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Article

- 1 **The Decline in Earnings Prior to Application for Disability Insurance Benefits****
by Jackson Costa

Social Security administrative data show that the earnings of individuals who apply for Disability Insurance benefits decline rapidly in the years prior to application. This article presents statistics on the average “decline period”—the time from the year of maximum earnings to the year of application—by general and specific primary diagnosis, sex, and age for individuals who filed applications during 2004–2013. The analysis compares decline periods for applicants whose claims were allowed with those for applicants whose claims were denied. Understanding decline-period variations may enable policymakers and service providers to target and customize preapplication support services to specific population subgroups.

Perspectives

- 17 **Supplemental Security Income and Social Security Disability Insurance Beneficiaries with Intellectual Disability****
by Gina A. Livermore, Maura Bardos, and Karen Katz

This article uses nationally representative survey data on working-age Supplemental Security Income (SSI) and Social Security Disability Insurance (DI) beneficiaries to present a profile of the characteristics, employment, and income sources of beneficiaries with intellectual disability and to compare them with those of other working-age SSI and DI beneficiaries.

THE DECLINE IN EARNINGS PRIOR TO APPLICATION FOR DISABILITY INSURANCE BENEFITS

by Jackson Costa*

Data from the 2014 Disability Research File show that the earnings of individuals who apply for Social Security Disability Insurance benefits decline rapidly in the years prior to application. This article presents statistics on the average “decline period”—the time from the year of maximum earnings to the year of application—by general and specific primary diagnosis, sex, and age, for individuals who filed applications during 2004–2013. On average, denied-claim applicants experience a longer decline period than do allowed-claim applicants, and those with mental impairments experience a shorter decline period than do those with physical impairments. Differences across general diagnosis groups are typically small; differences between certain specific diagnosis subgroups are greater. Men experienced longer decline periods than did women, and older applicants experienced longer decline periods than did younger ones.

Introduction

The Social Security Disability Insurance (DI) program provides benefits to individuals with disabilities and, in some cases, to their dependent family members. Individuals must accrue sufficient work histories and payroll tax contributions to be eligible for DI benefits. Some researchers, such as Autor and Duggan (2010), argue that the structure of the DI program supports a dependency on benefits that combines with other factors to increase program costs. However, other researchers have argued that many DI beneficiaries are simply unable to work (Bound 1989; Stapleton and others 2008).¹ Providing preapplication employment supports and related services to individuals at risk of applying for DI benefits might improve their economic well-being and lower the number of DI applications and awards.

To assist workers with disabilities effectively, researchers and policymakers might direct support services toward narrowly targeted subgroups (Wittenburg, Mann, and Thompkins 2013). In selecting groups to target for assistance, policymakers must consider factors such as the earnings history or the

functional abilities of the prospective target populations. This article investigates one potential factor to consider when planning early intervention efforts: the decline in earnings in the period leading up to application for DI benefits. Although that factor has previously been observed (see von Wachter, Song, and Manchester 2011), this article focuses on the duration of the decline in earnings across disability types. The analyses in this article will serve as a first step in understanding the trends in earnings prior to application and will expand the exploration of how best to target intervention efforts.

Selected Abbreviations

DDS	Disability Determination Service
DI	Disability Insurance
DRF	Disability Research File
IPS	Individual Placement and Support
SGA	substantial gainful activity
SSA	Social Security Administration
SSI	Supplemental Security Income

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Literature Review

Interventions to help maintain employment and earnings may be more effective if they occur prior to application for disability program benefits (Autor and Duggan 2010; Liebman and Smalligan 2013; Gimm, Hoffman, and Ireys 2014). Several initiatives have explored the effectiveness of early intervention. For example, the Demonstration to Maintain Independence and Employment (DMIE), administered by the Centers for Medicare & Medicaid Services in 2006–2009, tested the effectiveness of “wrap-around” services to prevent or delay employment loss and benefit receipt (Gimm and Weathers 2007; Whalen and others 2012). These services included employment-related supports, medical and behavioral services, life and work coaching, and person-centered case management (services varied by state).² In their evaluation of DMIE, Gimm, Hoffman, and Ireys (2014) found statistical evidence that early interventions significantly reduce the likelihood of federal disability-program benefit receipt after 12 months.

Similarly, Killackey, Jackson, and McGorry (2008) evaluated the effectiveness of Individual Placement and Support (IPS), an employment-support initiative in Melbourne, Australia that focused on enabling competitive employment for individuals with a mental illness.³ The authors found evidence suggesting that intervening at earlier stages of mental illness—specifically, at a first episode of psychosis—and incorporating IPS into the treatment regimen led to more jobs acquired and longer employment periods for their participants. Those receiving IPS treatment at the first stage of psychosis also worked more hours per week and relied less on welfare benefits than did the participants receiving the usual treatment regimen.

To date, most of the demonstrations administered by the Social Security Administration (SSA) have focused on employment efforts after award. Wittenburg, Mann, and Thompkins (2013) reviewed demonstrations conducted by SSA before and after Congress passed the Ticket to Work and Work Incentives Improvement Act of 1999. Although the authors concluded that none of the reviewed demonstrations were likely to reduce caseloads or benefit awards enough to reverse program growth, they found that demonstrations targeted narrowly to specific populations showed positive employment impacts. For example, after 24 months in the Mental Health Treatment Study, the targeted treatment group attained 61 percent employment, versus 40 percent for the control group (Frey and others 2011). In the Youth Transition

Demonstration (YTD), the extent of the service provided determined the impact on the participants. The two YTD project sites that provided the most generous employment services reported the sharpest increases in employment rates (Fraker and others 2012). With studies suggesting that targeted earlier interventions may be effective, there has been strong interest in reaching potential DI applicants much earlier, before they apply for benefits. For example, SSA is implementing the Early Intervention Mental Health Demonstration (EIMHD) to enable people with disabilities to remain in the workforce. EIMHD will combine aspects of IPS, systematic medication management, and nurse-care coordination for those who allege a mental impairment.⁴

