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## **Declining Employment Among a Growing Group of Work-Oriented Beneficiaries, 2005 - 2015**

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**Abstract****Project Number**

D-MP-18-05

**Title**

Declining employment among a growing group of work-oriented beneficiaries, 2005–2015

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**Key Findings and Policy Implications**

This study examined changes in the characteristics and employment-related experiences of participants in the Supplemental Security Income (SSI) and beneficiaries in the Disability Insurance (DI) programs from 2005 to 2015. The data for the study come from the National Beneficiary Survey (NBS), which provided an opportunity to examine these characteristics and employment outcomes with information that is not available in SSA administrative data. The NBS also permitted us to focus on the subset of beneficiaries for whom employment is most relevant—those with work-related goals and expectations. This is important because the majority of beneficiaries have no intention of working, so including them in statistics pertaining to employment-related activities obscures the experiences and changes over time for those for whom employment is actually relevant.

We found several noteworthy changes in the characteristics and work-related experiences of SSI and DI beneficiaries from 2005 to 2015:

1. Beneficiaries overall were older in 2015 than they were in 2005, but few measures of their health status changed significantly.
2. A greater share of DI-only beneficiaries had work goals or expectations, but among SSI recipients, this rate did not change.
3. Relative to all DI-only beneficiaries, there was a larger increase in the share of beneficiaries who were 56 or older in the work-oriented group, and the decline in physical health was more pronounced.
4. Among work-oriented beneficiaries, there was a decline in the share that had ever worked for pay, and this was particularly marked for SSI recipients. Compared with 2005, there was also a significant drop in the recent work activities of work-oriented beneficiaries in 2015, particularly in the rates of annual employment.
5. Among work-oriented SSI recipients who were employed, the rates of sheltered or supported employment fell over the study period, as did the shares of recipients who were employed full time and working for employers who offered health insurance. Production jobs for both DI-only beneficiaries and SSI recipients also declined. Among DI-only beneficiaries, the

percentage of individuals working in jobs in which the employer made at least one accommodation increased markedly.

6. Among work-oriented DI-only beneficiaries, the awareness of work-support provisions in 2015 increased or remained unchanged from 2005. Among SSI recipients, this awareness declined for several of the provisions asked about in the NBS, but it increased for benefits counseling services.

The findings remind us that, although many factors affecting beneficiary employment are outside of SSA's control, there are potential avenues that SSA or others could explore in an effort to improve beneficiary employment outcomes. These avenues include the following:

- Finding ways to meet the greater demand for employment supports from the larger group of work-oriented beneficiaries
- Incorporating lessons and strategies from programs that focus on helping older workers return to work in efforts to meet the needs of a large share of work-oriented DI-only beneficiaries who are older than 55.
- Considering ways to better educate beneficiaries about the availability of work supports and connecting them to these supports.

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## I. INTRODUCTION

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The Social Security Disability Insurance (DI) and Supplemental Security Income (SSI) programs provide essential income support to more than 13 million adults with significant disabilities from age 18 to full retirement age (SSA 2018a). Although most beneficiaries are unlikely to work because of the severity of their health conditions, many do, and provisions in the SSI and DI programs are intended to encourage those efforts. Since the passage of the Ticket to Work and Self-Sufficiency Act of 1999 (the Ticket Act), the Social Security Administration (SSA) has implemented a variety of additional supports intended to promote the employment of SSI recipients and DI beneficiaries. Other federal agencies have also implemented initiatives to promote employment among people with disabilities in the recent decades. At the same time, other factors, particularly the 2007–2009 recession, have negatively affected the employment of people with disabilities. In addition, it is likely that demographic and labor market changes have affected both the characteristics of program participants over time and the likelihood that they will be employed.

The purpose of this study is to examine the changes in SSI and DI beneficiary characteristics and employment-related experiences from 2005 to 2015. The data for the study come from the National Beneficiary Survey (NBS), which provided an opportunity to examine these characteristics and employment outcomes with information that is not available in SSA administrative data. The NBS also permitted us to focus on the subset of beneficiaries for whom employment is most relevant—those with work-related goals and expectations. This is important because the majority of beneficiaries have no intention of working, so including them in statistics pertaining to employment-related activities obscures the experiences and changes over time for those for whom employment is actually relevant. An understanding of the changes that have occurred over time in beneficiaries' interest in work and work activities, and the implications of these changes, can support the policy and program-related decisions made by SSA and others interested in improving the employment of people with significant disabilities.

This study addresses three primary questions:

1. How did the characteristics of beneficiaries change from 2005 to 2015?
2. How did the size and composition of the population of work-oriented beneficiaries change from 2005 to 2015?
3. How did the employment-related outcomes of work-oriented beneficiaries change from 2005 to 2015, and are any differences significant after controlling for changes in personal characteristics.

In the sections that follow, we describe the background on the employment of SSI recipients and DI beneficiaries along with a variety of factors that might have affected their employment, both positively and negatively, from 2005 to 2015. We then review the study data and methods, and present the findings. The findings are intended to enhance our understanding of how the characteristics and employment outcomes of beneficiaries changed, in aggregate, over the study period. They are descriptive and do not provide causal evidence of the contribution of particular factors to the changes observed. The final section of the paper discusses the implications of these findings.

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## II. BACKGROUND

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Although all SSI and DI beneficiaries have demonstrated that they cannot work at substantial levels by virtue of their eligibility for the programs,<sup>1</sup> a nontrivial share does work, especially during the first several years after they enter the disability programs. Liu and Stapleton (2011, 35–59) found that 28 percent of DI beneficiaries work at some point during their first 10 years in the program. Ben-Shalom and Stapleton (2015, 73–95) found that 19 percent of SSI recipients work during their first six years in the program. However, at any given point in time, relatively few beneficiaries (8 percent) are working (SSA 2018b). Most of those who work cannot do so at sustained levels that would disqualify them for SSI or DI benefits. Just 4 percent of DI beneficiaries and 7 percent of SSI recipients have had their disability payments suspended for at least one month because of earnings during their first 10 years in the programs; even fewer succeed in leaving the programs because of earnings during that period (3 percent of DI beneficiaries and 2 percent of SSI recipients) (Anand and Ben-Shalom 2018, 153–165).

The DI and SSI programs have a number of provisions intended to encourage participants to work (SSA 2018c). Most focus on allowing participants to retain more of their benefits as their earnings increase, accumulate assets that would help them become independent, and remain eligible for public health insurance through the Medicare and Medicaid programs. The Ticket Act introduced additional supports, including the Work Incentives Planning and Assistance (WIPA) and Ticket to Work programs. Under WIPA, SSA provides funding to community organizations to offer information and counseling to beneficiaries about how earnings affect their DI and SSI payments and program eligibility. Ticket to Work connects SSI and DI participants to employment service providers and reimburses those providers when they help participants meet certain employment milestones. The WIPA and Ticket to Work programs were implemented nationwide from 2000 to 2001<sup>2</sup> and from 2002 to 2004, respectively. Although these programs and other provisions created by the Ticket Act to promote work among beneficiaries were first implemented before 2005, they became more established and utilized by beneficiaries over the period of our study (2005–2015).

