent among those aged 55 or older.

²⁶ The mean age of work-oriented DI-only beneficiaries is 48, compared with means of 38 for work-oriented SSI-only recipients and 41 for work-oriented concurrent beneficiaries.

²⁷ SSI cash payments are immediately reduced by \$1 for every \$2 of monthly earnings above \$65. DI benefits are reduced (to zero) only when earnings exceed the SGA level after the 9-month trial work period.

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