Mamun and others (2011) examined employment rates for beneficiaries who had been on the disability rolls for at least 1 calendar year. The authors found little variation in 2007 employment rates across disability types (from 9.7 percent to 12.9 percent) except for beneficiaries with intellectual disability, who had an employment rate of 15.5 percent. Using linear probability model regressions, the authors also found that beneficiaries with intellectual disability were 2.7 percentage points more likely than the reference group (beneficiaries with nonmusculoskeletal physical disorders or with missing records) to be employed, all else being equal. Mann, Mamun, and Hemmeter (2015) extended this analysis by comparing employment and earnings outcomes across 25 categories of disabilities using logistic regression models. The authors’ analyses included probabilities of employment and earnings exceeding the substantial gainful activity (SGA) level.⁵ They found that DI beneficiaries with hearing impairments, intellectual disability, visual impairments, human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS), and cancers were more likely to be employed than were beneficiaries with primary impairments of respiratory diseases, which was their reference group. The authors also reported that DI beneficiaries with primary impairments of anxiety disorders, schizoaffective disorders, endocrine/nutritional/metabolic diseases, back disorders, and affective disorders were less likely to be employed than were DI beneficiaries in the reference group. Studies by Bound (1989) and von Wachter, Song, and Manchester (2011) showed that DI applicants typically experienced decreases in their earnings in the period immediately before application, especially among those whose claims were rejected. Both studies analyzed postapplication

employment and earnings trends and found that a portion of rejected applicants were able to find and maintain employment.

Burkhauser, Butler, and Weathers (2001/2002) looked at the influence of policy variables on the timing of DI application. Using data from the Health and Retirement Study, the authors found that certain variables significantly predict the time to application. The authors reported that the median time elapsed from the onset of a work-limiting condition to DI application among working-age individuals is 7 years for men and 8 years for women. They further found that individuals in states with high allowance rates are disproportionately more likely to apply within 1 year of the onset of a work-limiting condition. Other factors affecting the timing of DI application include the size of the benefit (a 20 percent increase in DI benefits reduces the time to application by 1.2 years); state allowance rates (a 20 percent increase in the allowance rate reduces the time to application by 0.88 years for men); and employer accommodations for work-limiting conditions (universal accommodation increases the time to application by 4.36 years for men and 3.76 years for women).

In this article, I analyze DI applicants by type of disability, sex, age group, and claim outcome to see how long individuals experience an earnings decline prior to filing an application. The article seeks to add to the current literature on employment experiences and variations across disability types and other characteristics. It differs from the studies mentioned above in multiple ways. First, Mamun and others (2011) and Mann, Mamun, and Hemmeter (2015) focused on employment after award, while this study examines earnings and employment prior to award. Second, in addition to examining differences across broader diagnosis groups (as in Mann, Mamun, and Hemmeter 2015), this study examines differences across more specific disability categories. Third, although Bound (1989) and von Wachter, Song, and Manchester (2011) mention employment trends prior to award, those studies do not distinguish between disability types, as this article does. Lastly, this study also analyzes variations by sex and age group.

The period of earnings decline prior to DI application is a potential measure of how much time SSA has to offer intervention services to reduce the rate of DI application. Overall, I find differences in the earnings decline periods among the general impairment categories. However, differences in the decline periods are more pronounced when the disability categories

are disaggregated at specific levels. The preapplication earnings decline period also differs by sex. Across age groups, the earnings decline period increases with successively older applicant cohorts. I present separate results for DI applicants whose claims were allowed and those whose claims were denied to highlight differences in the earnings-decline patterns for these groups. For denied claims, the type of impairment is based on the disability the applicant alleged, which was not verified by a disability examiner.

Data and Methodology

This analysis uses data from SSA's 2014 Disability Research File (DRF). Created annually, the DRF is a longitudinal file containing data on all disability claims filed with SSA in the previous 10 years; the 2014 DRF thus covers DI and Supplemental Security Income (SSI) applications filed from 2004 through 2013. The DRF combines data from several agency administrative data files, including the Numerical Identification System (Numident) file, for beneficiary/client information; the Master Beneficiary Record, for information on Old-Age, Survivors, and Disability Insurance benefits; the Supplemental Security Record, for information on SSI payments; the 831 File, for information on disability; and the Summary Earnings Record, for earnings histories. This analysis uses DRF records on DI-only or concurrent DI and SSI claims.

The data used in this analysis have some inherent limitations. First, the study examines only the impairment types identified as the primary diagnosis; secondary diagnoses, or any other subsequent diagnoses, are not considered. Second, the primary diagnosis is not always what the applicant alleges; it is rather what SSA and the Disability Determination Service (DDS) consider the applicant's primary disability to be. An applicant may allege more than one disability but be determined by DDS and SSA to be eligible on the basis of only one of the diagnoses. If DDS recognizes more than one disability, the order in which the examiner lists the disabilities determines the diagnosis group to which the individual belongs.⁶ Lastly, because my sample consists of applications filed 2004–2013, different economic conditions may have affected earnings trends across applicant cohorts.

I analyze disability data at two tiers of disaggregation: by general diagnosis and by specific diagnosis. SSA identifies a specific diagnosis in its records with a 4-digit impairment code. To provide comparisons at the broader tier, I categorize these 4-digit impairment codes into 23 groups of general diagnoses

(see Appendix Table A-1 for the general-diagnosis classification scheme).

Before conducting my analysis, I adjusted certain values for selected variables. I recoded the earnings of applicants when they were younger than 18 to “missing” to avoid lowering their average earnings based on a child’s level of work. I relabeled the specific diagnoses of “autistic disorders” and “schizophrenic and other psychotic disorders” as “autistic disorders and other pervasive developmental disorders” and “schizophrenic, paranoid, and other functional psychotic disorders,” respectively, to match the terminology in published SSA tables. Lastly, I adjusted all earnings to real 2014 dollars using the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

Because this analysis aims to facilitate discussions on targeting applicant groups to help them maintain employment and earnings, I include only DI applicants aged 26–55. The lower bound of age 26 includes individuals who joined the labor force, reached their maximum earnings level, and experienced earnings decline at relatively young ages. Setting the upper bound at age 55 (rather than an older age) focuses the analysis on a population with greater labor force attachment and likelihood of return to work.⁷ I exclude from the sample 20,646 applicants whose claims remained pending as of year-end 2013. After applying all restrictions to the data, my sample consists of 8,767,497 individuals.⁸

Personal Characteristics

Table 1 presents selected characteristics of the sample (overall and by claim outcome) with allowance rates. A little less than half (49.0 percent) of claims are allowed. About 70 percent of applicants are aged 40–55. Among all applicants, the two most common diagnoses are diseases of the musculoskeletal system and connective tissue (31.7 percent) and mood disorders (14.0 percent). Autistic disorders, developmental disorders, childhood and adolescent disorders not elsewhere classified, intellectual disability, congenital anomalies, diseases of the blood and blood-forming organs, and diseases of the skin and subcutaneous tissue are among the least prevalent primary general diagnoses, each accounting for less than 1 percent of the sample. The distribution by general diagnosis in my sample is broadly similar to that of SSA statistical publications (for example, SSA 2015, Table 40).