A number of other policies and federal initiatives were implemented or expanded from 2005 to 2015, and they may have positively affected the employment of DI and SSI beneficiaries. Some of these efforts are described below.

**Employment First.** Since the early 2000s, states have instituted policies intended to prioritize the employment of people with disabilities, particularly those with intellectual and developmental disabilities, in integrated settings within the community.<sup>3</sup> The movement toward

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<sup>1</sup> To qualify for the DI and SSI programs, individuals must meet strict medical criteria and demonstrate an inability to work at a substantial level. In 2019, SSA defines substantial gainful activity, a measure of work above which the agency considers to be substantial for purposes of initial and ongoing eligibility determinations, as monthly earnings of \$1,220 for nonblind individuals and \$2,040 for blind individuals.

<sup>2</sup> The WIPA program was called the Benefit Planning, Assistance, and Outreach program. SSA renamed the initiative in 2006.

<sup>3</sup> The U.S. Department of Labor (DOL) defines integrated employment as “work paid directly by employers at the greater of minimum or prevailing wages with commensurate benefits, occurring in a typical work setting where the employee with a disability interacts or has the opportunity to interact continuously with co-workers

more integrated employment, which has been named Employment First, gained momentum over the period from 2005 to 2015 and has been supported by DOL grants to states and other activities since 2012 (DOL, n.d.). From 2003 to 2016, 32 states adopted legislation and policies that reflect the Employment First philosophy (Hoff 2016). Employment First principles are reflected in the provisions of the Workforce Innovation and Opportunity Act (WIOA) of 2014, which are intended to promote integrated, competitive employment and to limit the use of certificates that permit the payment of subminimum wages to people with disabilities under section 14(c) of the Fair Labor Standards Act of 1938. These certificates are most often used by community rehabilitation providers that offer facility-based or congregate work opportunities to people with disabilities (Advisory Committee on Increasing Competitive Integrated Employment for Individuals with Disabilities 2015).

**Disability Employment Initiative.** From 2010 to 2017, DOL issued grants totaling \$139 million for projects in 30 states designed to make American Job Centers (AJCs) more accessible and to improve services to and the employment outcomes of job seekers with disabilities (DOL 2017). AJCs are an important avenue through which disability beneficiaries can access employment services. In assessing the use of these centers by SSI and DI beneficiaries in four states, Livermore and Coleman (2010) found that 3 to 6 percent of all AJC customers were current or former SSI and DI beneficiaries. Although this percentage seems small from the perspective of the population served by AJCs, the authors estimated that this group represented 11 to 26 percent of all SSI and DI beneficiaries actively pursuing employment in the states studied.

**Centers for Medicare and Medicaid Services (CMS) waivers for employment supports.** Under 1915c home and community-based service waivers, states can offer a variety of Medicaid services to promote home and community living as an alternative to institutionalization, including employment supports. In 2011, CMS provided additional guidance to states on the delivery of 1915c employment support services that both emphasized Employment First principles and clarified provisions that might have inhibited some states from offering Medicaid-funded employment supports (including acknowledging that Ticket to Work payments do not conflict with Medicaid service payments) (CMS 2011).

**Changes in access to health insurance.** Health care, and access to it through affordable health insurance coverage, is a critical need for people with disabilities who have chronic health conditions. In the U.S., health insurance coverage among non-elderly adults is primarily obtained through employment, but over time, employer-sponsored health insurance has become less affordable (Collins et al. 2017) and less frequently offered by employers (Long et al. 2016). The Ticket Act included provisions designed to expand access to public health insurance for people with disabilities in two ways: (1) by extending the period of Medicare eligibility for former DI beneficiaries who leave the DI program because of earnings and (2) by authorizing states to implement Medicaid buy-in programs for people with disabilities. These policies weakened the link between access to public health insurance and DI or SSI eligibility with the intent of promoting employment; if beneficiaries did not have to maintain their SSI and DI eligibility to access affordable health insurance, then they would be more likely to risk losing their SSI and DI

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without disabilities, has an opportunity for advancement and job mobility, and is preferably engaged full-time” (DOL, n.d.).

eligibility by working. The Patient Protection and Affordable Care Act of 2010 further weakened the link between beneficiaries' access to affordable health care and participation in federal disability programs by allowing states to expand the Medicaid eligibility requirements. This provision became a means for uninsured individuals to obtain affordable coverage not only through health insurance exchanges sponsored by the states and the federal government but also through a number of other provisions that make it easier for people with disabilities to obtain coverage (Sevak et al. 2017).

The above policies and initiatives reflect a shift in societal expectations about people with disabilities that has been occurring since the disability rights movement that began in the 1960s. That movement emphasized removing the barriers that kept some people with disabilities from participating in the community and mainstream activities, including employment. The federal policies described above not only made it easier for people with disabilities to be part of their communities, they also reflect the notion that, with the appropriate supports, people with disabilities can work in integrated, competitive settings and contribute to their own economic well-being. Despite these positive forces that support the employment of SSI and DI beneficiaries, demographic and labor market changes from 2005 to 2015 might have impeded it.

**Aging of the baby boom generation.** The baby boom generation, born between 1946 and 1964, represents the largest living generation. From 2005 to 2015, they represented about 25 percent of the U.S. population (Colby and Ortman 2014). During this period, they ranged in age from 41 to 69, and because the prevalence of disability increases with age (Kang et al. 2018), many of them entered the federal disability programs and contributed to the growth in those programs (Center on Budget and Policy Priorities 2018). Moreover, the percentage of these individuals who entered the DI program at any given age has increased over time, as has their tenure on disability benefits because they enter the program when they are younger, and they live longer than earlier generations (Ben-Shalom et al. 2018).

Employment rates of the overall population of people with disabilities decline after age 35 (DOL 2013); this is also true for SSI recipients and DI beneficiaries (Livermore et al. 2009). Thus, if the beneficiary population became older on average from 2005 to 2015, a smaller share might have been employed in 2015 than in 2005.

**The Great Recession of 2007–2009.** The recession of 2007–2009 had a large negative impact on the employment of people with and without disabilities, but studies suggest that people with disabilities experienced job loss, longer unemployment spells, wage declines, and reductions in labor force participation at higher rates than people without disabilities (Livermore and Honeycutt 2015, 70–79; Fogg et al. 2011, 3–10; Kaye 2010, 19–30). Similarly, DI beneficiaries and SSI recipients experienced marked declines in annual employment rates and very large increases in unemployment (Livermore and Bardos 2015). The shares of SSI recipients and DI beneficiaries whose payments were suspended or terminated because of earnings also fell sharply during this period (Leverette et al. 2018). By 2012, about three years after the end of the recession, neither unemployment nor annual employment rates for beneficiaries or nonbeneficiaries had returned to their pre-recession levels. The recession may have affected beneficiary employment in 2015 through lingering effects on job availability or by damaging or permanently severing beneficiaries' ties to the labor market. Additionally, federal disability program applications and awards increased during the recession, peaking in 2010 (SSA 2018d).