Allowance rates are low for the younger age groups: 31.1 percent for applicants aged 26–29 and 36.8 percent for those aged 30–39. The allowance

rate for those aged 50–55 is 64.1 percent, more than double the allowance rate of the youngest applicant cohort. Applicants with a primary diagnosis of neoplasms, intellectual disability, and genitourinary system diseases (such as kidney failure) have the highest allowance rates, at 83.8 percent, 82.6 percent, and 79.1 percent, respectively. Apart from those with an “unknown” diagnosis, applicants with a primary diagnosis of childhood and adolescent disorders not elsewhere classified; developmental disorders; and endocrine, nutritional, and metabolic diseases have the lowest allowance rates, at 20.3 percent, 21.4 percent, and 37.5 percent, respectively.

Analysis

To qualify for DI benefits, an applicant must be unable to work enough to earn at the SGA level, which in 2015 was \$13,080 for nonblind individuals. Chart 1 shows that among individuals who applied for DI benefits during 2004–2013, the percentages who had any earnings or had earnings exceeding the SGA threshold in a given year dropped significantly in the period leading up to the year of application.⁹ The red lines of Chart 1 represent the applicants whose DI claims were eventually allowed, and the blue lines represent denied claims. In my sample of individuals who applied during the period 2004–2013, the percentage whose claims were allowed and who earned more than the SGA level during the 3 years prior to application dropped from 68 percent to 63 percent, 53 percent, and finally 22 percent in the year of application.

On average, earnings at the time of DI application are drastically lower than the maximum earnings within the 10 previous years, regardless of diagnosis group. Chart 2 displays the stark differences between an individual’s maximum earnings (in the 10-year period leading up to application) and his or her earnings in the year before application by primary general diagnosis. By definition, applicants must earn less than the SGA level to be eligible for DI benefits; therefore, some may choose to reduce their earnings around the time they apply. Average earnings in the year before application accurately measures the decline in earnings because it reflects a year in which applicants do not have to reduce earnings in order to meet the eligibility threshold. In Chart 2, for each diagnosis, the red bar shows the earnings differences for the applicants whose DI claims were allowed. The largest percentage decline in earnings (not labeled in Chart 2) occurred for those who had schizophrenic and other psychotic disorders (65 percent), childhood and adolescent

Table 1.
Number and percentage of DI applicants, by claim outcome and applicant characteristics, 2004–2013

Characteristic	All applicants		Allowed claims	Denied claims	Allowance rate (%)
	Number	Percentage distribution			
Total ^a	8,767,497	100.0	4,294,312	4,473,185	49.0
Age at application					
26–29	653,208	7.5	203,448	449,760	31.1
30–39	1,982,286	22.6	730,344	1,251,942	36.8
40–49	3,350,494	38.2	1,576,737	1,773,757	47.1
50–55	2,781,509	31.7	1,783,783	997,726	64.1
Sex ^b					
Men	4,445,658	50.7	2,221,748	2,223,910	50.0
Women	4,321,825	49.3	2,072,556	2,249,269	48.0
Concurrent SSI application					
Yes	4,875,852	55.6	1,976,735	2,899,117	40.5
No	3,891,645	44.4	2,317,577	1,574,068	59.6
Primary general diagnosis					
Mental impairments					
Autistic disorders	5,832	0.1	3,912	1,920	67.1
Developmental disorders	14,446	0.2	3,097	11,349	21.4
Childhood and adolescent disorders not elsewhere classified	11,777	0.1	2,393	9,384	20.3
Intellectual disability	69,530	0.8	57,413	12,117	82.6
Mood disorders	1,227,956	14.0	576,859	651,097	47.0
Organic mental disorders	174,528	2.0	125,243	49,285	71.8
Schizophrenic and other psychotic disorders	153,010	1.7	108,628	44,382	71.0
Other mental impairments	349,213	4.0	142,329	206,884	40.8
Nonmental impairments					
Congenital anomalies	10,319	0.1	5,372	4,947	52.1
Diseases of the—					
Blood and blood-forming organs	27,459	0.3	13,172	14,287	48.0
Circulatory system	681,630	7.8	384,096	297,534	56.3
Digestive system	245,832	2.8	119,680	126,152	48.7
Genitourinary system	141,057	1.6	111,601	29,456	79.1
Musculoskeletal system and connective tissue	2,777,205	31.7	1,230,814	1,546,391	44.3
Nervous system and sense organs	689,896	7.9	383,491	306,405	55.6
Respiratory system	261,319	3.0	138,337	122,982	52.9
Skin and subcutaneous tissue	25,755	0.3	11,762	13,993	45.7
Endocrine, nutritional, and metabolic diseases	373,643	4.3	140,188	233,455	37.5
Infectious and parasitic diseases	115,007	1.3	62,079	52,928	54.0
Injuries	468,732	5.3	189,906	278,826	40.5
Neoplasms	529,582	6.0	443,582	86,000	83.8
Other nonmental impairments	23,428	0.3	11,149	12,279	47.6
Unknown	390,341	4.5	29,209	361,132	7.5

SOURCE: Author's calculations using Social Security administrative records.

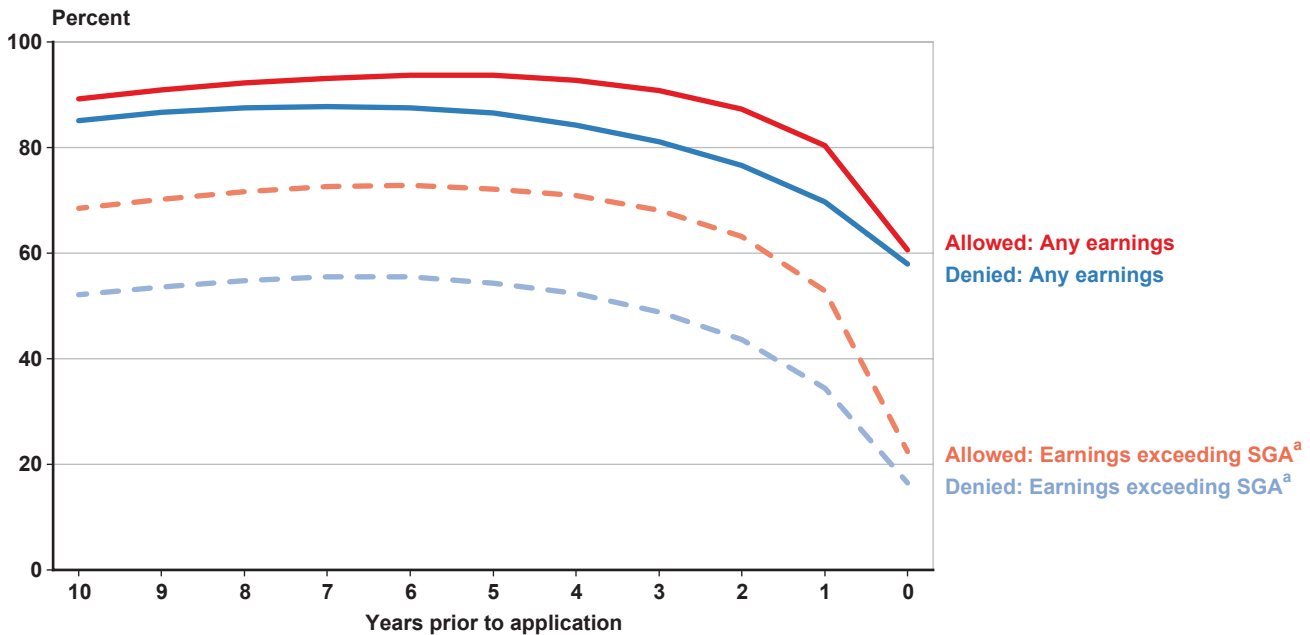
NOTE: Rounded components of percentage distributions do not necessarily sum to 100.0.

a. Omits 20,646 applications (0.2 percent) that remained pending at year-end 2013.

b. The administrative records for 14 claims did not indicate the applicant's sex.

Chart 1.

Percentage of DI applicants with any earnings and with earnings exceeding SGA in the 10 years prior to application, by claim outcome: Applications filed 2004–2013



SOURCE: Author's calculations using Social Security administrative data.

NOTES: Sample includes individuals concurrently applying for SSI payments.

Year 0 = year of application.

a. Earnings in nominal dollars.

disorders not elsewhere classified (62 percent), mood disorders (57 percent), and autistic disorders (56 percent). On average, applicants with schizophrenic and other psychotic disorders experienced a drop in average earnings from \$29,664 at the maximum to \$10,398 in the year before application. The smallest percentage drop in earnings was for applicants diagnosed with neoplasms (39 percent); that group experienced a decline in average earnings from about \$48,088 at maximum to \$29,326 in the year before application.

The blue bars in Chart 2 illustrate the earnings differences for DI applicants whose claims were denied. For many diagnoses, results are similar for both claim outcomes. On average, applicants whose claims were denied and who alleged schizophrenic and other psychotic disorders experienced an earnings drop from \$23,532 at maximum to \$7,256 in the year before application. Those who alleged childhood and adolescent disorders not elsewhere classified experienced a drop from \$24,547 to \$8,018, and those alleging other mental impairments had their earnings drop from \$27,719 to \$9,362. The earnings declines