The influx of new beneficiaries may have changed the aggregate characteristics of SSI recipients and DI beneficiaries in ways that affected their employment-related expectations and outcomes.

**Other labor market changes.** The U.S. economy changed from 2005 to 2015 in other ways that have implications for beneficiary employment. These changes resulted in a reduction in the demand for less educated workers, most apparent in the declining relative wages of these workers (Council of Economic Advisors 2016). This decline is also believed to have induced some less-skilled workers to leave the labor force and apply for disability benefits (Liebman 2015, 123–150). Economists do not have a unified explanation for why the demand for less educated workers is declining. Some of the decline stems from the continuation or acceleration of trends from earlier decades, whereas other trends emerged during this period. For example, the U.S. manufacturing industry has been in a steady, decades-long decline, but from 2000 to 2012 the number of workers in manufacturing jobs fell by 25 percent (Fort et al. 2018, 47–72). Additional causes for the decline in the demand for labor include automation (Autor and Salomons 2018), imports, and the shifting of jobs offshore (CEA 2016). A less established hypothesis is that a decline in middle-skill jobs has led to middle-skill workers displacing less educated workers in low-skill jobs (Beaudry, Green, and Sand 2016, s199–s247).

Another change in the labor market that might have affected beneficiary employment is the rise of the gig economy and jobs with irregular scheduling. Some have argued that gig jobs offer expanded opportunities with flexible contracts (Hurst and Pugsley 2011, 73–118), although others have bemoaned the challenges of scheduling and earnings uncertainty in gig jobs (Hannagan and Morduch 2015). The latter change in the labor market could, in light of a study by Lambert et al. (2014), be particularly salient for young adult beneficiaries. The researchers found that 38 percent of workers age 26 to 32 are notified about upcoming work one week or less in advance, and the weekly hours of 70 percent of these workers can fluctuate over the course of a month.

### III. DATA AND METHODS

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We used public use data from two NBS rounds fielded in 2005 and 2015 to address the research questions. The survey collected data from cross-sectional national samples of SSI and DI beneficiaries age 18 to full retirement age.<sup>4</sup> SSA originally developed and implemented the NBS as part of an evaluation of its Ticket to Work program; the agency continued the survey to collect information about SSI and DI beneficiaries with a focus on employment activity. The primary purpose of the survey is to provide information about SSI and DI beneficiaries that is not available in SSA administrative data sources, including personal characteristics, health and disabilities, interest and experiences in work, use of services, and participation in public support programs.

The NBS relied primarily on computer-assisted telephone interviewing; in-person interviews were conducted with beneficiaries who either requested one or who were difficult to reach by telephone. Whenever possible, the interview was conducted with the beneficiary, but if the beneficiary was unable to complete the interview because of a disability, a proxy was allowed to complete it. A number of other accommodations as well as interpreter and translation services were available to help boost response rates. The weighted response rates were 79 percent in 2005 (Wright et al. 2009) and 63 percent in 2015 (Wright et al. 2017). When weighted, the samples for each round are representative of individuals participating in the SSI and DI programs as of June of the calendar year before each survey year. The sample sizes for the 2005 and 2015 rounds of the NBS used in this study are 4,864 and 4,062, respectively.

We conducted all analyses separately for DI-only beneficiaries and SSI recipients (those receiving SSI only or concurrently with DI).<sup>5</sup> Table 1 shows the sample sizes for these subgroups. In discussing the composition of the beneficiary population and how it has changed from 2005 to 2015, we first present descriptive statistics on a variety of personal characteristics. These include gender, age, race, educational attainment, years since initial SSA award, marital and parental status, living arrangement, and poverty status. We also examine the health and activity limitations of beneficiaries as measured by self-reported health condition that contributed to activity limitations, age at disability onset, general mental and physical health, obesity, and difficulty with a number of activities and instrumental activities of daily living. The 2005 public use NBS does not have information about the SSA-determined primary and secondary impairments that qualified sample members for SSI and DI benefits. Therefore, the statistics on the health conditions that contribute to activity limitations are based solely on respondents' reports.

We then present estimates of the size of the work-oriented beneficiary populations in 2005 and 2015. For this analysis, we categorized beneficiaries as being work-oriented based on a definition that was used in an earlier study (Livermore 2011, 61–82) and that relies on

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<sup>4</sup> Reflecting the adult disability program eligibility criteria, sample members receiving DI were age 18 through full retirement age, and sample members receiving only SSI were age 18 through 64. Because the full retirement age has changed over time, sample members in the DI program could be as old as 65 in the 2005 NBS and as old as 66 in the 2015 NBS.

<sup>5</sup> DI and SSI status in the NBS reflects receipt of benefits at the time of sampling, as documented in SSA administrative data.

beneficiaries' responses to survey questions about their personal goals and expectations about working. We categorized those who reported that their personal goals included work or who saw themselves working in the next five years as work-oriented, regardless of their employment status at the time of the survey.<sup>6</sup> Table 1 shows the sample sizes for the subgroup of work-oriented beneficiaries by DI-only and SSI participation status.

Finally, we compare the employment-related experiences of work-oriented beneficiaries in 2005 and 2015. We present three employment measures: whether the beneficiary had ever worked for pay, had worked at any time during the calendar year before their NBS interview, or was working at the time of their NBS interview. We also report if they looked for work in the prior month, had used employment services, or believed that they had a need for employment services but had not received them. We also review the beneficiaries' awareness of a number of SSA programs and policies that are meant to provide work incentives or support, including the trial work period, extended eligibility for Medicare or Medicaid, the Ticket to Work program, and benefit specialists. For beneficiaries who were employed at the time of the interview, we describe selected job characteristics, including hours of work, occupation, accommodations and benefits, and whether the job was in a sheltered or supported employment setting.<sup>7</sup> For work-oriented beneficiaries who were not employed, we report selected reasons that they cited for not working.

**Table 1. Sample sizes**

	DI-only		SSI	
	2005	2015	2005	2015
<b>All beneficiaries</b>				
Unweighted number	1,781	1,666	3,083	2,396
Weighted number	4,833,241	7,347,758	4,506,392	5,548,977
<b>Work-oriented beneficiaries</b>				
Unweighted number	835	900	1,828	1,463
Weighted number	1,626,978	3,116,054	2,183,514	2,712,818

Source: 2005 and 2015 NBS.

Throughout the discussion of changes in employment-related outcomes, we present unadjusted statistics for 2005 and 2015. Some of the changes in the employment-related outcomes may be a result of changes in the composition of the beneficiary population, such as an older population in 2015 relative to 2005. To assess whether work-related experiences have

<sup>6</sup> Expectations about working in the next five years are based on two questions: one is about working in the next year (2005 NBS) or next two years (2015 NBS), and the second is about working in the next five years (both rounds). We assessed the impact of the change in the one-year/two-year question on the size of the work-oriented sample and determined that the impact was minimal; excluding the question had nearly the same impact on the overall work-oriented measure in both years, so this does not affect the differences we observed across the years in the share of beneficiaries categorized as work-oriented.