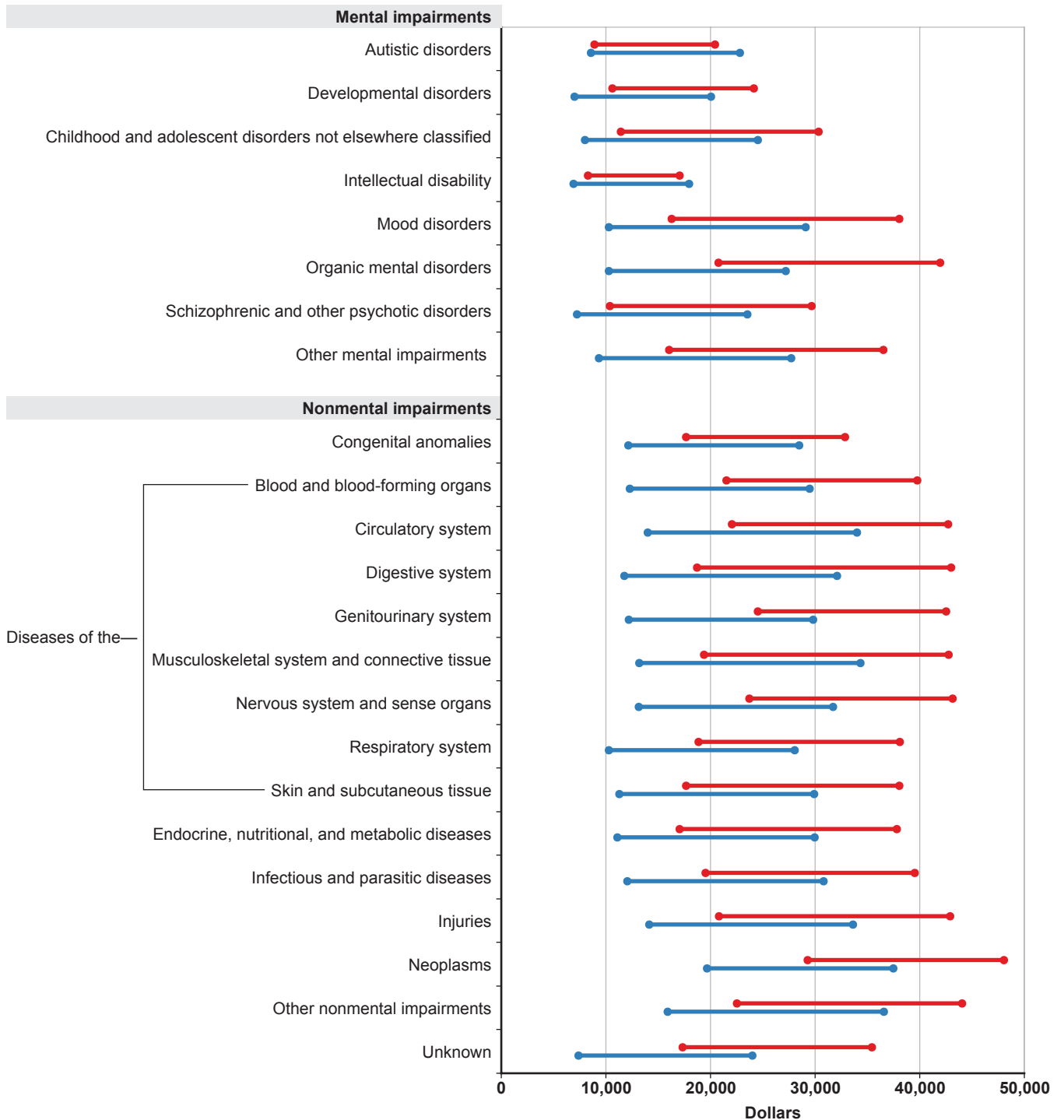
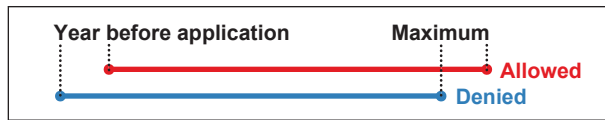
for those three diagnoses were 69 percent, 67 percent, and 66 percent, respectively. Applicants with claims denied who alleged neoplasms experienced the smallest proportional decline in earnings at 47 percent.

Decline Periods

Determining the diagnosis groups that experienced the quickest earnings declines is complicated because of the difficulty of properly identifying the beginning of the decline for those whose earnings did not fall monotonically. For this analysis, I measure the period that begins with an individual's year of maximum earnings (among the 10 years prior to DI application) and ends with the year of application. The period is measured in full years only; I do not account for the month of maximum earnings or application. Hereafter, I refer to that span as the "decline period."

Knowing the differences in the average decline period between diagnosis types can inform researchers and policymakers who are assessing the selection of target groups and the timing of intervention efforts. For example, the data may reveal that certain groups,

Chart 2.
Average earnings in year of maximum earnings and in year before DI application, by primary general diagnosis and claim outcome: Applications filed 2004–2013



SOURCE: Author's calculations using Social Security administrative data.

on average, experience a quicker earnings decline; therefore, intervening prior to application may not be as feasible for that particular group as it might be for others.

General diagnosis groups. Tables 2A and 2B present the mean decline periods for each primary general diagnosis for applicants with allowed claims and denied claims, respectively. The general-diagnosis rankings for shortest to longest mean decline period are also given. The mean times from maximum earnings to application range from 4.65 to 5.69 years for allowed applicants (Table 2A) and from 5.11 to 5.74 years for denied applicants (Table 2B). Among the allowed applicants, those with intellectual disability experienced an average decline period of 4.65 years, the shortest among the general diagnosis groups (Table 2A). Autistic disorders, congenital anomalies, diseases of the blood and blood-forming organs, and developmental disorders followed, with decline periods ranging from 4.71 to 5.04 years. The longest mean decline periods were experienced by applicants with diseases of the musculoskeletal system and connective tissue (5.52 years); diseases of the circulatory system (5.55 years); diseases of the respiratory system (5.60 years); endocrine, nutritional, and metabolic diseases (5.64 years); and diseases of the digestive system (5.69 years).

On average, applicants with denied claims experienced slightly longer decline periods than did applicants with allowed claims. However, the primary general diagnoses of congenital anomalies, developmental disorders, intellectual disability, and autistic disorders were among the five groups with the shortest mean decline periods (Table 2B), as was the case with allowed claims. The mean decline periods for those groups ranged from 5.11 to 5.27 years. Likewise, the diagnosis groups with the longest mean decline periods among denied-claim applicants were similar to those for allowed-claim applicants.

Specific diagnosis groups. A better understanding of the preapplication earnings trends of DI applicants is provided by examining the decline periods among specific diagnoses. Although the shortest and longest mean decline periods among the general disability groups differ by only about 1 year, the differences are greater between specific diagnoses within each general diagnosis group. There are 239 distinct specific diagnoses listed among the applicants in my full sample; 238 of them are listed among the allowed-claim applicants and 228 are listed among

the denied-claim applicants.¹⁰ Table 3 presents the mean decline periods for each of the 10 specific diagnoses with the shortest decline periods among the full sample, the allowed-claim subsample, and the denied-claim subsample. (A table presenting results for all specific diagnoses is available on request from the author: Jackson.Costa@ssa.gov.)

Among all DI applicants, those with the specific diagnoses of organic mental disorders, chromosomal anomalies, and intellectual disability experienced the three shortest decline periods, ranging from 3.65

Table 2A.
Mean decline period, by primary general diagnosis: Allowed claims filed 2004–2013

Primary general diagnosis	Period (years)		Rank
	Mean	Median	
Intellectual disability	4.65	4.00	1
Autistic disorders	4.71	4.00	2
Congenital anomalies	4.73	4.00	3
Diseases of the blood and blood-forming organs	4.99	5.00	4
Developmental disorders	5.04	5.00	5
Neoplasms	5.13	5.00	6
Unknown	5.14	5.00	7
Other nonmental impairments	5.14	5.00	8
Other mental impairments	5.14	5.00	9
Diseases of the genitourinary system	5.16	5.00	10
Diseases of the nervous system and sense organs	5.18	5.00	11
Infectious and parasitic diseases	5.19	5.00	12
Childhood and adolescent disorders not elsewhere classified	5.25	5.00	13
Injuries	5.27	5.00	14
Organic mental disorders	5.31	5.00	15
Mood disorders	5.34	5.00	16
Schizophrenic and other psychotic disorders	5.37	5.00	17
Diseases of the skin and subcutaneous tissue	5.42	5.00	18
Diseases of the musculoskeletal system and connective tissue	5.52	5.00	19
Diseases of the circulatory system	5.55	6.00	20
Diseases of the respiratory system	5.60	6.00	21
Endocrine, nutritional, and metabolic diseases	5.64	6.00	22
Diseases of the digestive system	5.69	6.00	23

SOURCE: Author's calculations using Social Security administrative records.

NOTE: Decline period is the time from the year of maximum earnings (up to 10 years prior to DI application) to the year of application.

to 3.96 years. Of the 2,393 allowed-claim applicants who had a general diagnosis of childhood and adolescent disorders not elsewhere classified, only 14 did not have a more specific level of disability identified with a 4-digit impairment code. That group of 14 had the shortest average earnings decline period in the subgroup.¹¹ Allowed-claim applicants with specific diagnoses of chromosomal anomalies, organic mental disorders, intellectual disability, neoplasms, and congenital anomalies ranked next, with decline periods ranging from 3.76 to 4.03 years. Allowed-claim

applicants with specific diagnoses of chronic liver disease and cirrhosis, gout, and alcohol addiction disorders¹² had the longest average earnings declines (about 6 years; not shown). The differences between the shortest and longest earnings decline periods are greater among the specific diagnoses than they are at the general-diagnosis level—a finding that could be useful when considering groups to target for interventions or support services.

Denied-claim applicants with the following specific diagnoses experienced the quickest average earnings declines: malignant neoplasms of the thymus, heart, or mediastinum; hereditary hemolytic anemias; malignant neoplasms of other parts of the nervous system; disorders of the metabolism (cystic fibrosis); and developmental and emotional disorders of newborn and younger infants. Those groups experienced average earnings decline periods ranging from 4.41 to 4.77 years. Denied-claim applicants experiencing the longest decline periods (ranging from 6.2 to 6.8 years) were those with substance addiction disorders, malignant neoplasms of the liver and intrahepatic bile ducts, Epstein-Barr hepatitis, anterior horn cell disease, and asbestosis (not shown). Denied-claim applicants experienced longer average decline periods than those experienced by allowed-claim applicants.

The population of some specific-diagnosis groups is small enough that the aggregate positive impacts of an early intervention program may not significantly exceed the resource requirements of recruiting and serving participants. For that reason, Table 4 presents the mean decline periods for each of the 10 most populous specific diagnosis groups among all, allowed-claim, and denied-claim applicants.

Disorders of the back and affective disorders were the two most prevalent specific diagnoses, regardless of claim outcome. Of the 10 most common specific diagnoses among allowed-claim applicants, those with the shortest mean earnings decline periods (ranging from 5.06 to 5.34 years) were anxiety-related disorders, chronic renal failure, organic mental disorders, affective disorders, and late effects of cerebrovascular disease; those with the longest were chronic pulmonary insufficiency and other and unspecified arthropathies (5.70 years). Of the 10 most common specific diagnoses among denied-claim applicants, those with the shortest mean earnings decline periods (ranging from 5.30 to 5.53 years) were fractures of lower limbs; disorders of muscle, ligament, and fascia; anxiety-related disorders; and affective disorders. Those with

Table 2B.
Mean decline period, by primary general diagnosis: Denied claims filed 2004–2013

Primary general diagnosis	Period (years)		Rank
	Mean	Median	
Congenital anomalies	5.11	5.00	1
Developmental disorders	5.17	5.00	2
Intellectual disability	5.17	5.00	3
Neoplasms	5.24	5.00	4
Autistic disorders	5.27	5.00	5
Diseases of the blood and blood-forming organs	5.28	5.00	6
Childhood and adolescent disorders not elsewhere classified	5.29	5.00	7
Injuries	5.30	5.00	8
Other nonmental impairments	5.32	5.00	9
Infectious and parasitic diseases	5.36	5.00	10
Diseases of the nervous system and sense organs	5.41	5.00	11
Organic mental disorders	5.43	5.00	12
Diseases of the genitourinary system	5.45	5.00	13
Mood disorders	5.53	6.00	14
Diseases of the skin and subcutaneous tissue	5.54	6.00	15
Schizophrenic and other psychotic disorders	5.57	6.00	16
Diseases of the musculoskeletal system and connective tissue	5.57	6.00	17
Other mental impairments	5.58	6.00	18
Endocrine, nutritional, and metabolic diseases	5.68	6.00	19
Unknown	5.70	6.00	20
Diseases of the circulatory system	5.70	6.00	21
Diseases of the respiratory system	5.71	6.00	22
Diseases of the digestive system	5.74	6.00	23

SOURCE: Author's calculations using Social Security administrative records.

NOTE: Decline period is the time from the year of maximum earnings (up to 10 years prior to DI application) to the year of application.

the longest were osteoarthritis and allied disorders (5.70 years), diabetes mellitus (5.71 years), and essential hypertension (5.80 years).

Other characteristics. Differences by sex and age provide a fuller understanding of the trends in earnings prior to DI application. Table 5 presents the

decline periods for men and women and among four age groups.