<sup>7</sup> Sheltered employment is employment in a segregated setting, in which most workers have a disability and receive supports to perform their jobs. Supported employment may be in a segregated or integrated (most workers do not have disabilities) setting, and workers with disabilities receive supports to help them perform their jobs.

changed for reasons other than composition changes, we report adjusted differences in the following factors from 2005 to 2015: time on the disability rolls, age, education, race, marital status, the likelihood of having children younger than age 18, general physical and mental health, and selected activity limitations. We also conducted statistical tests of the adjusted differences, which control for changes in beneficiaries' observable characteristics from 2005 to 2015. .

To produce the adjusted differences, we used an Oaxaca decomposition approach to calculate the difference in a given outcome while holding constant the characteristics of the 2005 and 2015 samples to reflect the characteristics of the beneficiary population in 2015. Mechanically, this calculation is a three-step process. First, we estimated separate regressions for each outcome by year and program, which allows the estimated relationship between characteristics and outcomes to vary by year and program. Second, using the estimated regression parameters from 2005, we calculated predicted outcomes for the 2015 sample. Third, we calculated the adjusted difference as the difference in means between the 2015 observed outcome and the 2015 predicted outcome. We used the Oaxaca command in Stata to obtain standard errors of the adjusted differences that accurately account for this approach. The standard errors for all the analyses also account appropriately for the NBS sampling design, and we estimated all statistics by using the relevant survey weights.

With a few exceptions, all differences in the adjusted and unadjusted estimates for 2005 and 2015 discussed in the next section are statistically significant at the 0.05 level. The exceptions relate to selected statistics that are based on relatively small samples; for these, we also note differences that are statistically significant at the 0.10 level.

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## IV. FINDINGS

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### A. Changes in the characteristics of the beneficiary population

The changes in the characteristics of beneficiaries from 2005 to 2015 reflect, in part, the demographic changes in the U.S. population over this period. In 2015, beneficiaries were older; the share age 56 and older increased from 49 to 56 percent among DI-only beneficiaries and from 26 to 32 percent among SSI recipients (Table 2). DI-only beneficiaries made up a greater share of all beneficiaries in 2015 than in 2005 (57 versus 52 percent) owing to the relatively larger growth in that program than in the SSI program over the decade (statistics not shown). However, among SSI recipients, the share that concurrently received DI remained steady at about 35 percent. Perhaps partly because of the aging of the population but also because of changing norms in family structure, a smaller share of DI-only beneficiaries were married in 2015 (43 versus 48 percent), and fewer SSI recipients had children younger than 18 in 2015 (24 versus 18 percent). Beneficiaries had higher levels of education in 2015, also reflecting a trend in the general population; the share that had not completed high school fell from 24 to 19 percent among DI-only beneficiaries and from 43 to 35 percent among SSI recipients. Poverty rates among beneficiaries remained high but statistically unchanged from 2005 to 2015. In 2015, 29 percent of DI-only beneficiaries and 72 percent of SSI recipients had a household income below the federal poverty level.

A few indicators of health and functioning changed from 2005 to 2015, some suggesting a potential worsening of health and others suggesting improvements (Table 3). Only one respondent-reported health condition (intellectual disability) changed over the period, declining for both DI-only beneficiaries and SSI recipients, although the share of SSI recipients reporting that no condition limited their activities increased (from 7 to 12 percent). Obesity prevalence increased for all beneficiaries, and a larger share of SSI recipients reported having difficulty getting around outside of the home. However, smaller shares of DI-only beneficiaries reported difficulty with bathing or dressing, shopping for personal items, or preparing meals in 2015 than in 2005. Summary measures of general physical and mental health did not change over the period for either DI-only beneficiaries or SSI recipients.<sup>8</sup>

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<sup>8</sup> The summary physical and mental health measures are derived from the SF-8 instrument. The eight items provide respondents' ratings of their general health and the degree to which physical health, mental health, and bodily pain interfered with specific activities during the previous four weeks. A scoring algorithm is applied to the respondent ratings of each item to construct the summary scores. The SF-8 questions and scoring algorithm were based on the longer SF-36v2 instrument. The SF-36v2 was originally developed by RAND as part of a multiyear, multisite study designed to explain variations in patient outcomes. The scoring weights are based on regression analyses of data from large general population samples. Responses to the eight items in the SF-8 are weighted (using weights provided by QualityMetric, Inc.) and summed to derive the scores. The weights norm the scores to a scale such that both the physical and mental summary scores have a mean of 50 and a standard deviation of 10 in the general adult population (based on testing in 2000). The validity and reliability of the SF-8 and other versions of the SF instruments have been extensively tested, and the instruments are now widely used by researchers and others to assess general health. For information about the development and interpretation of the SF-36v2, see Ware, Kosinski, and Keller (1994). For specific information about the SF-8, see Ware et al. (2001).

**Table 2. Personal characteristics**

	DI-only		SSI	
	2005	2015	2005	2015
Unweighted number	1,781	1,666	3,083	2,396
Weighted number	4,833,241	7,347,758	4,506,393	5,548,977
Program participation (%)				
DI-only	100.0	100.0	0.0	0.0
Concurrent	0.0	0.0	35.5	35.0
SSI-only	0.0	0.0	64.5	65.0
Male (%)	55.0	52.9	44.4	46.2
Age in years (%)		#		#
18-25	0.8	0.8	11.3	12.3
26-40	10.1	9.4	24.8	22.7
41-55	40.0	34.1	38.0	33.3
56 and older	49.1	55.7	25.9	31.7
Nonwhite (%)	21.5	24.4	36.4	39.7
Highest grade in school (%)		#		#
Did not complete high school or GED	23.8	18.6	43.4	35.4
High school or equivalent	40.0	41.8	36.1	43.7
Some college	23.6	27.1	11.4	13.4
4-year degree or higher	10.4	11.3	3.4	3.3
Other	2.2	1.2	5.7	4.1
Years since initial SSA award (%)				#
Fewer than 5	29.5	26.1	12.7	20.7
5 to 10	32.1	32.4	18.6	19.7
More than 10	38.4	41.3	68.7	59.2
Unknown	0.0	0.2	0.0	0.4
Married (%)	47.6	42.6	13.2	12.2
Has own children (%)	17.4	15.2	23.5	17.8
Living arrangement (%)				
Lives with parents, spouse, or partner	68.2	69.4	57.5	58.3
Other	31.8	30.6	42.5	41.7
Household income as a percent of the federal poverty level (%)				
Less than 100	26.3	29.4	69.1	71.6
100 - 299	53.4	52.0	26.7	23.3
300 or more	20.3	18.6	4.3	5.1

Source: 2005 and 2015 NBS.

\*Statistically different from the 2005 value at the 0.05 level.

# Statistically different from the 2005 distribution at the 0.05 level (chi-square test).

**Table 3. Disability and health status**

	DI-only		SSI	
	2005	2015	2005	2015
Unweighted number	1,781	1,666	3,083	2,396
Weighted number	4,833,241	7,347,758	4,506,393	5,548,977
Self-reported main reason for limitation (%)				#
Musculoskeletal condition	23.7	27.2	14.7	15.7
Psychiatric condition	16.4	15.7	24.5	26.3
Sensory disorder	3.5	2.2	3.0	2.2
Intellectual disability	3.7	2.3	12.6	6.3
Other	48.5	47.1	38.3	37.7
No condition limits activities	4.3	5.5	6.8	11.8
Age at disability onset (%)				
Less than 18	11.8	10.3	36.2	35.5
18 and over	88.2	89.7	63.8	64.5
SF8 mental component summary score <sup>a</sup>				
Less than 44	69.0	66.0	65.9	65.3
44-51	13.9	16.8	14.4	15.5
52 or more	17.1	17.3	19.6	19.1
Average	37.6	38.0	38.2	37.9
SF8 physical component summary score <sup>a</sup>				
Less than 44	83.8	85.6	69.5	70.3
44-51	7.5	7.4	13.5	12.5
52 or more	8.7	6.9	17.0	17.2
Average	33.0	32.6	37.0	37.4
Obese (body mass index of 30 or more) (%)	40.4	49.2	42.0	46.7
Difficulty with activities of daily living (ADL) (%)				
Getting into or out of bed	41.1	39.1	32.3	31.1
Bathing or dressing	31.6	27.2	26.8	29.1
Getting around inside the house	24.4	23.2	20.0	17.5
Eating	14.4	13.3	14.3	16.9
None of the above	43.2	44.3	50.5	49.2
Difficulty with instrumental activities of daily living (IADL) (%)				
Getting around outside of the home	48.0	48.9	44.5	56.8
Shopping for personal items	37.8	30.3	39.0	36.5
Preparing meals	37.9	32.0	37.8	39.0
None of the above	38.1	42.1	38.3	35.4
Number of ADL/IADL difficulties (%)		#		
0	25.0	24.2	28.4	24.9
1 - 2	33.7	40.5	34.1	33.2
3 or more	41.3	35.3	37.5	41.9

Source: 2005 and 2015 NBS.

\* Statistically different from the 2005 value at the 0.05 level.

# Statistically different from the 2005 distribution at the 0.05 level (chi-square test).

<sup>a</sup> The SF8 mental and physical component summary measures are calculated based on responses to eight questions about the degree to which physical and mental health and bodily pain interfered with activities during the previous four weeks. They are scaled to reflect the U.S. general adult population, with a score of 50 representing the average. Higher scores correspond with better health. A score of less than 44 approximately corresponds with the lowest 25th percentile for the general U.S. adult population, a score of 44 to 51 corresponds approximately to the 25th to 50th percentiles, and a score of greater than 51 approximately corresponds to above the 50th percentile.

## B. Changes in the size and characteristics of the work-oriented beneficiary population

Compared with 2005, a greater share of DI-only beneficiaries had work goals and expectations in 2015 (Table 4). The percentage of work-oriented DI-only beneficiaries increased from 34 to 42 percent. In contrast, the share of work-oriented SSI recipients did not change from 2005 to 2015, but at 49 percent, it remained larger than that of DI-only beneficiaries. The increase in the share of DI-only beneficiaries with work expectations was statistically significant and similar in magnitude after accounting for changes in beneficiaries' characteristics over the period.

**Table 4. Work-oriented beneficiaries**

	DI-only			SSI		
	Unadjusted 2005	Unadjusted 2015	Adjusted difference (2015-2005)	Unadjusted 2005	Unadjusted 2015	Adjusted difference (2015-2005)
Unweighted number	1781	1666		3083	2396	
Weighted number	4,833,241	7,347,758		4,506,392	5,548,977	
Work-Oriented (%)	34.0	42.6	9.4 *	48.9	49.2	-1.0

Source: 2005 and 2015 NBS.

\*Statistically different from the 2005 value at the 0.05 level.

The personal and health characteristics of work-oriented DI-only beneficiaries changed in a few ways that differed from the changes observed for the general population of DI-only beneficiaries. The share of work-oriented DI-only beneficiaries who were age 56 and older increased more sharply (from 30 to 44 percent) over the study period (Table 5). There was also a much more substantial decline in the share of work-oriented DI-only beneficiaries who had been in the DI program for five years or less (from 37 percent in 2005 to 25 percent in 2015). The relatively older group of work-oriented DI-only beneficiaries in 2015 also had poorer general physical health compared with work-oriented beneficiaries in 2005 (Table 6). Among work-oriented SSI recipients, the changes in personal and health characteristics observed from 2005 to 2015 generally reflected the same changes in the general SSI population.

**Table 5. Personal characteristics of work-oriented beneficiaries**

	DI-only		SSI	
	2005	2015	2005	2015
Unweighted number	835	900	1,828	1,463
Weighted number	1,626,978	3,116,054	2,183,514	2,712,818
Work-oriented (%)	33.7	42.4	48.5	48.9
Program participation (%)				
DI-only	100.0	100.0	0.0	0.0
Concurrent	0.0	0.0	34.5	35.4
SSI-only	0.0	0.0	65.5	64.6
Male (%)	56.8	54.4	48.0	49.9
Age in years (%)		#		
18-25	1.7	1.3	17.6	18.9
26-40	19.9	15.3	32.2	29.5
41-55	48.7	39.6	33.8	32.0
56 and older	29.7	43.8	16.4	19.5
Nonwhite (%)	27.5	26.4	39.8	47.5
Highest grade in school (%)				#
Did not complete high school or GED	19.6	14.0	36.4	30.1
High school or equivalent	39.4	42.6	38.2	47.4
Some college	24.4	29.9	16.7	16.1
4-year degree or higher	14.6	12.3	4.0	4.3
Other	1.9	1.1	4.7	2.1
Years since initial SSA award (%)		#		#
Fewer than 5	36.7	24.6	14.6	22.8
5 to 10	26.5	33.6	19.6	21.1
More than 10	36.8	41.9	65.9	55.7
Unknown	0.0	0.0	0.0	0.3
Married (%)	37.0	34.3	10.8	8.9
Has own children (%) <sup>a</sup>	24.2	19.2	28.0	22.1
Living arrangement (%)				
Lives with parents, spouse, or partner	63.8	64.4	58.2	61.4
Other	36.2	35.6	41.8	38.6
Household income as a percentage of federal poverty level (%)				
Less than 100	29.8	33.7	67.1	71.4
100 - 299	54.0	51.5	27.3	22.6
300 or more	16.2	14.7	5.6	6.0

Source: 2005 and 2015 NBS.

\*Statistically different from the 2005 value at the 0.05 level.

#Statistically different from the 2005 distribution at the 0.05 level (chi-square test).

<sup>a</sup> Own children defined as biological, adoptive, and/or foster care children of the respondent.