Women tended to have shorter average decline periods than did men, but the difference was less than a year. Among allowed-claim applicants, men experienced a mean decline period of 5.54 years and women

Table 3.
Ten primary specific diagnoses with the shortest mean decline periods, overall and by claim outcome

Primary specific diagnosis	Period (years)		Number of applicants
	Mean	Median	
All applicants			
Organic mental disorders	3.65	4.00	23
Chromosomal anomalies	3.92	3.00	691
Intellectual disability	3.96	3.00	265
Childhood and adolescent disorders not elsewhere classified	4.07	4.00	15
Congenital anomalies	4.09	4.00	35
Neoplasms	4.10	4.00	79
Other mental impairments ^a	4.23	4.00	75
Diseases of the skin and subcutaneous tissue	4.27	4.00	15
Developmental and emotional disorder of newborn and younger infants	4.33	4.00	126
Hereditary hemolytic anemias (including all sickle cell)	4.36	4.00	5,057
Allowed claims			
Childhood and adolescent disorders not elsewhere classified	(X)	4.00	14
Chromosomal anomalies	3.76	3.00	619
Organic mental disorders	3.80	4.00	20
Intellectual disability	3.88	3.00	258
Neoplasms	4.03	4.00	67
Congenital anomalies	4.03	3.50	32
Developmental and emotional disorder of newborn and younger infants	4.09	3.00	82
Other mental impairments ^a	4.11	4.00	66
Diseases of the circulatory system	4.18	3.00	67
Diseases of the skin and subcutaneous tissue	4.25	4.00	12
Denied claims			
Malignant neoplasms of the thymus, heart, or mediastinum	4.41	4.00	133
Hereditary hemolytic anemias (including all sickle cell)	4.52	4.00	2,030
Malignant neoplasms of other parts of the nervous system	4.63	4.00	109
Disorders of the metabolism (cystic fibrosis)	4.73	4.00	351
Developmental and emotional disorders of newborn and younger infants	4.77	4.50	44
Secondary malignant neoplasms (metastatic neoplasms of distant sites other than lymph nodes)	4.80	4.50	20
Malignant neoplasms of the skeletal system	4.81	5.00	398
Malignant neoplasms of the testis	4.85	5.00	1,918
Cerebral degenerations usually manifest in childhood	4.85	4.00	197
Malignant neoplasms of the lymphoid and histiocytic tissue (lymphoma)	4.92	5.00	9,556

SOURCE: Author's calculations using Social Security administrative records.

NOTES: Decline period is the time from the year of maximum earnings (up to 10 years prior to DI application) to the year of application.

Omits primary diagnoses accounting for fewer than 10 applications.

An extended table presenting results for all specific diagnoses is available on request from the author.

(X) = suppressed to avoid disclosing information about particular individuals.

a. "Other mental disorders" does not include all mental disorders not specifically identified in this table. The category excludes other mental-impairment classifications that are not among the 10 diagnoses with the shortest period from maximum earnings to DI application.

Table 4.
Mean decline periods among the 10 most common primary specific diagnoses, overall and by claim outcome

Primary specific diagnosis	Period (years)		Number of applicants
	Mean	Median	
All applicants			
Anxiety-related disorders	5.28	5.00	228,309
Organic mental disorders (chronic brain syndrome)	5.35	5.00	174,709
Disorders of the muscle, ligament, and fascia	5.39	5.00	224,236
Schizophrenic, paranoid, and other functional psychotic disorders	5.42	5.00	153,227
Affective disorders	5.44	5.00	1,229,383
Disorders of the back (discogenic and degenerative)	5.54	5.00	1,627,154
Unknown	5.65	6.00	400,040
Osteoarthritis and allied disorders	5.68	6.00	432,747
Other and unspecified arthropathies ^a	5.68	6.00	252,714
Diabetes mellitus	5.71	6.00	230,588
Allowed claims			
Anxiety-related disorders	5.06	5.00	108,140
Chronic renal failure	5.15	5.00	100,905
Organic mental disorders (chronic brain syndrome)	5.32	5.00	125,223
Affective disorders	5.34	5.00	576,824
Late effects of cerebrovascular disease	5.34	5.00	102,984
Schizophrenic, paranoid, and other functional psychotic disorders	5.37	5.00	108,628
Disorders of the back (discogenic and degenerative)	5.50	5.00	708,950
Osteoarthritis and allied disorders	5.66	6.00	219,587
Chronic pulmonary insufficiency (chronic obstructive pulmonary disease)	5.70	6.00	91,923
Other and unspecified arthropathies ^a	5.70	6.00	93,693
Denied claims			
Fractures of lower limbs	5.30	5.00	88,532
Disorders of the muscle, ligament, and fascia	5.36	5.00	142,357
Anxiety-related disorders	5.48	5.00	119,892
Affective disorders	5.53	6.00	651,094
Disorders of the back (discogenic and degenerative)	5.57	6.00	915,338
Other and unspecified arthropathies ^a	5.67	6.00	158,753
Unknown	5.70	6.00	361,132
Osteoarthritis and allied disorders	5.70	6.00	212,583
Diabetes mellitus	5.71	6.00	149,257
Essential hypertension	5.80	6.00	86,229

SOURCE: Author's calculations using Social Security administrative records.

NOTE: Decline period is the time from the year of maximum earnings (up to 10 years prior to DI application) to the year of application.

a. Excludes certain specific arthropathies not included among the 10 most common diagnoses.

experienced a mean decline period of 5.19 years. The difference among denied-claim applicants was smaller, with mean periods of 5.70 years for men and 5.40 years for women.

Allowed-claim applicants aged 26–29 at application experienced decline periods averaging 3.72 years, whereas denied-claim applicants in that age group experienced decline periods averaging 4.14 years. The average decline period increased for each successively older age group. Allowed-claim applicants aged 50–55

at the time of application experienced a mean decline period of 5.68 years. Denied-claim applicants of the same age experienced a mean decline period of 6.01 years. The large difference in mean decline periods between the oldest and youngest age groups is to be expected because older applicants have longer exposure to the labor market and thus have higher earnings levels from which a subsequent decline can more sharply differ.

Table 5.
Mean decline period, by applicant sex and age and claim outcome

Characteristic	All applicants			Allowed claims			Denied claims		
	Period (years)		Number of applicants	Period (years)		Number of applicants	Period (years)		Number of applicants
	Mean	Median		Mean	Median		Mean	Median	
Sex ^a									
Men	5.62	6.00	4,445,658	5.54	5.00	2,221,748	5.70	6.00	2,223,910
Women	5.30	5.00	4,321,825	5.19	5.00	2,072,556	5.40	5.00	2,249,269
Age at application									
26–29	4.01	4.00	653,208	3.72	3.00	203,448	4.14	4.00	449,760
30–39	5.22	5.00	1,982,286	4.97	5.00	730,344	5.37	5.00	1,251,942
40–49	5.62	6.00	3,350,494	5.43	5.00	1,576,737	5.79	6.00	1,773,757
50–55	5.80	6.00	2,781,509	5.68	6.00	1,783,783	6.01	6.00	997,726

SOURCE: Author's calculations using Social Security administrative records.