**Table 6. Disability and health status of work-oriented beneficiaries**

	DI-only		SSI	
	2005	2015	2005	2015
Unweighted number	835	900	1,828	1,463
Weighted number	1,626,978	3,116,054	2,183,514	2,712,818
Self-reported main reason for limitation (%)		#		#
Musculoskeletal condition	18.2	23.0	12.8	11.6
Psychiatric condition	22.3	17.9	27.4	29.3
Sensory disorder	4.2	2.1	3.7	2.6
Intellectual disability	5.6	3.7	12.4	6.3
Other	43.1	45.4	34.6	34.2
No condition limits activities	6.6	7.9	9.2	16.0
Age at disability onset (%)				
Less than 18	15.6	13.0	41.3	42.1
18 and over	84.4	87.0	58.7	57.9
SF8 mental component summary score <sup>a</sup>				
Less than 44	69.2	62.8	65.3	61.0
44 - 51	12.3	18.7	14.6	16.9
52 or more	18.5	18.5	20.1	22.1
Average	38.0	38.7	38.4	39.2
SF8 physical component summary score <sup>a</sup>		#		
Less than 44	73.5	80.1	58.6	60.4
44 - 51	11.2	9.4	17.4	15.9
52 or more	15.2	10.5	24.0	23.7
Average	36.8	34.9	40.6	40.9
Obese (body mass index of 30 or more) (%)	40.0	47.2	40.4	47.4
Difficulty with activities of daily living (ADL) (%)				
Getting into or out of bed	34.1	36.5	26.8	22.6
Bathing or dressing	26.2	22.2	19.8	19.5
Getting around inside the house	17.6	19.4	15.6	10.7
Eating	11.1	11.4	11.0	10.8
None of the above	51.6	49.5	59.8	62.7
Difficulty with instrumental activities of daily living (IADL) (%)				
Getting around outside of the home	37.7	43.4	36.3	47.4
Shopping for personal items	32.7	26.8	28.9	26.5
Preparing meals	29.2	30.7	32.7	29.4
None of the above	47.6	46.0	46.6	45.8
Number of ADL/IADL difficulties (%)				
0	34.0	30.0	36.4	34.5
1 - 2	32.3	39.4	35.9	36.3
3 or more	33.6	30.6	27.8	29.2

Source: 2005 and 2015 NBS.

\* Statistically different from the 2005 value at the 0.05 level.

#Statistically different from the 2005 distribution at the 0.05 level (chi-square test).

<sup>a</sup> The SF8 mental and physical component summary measures are calculated based on responses to eight questions about the degree to which physical and mental health and bodily pain interfered with activities during the previous four weeks. They are scaled to reflect the U.S. general adult population, with a score of 50 representing the average. Higher scores correspond with better health. A score of less than 44 approximately corresponds with the lowest 25th percentile for the general U.S. adult population, a score of 44 to 51 corresponds approximately to the 25th to 50th percentiles, and a score of greater than 51 approximately corresponds to above the 50th percentile.

### C. Employment-related experiences of work-oriented beneficiaries

**Use of employment services.** Beneficiaries who want to work have access to employment support services from a number of sources, including state vocational rehabilitation programs and other providers affiliated with SSA’s Ticket to Work program. Only a small share of work-oriented beneficiaries reported using employment services, and our findings indicate that the shares for DI-only beneficiaries and SSI recipients have not changed significantly since 2005 (Table 7). In 2015, just 14 percent of DI-only beneficiaries and 19 percent of SSI recipients reported using employment services. Similarly low shares of work-oriented beneficiaries reported having unmet needs related to employment services, and this also did not change from 2005 to 2015.

**Employment.** Although there was an increase in the number and percentage of beneficiaries with work expectations, a smaller share of work-oriented DI-only and SSI beneficiaries had recent or lifetime employment experiences in 2015 than they did in 2005 (Table 7). Most work-oriented DI-only (94 percent) and SSI beneficiaries (74 percent) in 2015 had worked for pay at some point in their lives, but these rates were lower than in 2005 by 4 and 15 percentage points, respectively, after controlling for changes in characteristics. Similarly, the shares of work-oriented beneficiaries who reported working in the year before the interview fell by 8 percentage points in 2015—to 23 percent for DI-only beneficiaries and 19 percent for SSI recipients. There was no change from 2005 to 2015 in the percentage of work-oriented beneficiaries who were employed at the time of the interview; 18 percent of DI-only beneficiaries and 15 percent of SSI beneficiaries were working at the time of the 2015 interview, and the differences in these rates were not significantly different from the rates in 2005 after adjusting for changes in characteristics. The percentages of unemployed work-oriented beneficiaries actively searching for employment also did not change from 2005 to 2015.

From 2005 to 2015, there was a larger decline in all recent employment-related activities (employed in the previous calendar year and employed or looking for work at interview) among work-oriented DI-only beneficiaries than among work-oriented SSI recipients (9 percentage points compared with 4 percentage points after accounting for changes in characteristics over the period). Both groups had the same rate of recent employment-related activities in 2015 (33 percent).

**Table 7. Employment-related activities of work-oriented beneficiaries**

	DI-only			SSI		
	Unadjusted 2005	Unadjusted 2015	Adjusted difference (2015-2005)	Unadjusted 2005	Unadjusted 2015	Adjusted difference (2015-2005)
Unweighted number	835	900		1,828	1,463	
Weighted number	1,626,978	3,116,054		2,183,514	2,712,818	
Employment service use in year before interview (%)						
Used employment-specific services in previous year	17.0	12.9	-2.9	17.3	17.1	0.2
Used employment or other services in previous year to get a job or increase income	6.2	4.1	-1.7	6.7	7.9	1.2
<i>Either of the above activities</i>	18.3	13.7	-3.2	18.1	18.6	0.8
Did not receive needed services (%)	15.6	13.6	-1.8	19.7	18.4	-2.0
Ever worked for pay (%)	98.3	94.0	-4.2*	87.4	73.6	-15.1*
Recent Work-Related Activities (%)						
Worked in calendar year before interview	31.8	22.5	-8.4*	27.9	18.6	-8.0*
Employed at interview	21.9	18.4	-1.5	18.6	14.8	-2.5
Not employed, looked for work in past four weeks	13.5	9.8	-3.2	13.7	14.8	1.2
Any of the above recent work-related activities	42.4	32.7	-8.5*	38.7	33.1	-4.2*

Source: 2005 and 2015 NBS.

\*Adjusted difference is statistically significant at the 0.05 level.

Some groups of work-oriented beneficiaries experienced larger relative declines in employment based on the annual measure (Table 8). To illustrate the relative magnitude of the differences across subgroups, we report both the adjusted percentage-point difference from 2005 to 2015 and the adjusted difference as a percentage of the adjusted 2005 value.<sup>9</sup> The table also shows changes that are significant at the 0.10 level; a lack of statistical power stemming from small subgroups could lead us to discount noteworthy changes that we found to be statistically insignificant at the 0.05 level. The groups that experienced a relatively larger decline in employment include beneficiaries with less than a high school level of education, those who had participated in the disability programs for fewer than five years, and those with musculoskeletal and sensory impairments. The relative decline for these groups was 40 percent or more, regardless of program. Older SSI recipients and DI-only beneficiaries with intellectual disability also experienced large relative and absolute declines in annual employment.

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<sup>9</sup> We calculated the adjusted difference for each subgroup by using the same Oaxaca decomposition approach that we used to calculate adjusted differences in the full sample, omitting the single subgroup characteristic from the list of explanatory variables.

**Table 8. Annual employment rates of selected subgroups of work-oriented beneficiaries**

	DI-only				SSI			
	Unadjusted 2005	Unadjusted 2015	Adjusted difference (2015-2005)	Adjusted difference as a percentage of 2005 adjusted value	Unadjusted 2005	Unadjusted 2015	Adjusted difference (2015-2005)	Adjusted difference as a percentage of 2005 adjusted value
Total	31.8	22.5	-8.4*	-27.2	27.9	18.6	-8.0*	-30.1
Age								
Under 56	34.4	25.9	-10.1*	-28.1	28.0	20.4	-5.9*	-22.4
56 and older	25.8	18.1	0.7	4.0	27.4	10.9	-21.3*	-66.1
Education								
Less than high school	29.8	18.1	-14.1*	-43.8	23.8	9.7	-11.1*	-53.4
High school or greater	32.3	23.2	-8.4*	-26.6	30.2	22.4	-7.2*	-24.3
Self-reported reason for limitation								
Musculoskeletal condition	28.9	21.7	-15.5+	-41.7	17.5	9.5	-8.4	-46.9
Psychiatric condition	34.8	24.1	-9.3	-27.8	25.4	15.7	-7.8*	-33.2
Sensory condition	43.9	30.6	-22.2	-42.0	38.0	21.0	-19.0+	-47.5
Intellectual disability	65.3	39.6	-22.3	-36.0	49.5	33.8	-5.0	-12.9
Years since initial SSA award								
Fewer than 5	26.1	12.2	-16.3	-57.2	21.9	10.9	-11.1*	-50.5
5 or more	35.2	25.9	-5.9	-18.6	28.9	20.9	-6.8*	-24.5

Source: 2005 and 2015 NBS.

\*Adjusted difference is statistically significant at the 0.05 level.

+Adjusted difference is statistically significant at the 0.10 level.

**Job characteristics.** There were changes in selected job characteristics of work-oriented beneficiaries who were employed at the time of the NBS interview (Table 9).<sup>10</sup> We again report statistical significance at the 0.10 level because the sample of work-oriented beneficiaries employed at the time of the interview (the group for whom data on job characteristics were available) was relatively small. A substantially smaller share of work-oriented beneficiaries were employed full time in 2015 compared with 2005 (10 versus 18 percent among DI-only beneficiaries and 16 versus 25 percent among SSI recipients). However, after controlling for changes in beneficiary characteristics, only the decline for SSI recipients is statistically significant. Employed SSI recipients also experienced a decline in sheltered or supported employment (11 percentage points)<sup>11</sup> and in jobs that offered health insurance (8 percentage points). These job attributes did not change for employed DI-only beneficiaries after adjusting for changes in their characteristics from 2005 to 2015. Employed DI-only beneficiaries saw an increase in the share of jobs in which the employer made at least one accommodation (by 14 percentage points). However, there was a drop in production jobs for employed DI-only beneficiaries and SSI recipients (18 and 13 percentage points, respectively). These findings mirror trends identified by others as occurring from immediately before to immediately after the 2007–2009 recession (Livermore and Bardos 2015).

**Reasons for not working.** The NBS asked respondents who were not employed at the time of the interview about the reasons they were not working. Work-oriented beneficiaries in both programs most frequently cited poor health (more than 90 percent), but they also reported other important reasons, only two of which changed over time (Table 10). In 2015, just over one-third said that they were not employed because they had been discouraged by previous work attempts. Among DI-only beneficiaries, this rate was similar in 2015 and 2005, but it fell significantly from 2005 to 2015 among SSI recipients. Roughly half of work-oriented beneficiaries cited not being able to find a job as a reason for not working in 2015. Relative to 2005, this rate was unchanged for SSI recipients, but it was roughly 12 percentage points higher for DI-only beneficiaries. The rates of reporting other barriers to employment, namely, inaccessible workplaces, lack of reliable transportation, and fear of losing cash or health insurance benefits, did not change from 2005 to 2015.

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<sup>10</sup> Because of the manner in which hourly wages and monthly earnings are reported in the 2005 NBS public use file, we were unable to make them comparable to the 2015 values. Therefore, we do not report changes in these important job characteristics.

<sup>11</sup> Sheltered and supported employment are asked about in the same NBS question; it is not possible to discern one from the other. Supported employment may or may not be in a competitive, integrated environment.

**Table 9. Characteristics of jobs held by work-oriented beneficiaries employed at interview**

	DI-only			SSI		
	Unadjusted 2005	Unadjusted 2015	Adjusted difference (2015-2005)	Unadjusted 2005	Unadjusted 2015	Adjusted difference (2015-2005)
Unweighted number	218	167		391	252	
Weighted number	356,971	573,457		407,105	401,785	
<b>Worked 35 or more hours per week (all jobs) (%)</b>	17.7	10.0	-0.3	25.4	16.4	-11.0*
<b>Sheltered or supported work (%)</b>	29.7	22.1	-4.6	45.3	26.9	-10.7*
<b>Employer made at least one accommodation (%)<sup>a</sup></b>	24.8	31.0	13.5+	14.2	14.0	-1.8
<b>Offered employer health insurance (%)<sup>a</sup></b>	22.1	25.9	6.2	24.2	19.2	-7.6+
<b>Very or somewhat satisfied with main job (%)<sup>b</sup></b>	83.8	85.0	-1.4	81.7	83.7	5.6
<b>Occupation (main job) (%)</b>						
Service Occupations	20.3	23.4	-2.7	30.9	36.0	6.1
Sales, Office, and Admin Occupations	20.5	34.4	13.1+	15.6	19.1	0.1
Production/Transportation	33.3	10.5	-18.4*	31.1	12.8	-13.4*
Other or unknown occupation	25.9	31.8	7.9	22.4	32.1	7.2

Source: 2005 and 2015 NBS.

\*Adjusted difference is statistically significant at the 0.05 level.

+Adjusted difference is statistically significant at the 0.10 level.

<sup>a</sup>Among those who are not self-employed.

<sup>b</sup>Among non-proxy interviews.

**Table 10. Reasons for not working among work-oriented beneficiaries not working or seeking work at interview**

	DI-only			SSI		
	Unadjusted 2005	Unadjusted 2015	Adjusted difference (2015-2005)	Unadjusted 2005	Unadjusted 2015	Adjusted difference (2015-2005)
Unweighted number not working or seeking employment at interview	500	602		1,162	952	
Weighted number not working or seeking employment at interview	1,049,971	2,236,522		1,478,067	1,908,653	
<b>Selected Reasons for Not Working (%)</b>						
Physical or mental condition prevents work	94.9	94.5	-0.0	91.9	91.4	-0.4
Discouraged by previous work attempts	38.9	37.2	-1.7	44.7	36.0	-6.8*
Cannot find a job <sup>a</sup>	37.8	48.8	11.7*	52.8	50.2	-1.7
Workplaces are not accessible	26.8	30.5	4.0	36.2	37.9	3.0
Lacks reliable transportation to/from work	17.4	23.2	5.1	33.8	30.2	-2.7
Doesn't want to lose cash/health insurance benefits	13.4	15.7	2.1	16.6	17.3	1.5

Source: 2005 and 2015 NBS.

\*Adjusted difference is statistically significant at the 0.05 level.

+Adjusted difference is statistically significant at the 0.10 level.

<sup>a</sup> Respondent was not working because he/she could not find a job for which he/she was qualified, employers would not give him/her a chance, or he/she could not find a job he/she wanted.

**Awareness of SSA supports.** As noted, a number of provisions in the DI and SSI programs are intended to encourage or support beneficiaries in their return-to-work efforts. However, it is well documented that beneficiaries' awareness of these provisions and supports is limited (Livermore et al. 2009; SSA 2018b). In assessing how awareness of SSA work supports has changed from 2005 to 2015, we found that awareness has increased for some but declined for others (Table 11). From 2005 to 2015, awareness of the Ticket to Work program increased among DI-only beneficiaries by 11 percentage points (to 44 percent), but it fell by 5 percentage points among SSI recipients (to 30 percent) after accounting for changes in beneficiaries' characteristics. The awareness of the provisions that allow working beneficiaries to keep their Medicaid (Section 1619b) or Medicare coverage after their federal disability payments have ended because of low earnings remained low for both SSI and DI-only beneficiaries, and it declined significantly (by 6 percentage points) among SSI recipients. In 2015, about one-fifth of work-oriented DI-only beneficiaries were aware of the extended Medicare option, and just 14 percent of work-oriented SSI recipients were aware of Section 1619b Medicaid. The awareness of benefit counseling services through SSA's Work Incentive Planning and Assistance (WIPA) program increased for both groups of beneficiaries, from 14 to 29 percent among DI-only beneficiaries and from 10 to 17 percent among SSI recipients.

**Table 11. Awareness of selected SSA work supports among work-oriented beneficiaries**

	DI-only			SSI		
	Unadjusted 2005	Unadjusted 2015	Adjusted difference (2015-2005)	Unadjusted 2005	Unadjusted 2015	Adjusted difference (2015-2005)
Unweighted Number	835	900		1,828	1,463	
Weighted Number	1,626,978	3,116,054		2,183,514	2,712,818	
<b>Heard of support (%)<sup>a</sup></b>						
Trial work period	46.9	44.2	-2.6	34.5	31.2	-3.3
Extended period of Medicare eligibility	20.2	20.5	-1.1	16.0	17.2	0.4
1619(b) continued Medicaid coverage	n.a.	n.a.		19.6	13.6	-6.3*
Plan for achieving self support	n.a.	n.a.		13.3	8.5	-4.6*
Ticket to Work	32.7	44.4	10.9*	34.2	29.8	-5.1*
Impairment-related or blind work expenses	14.9	15.4	-1.6	6.7	7.3	0.2
Benefits counseling	13.6	28.7	15.7*	9.9	16.8	7.1*

Source: 2005 and 2015 NBS.

\*Adjusted difference is statistically significant at the 0.05 level.

+Adjusted difference is statistically significant at the 0.10 level.

<sup>a</sup> Statistics for each work support were computed among those to whom the support was applicable based on SSI/DI status at sampling.

n.a. = not applicable

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## V. SUMMARY AND IMPLICATIONS OF FINDINGS

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We found several noteworthy changes in the characteristics and work-related experiences of SSI and DI beneficiaries from 2005 to 2015:

- Beneficiaries overall were older, but few measures of their health status changed significantly.
- A greater share of DI-only beneficiaries had work goals or expectations, but among SSI recipients, this rate did not change.
- Relative to all DI-only beneficiaries, there was a larger increase in the share of beneficiaries who were age 56 or older in the work-oriented group, and the decline in physical health was more pronounced.
- Among work-oriented beneficiaries, there was a decline in the share that had ever worked for pay, and this was particularly marked for SSI recipients. Compared with 2005, there was also a significant drop in the recent work activities of work-oriented beneficiaries in 2015, particularly in the rates of annual employment.
- Among work-oriented SSI recipients who were employed, the rates of sheltered or supported employment fell over the study period, as did the shares of recipients who were employed full time and working in jobs that offered health insurance. Production jobs for both DI-only beneficiaries and SSI recipients also declined. Among DI-only beneficiaries, the percentage of individuals working in jobs in which the employer made at least one accommodation increased markedly.
- Among work-oriented DI-only beneficiaries, the awareness of work-support provisions in 2015 increased or remained unchanged from 2005. Among SSI recipients, this awareness declined for several of the provisions asked about in the NBS, but it increased for benefits counseling services.

The changes noted above have important implications for programs and policies intended to promote the employment of individuals receiving SSI or DI, but some of the changes are outside of SSA's control. The decline in employment among work-oriented beneficiaries might be related to several factors, including the lingering effects of the Great Recession and changes in the economy that make it more difficult for low-skill individuals to find jobs. This view is supported not only by the large increase in the share of work-oriented DI-only beneficiaries who reported that they could not find jobs but also by the decline in beneficiaries with production jobs. It is possible that beneficiary employment improved after 2015 as the economy continued to recover and unemployment rates for people with disabilities continued to decline (Kang et al. 2018).

For new beneficiaries (those on the rolls for fewer than five years), the decline in employment from 2005 to 2015 was relatively pronounced; the recession might have compelled some individuals who struggled in the labor market even before the recession to seek disability benefits after losing or being unable to find jobs during the recession. The observed declines in employment persist even after adjusting for observable changes in beneficiaries' demographic

characteristics and health, but it is also possible that the lower rates of employment experience reflect changes in beneficiaries' characteristics that are not observable in the NBS.

Another implication of the findings relates to the larger share of beneficiaries, particularly SSI recipients, who have never held a job, a trend first identified in the 2010 NBS data (Livermore and Bardos 2015) and that appears to have persisted since then. This trend is especially concerning given that prior work experience is a strong predictor of future work activity. The recession likely limited the ability of low-skill workers with disabilities and no job experience to find jobs, and their lack of experience will continue to hurt their employment prospects while they participate in the disability programs.

Although many of the findings suggest that factors outside of SSA's control affect beneficiary employment, they also point to potential avenues for improving employment outcomes. The increase in the share of beneficiaries who are work-oriented, prompted entirely by an increase among DI-only beneficiaries, implies that more beneficiaries may attempt to return to work than they did in the past and that there may be a greater demand for employment supports offered by SSA and others. The greater awareness of the Ticket to Work and WIPA programs also suggests a potential increase in that demand. Lessons and strategies from programs that focus on helping older workers return to work might be useful, given that a large share (44 percent) of work-oriented DI-only beneficiaries is older than 55. One example is the Senior Community Service Employment Program sponsored by the National Council on Aging (National Council on Aging (n.d.),

The relatively low rates of awareness of work supports, including those that allow beneficiaries to keep public health insurance coverage after returning to work, suggests that more might be done to educate beneficiaries about these supports. Moreover, the fact that roughly half of work-oriented beneficiaries reported that they could not find a job as a reason for not working suggests that targeted outreach intended to connect beneficiaries with employment services and information about work supports—particularly relatively new DI-only beneficiaries—might help some individuals to regain employment.

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