NOTE: Decline period is the time from the year of maximum earnings (up to 10 years prior to DI application) to the year of application.

a. The administrative records for 14 claims did not indicate the applicant's sex.

Conclusion

In this article, I have examined the average duration of the period from the year of maximum earnings to the year of application for DI benefits by primary disability diagnosis, restricting the analysis to the 10 years prior to application. Although all applicants experience a significant decline in earnings prior to their application, the speed and severity of the declines differ across general diagnosis groups, and more so across specific diagnosis groups. Decline periods also differ by sex and age group. In my sample, the oldest age group (50–55) experienced a mean earnings decline period almost 2 years longer than that of the youngest age group (26–29).

With further research and analysis, the results of this study—more specifically, the trends in earnings prior to application—could assist in the planning of future early intervention services. Typically, denied-claim applicants experience a decline period slightly longer than that of allowed-claim applicants, and applicants with physical impairments experience longer earnings declines than do applicants with mental impairments. The contrast in decline periods among the different diagnosis groups can inform targeting strategies. For example, providers could design shorter and quicker support services for individuals known to experience shorter decline periods or extended services for those known to experience longer decline periods. Knowledge of the relative length of earnings decline periods could also enhance SSA's Quick Disability Determination and Compassionate Allowance

processes, with which the agency identifies and quickly provides benefits to claimants whose medical conditions are particularly severe and demonstrably meet SSA disability standards. Because the number of individuals in each of the diagnosis groups is also an important research consideration, I have presented the mean decline periods for each of the 10 most common specific diagnoses. Among those groups, applicants experienced relatively similar decline periods (between 5 and 6 years) regardless of claim outcome.

Supplemented with further analysis, this study could inform the creation and design of intervention services. Additional research could explore how information on decline periods can be applied to targeting and directing early intervention initiatives. Further research could also expand the study period beyond this article's 10-year earnings histories for 2004–2013 applicants. Economic conditions experienced by individuals who applied in 2004 differed from those experienced by individuals who applied in 2013. For example, the Great Recession (2007–2009) likely affected the earnings of individuals applying in 2007 or later, but would not have had an impact for those who applied earlier. For that reason, it may be worth exploring the earnings decline by application year. In addition, future research could analyze the variance in the decline periods within given diagnosis groups; those with wide variances may require further analysis before decline-period information is used in planning intervention services.

Appendix A

Table A-1.
General-diagnosis categorization scheme

General-diagnosis category	SSA impairment codes
Mental impairments	
Autistic disorders	2990–2999
Developmental disorders	3150–3159
Childhood and adolescent disorders not elsewhere classified	3120–3149
Intellectual disability	3170–3194, 3196–3199
Mood disorders	2960–2969, 3110–3119
Organic mental disorders	2900–2909, 2940–2949, 3100–3109
Schizophrenic and other psychotic disorders	2950–2959, 2970–2989
Other mental impairments	2910–2939, 3000–3099, 3160–3169, 3195
Nonmental impairments	
Congenital anomalies	7400–7599
Diseases of the—	
Blood and blood-forming organs	2800–2899, 7720–7739, 7760–7769
Circulatory system	3750–3759, 3900–3989, 4010–4059, 4100–4179, 4200–4389, 4400–4449, 4460–4489, 4510–4599
Digestive system	5200–5379, 5400–5439, 5500–5539, 5550–5589, 5600–5609, 5620–5629, 5640–5799, 7770–7779
Genitourinary system	5800–6089, 6100–6119, 6140–6299
Musculoskeletal system and connective tissue	7100–7399
Nervous system and sense organs	3200–3269, 3290–3379, 3400–3749, 3760–3899
Respiratory system	4600–4669, 4700–4789, 4800–4879, 4900–4969, 5000–5089, 5100–5199, 7680–7709
Skin and subcutaneous tissue	6800–6869, 6900–6989, 7000–7099, 7780–7789
Endocrine, nutritional, and metabolic diseases	2400–2469, 2500–2539, 2550–2559, 2600–2799
Infectious and parasitic diseases	0020–0189, 0200–0279, 0300–0419, 0430–0579, 0600–0669, 0700–0889, 0900–1049, 1100–1189, 1200–1359, 1370–1399, 7710–7719
Injuries	8000–8489, 8500–8549, 8600–8879, 8900–8979, 9000–9059, 9070–9099, 9200–9299, 9400–9599
Neoplasms	0420–0429, 1400–1659, 1700–1769, 1780–2089, 2100–2399
Other nonmental impairments	7600–7609, 7640–7669, 7800–7809, 7830–7849
Unknown	Any other code

SOURCE: 2014 DRF.

NOTE: The specific impairments that correspond with the impairment codes are listed in SSA's Program Operations Manual System (<https://secure.ssa.gov/apps10/poms.nsf/lx/0426510015>).

Notes

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¹ In their evaluation of the Social Security Administration's Ticket to Work program, Stapleton and others (2008) found that 95 percent of 2005 National Beneficiary Survey respondents reported that they were not working because they were prevented by a physical or mental health condition.

² For more information on DMIE, see <http://www.mathematica-mpr.com/~media/publications/pdfs/wwd demonstration.pdf>.

³ Ongoing IPS programs operate in locations worldwide. They focus on competitive employment and are open to any person with mental illness who agrees to look for work as a condition of acceptance into the program. Job searching commences directly on entry into the program, which is integrated with a mental health treatment regimen. Potential jobs are based on client preference. Program supports are time-unlimited, are adapted to the needs of the individual, and continue after the participant is employed (Killackey, Jackson, and McGorry 2008).

⁴ For more information on the EIMHD, see <https://www.socialsecurity.gov/disabilityresearch/earlyintervention.htm>. The EIMHD is to be renamed the Supported Employment Demonstration (SED) in 2017.

⁵ SGA is an earnings threshold that determines ongoing eligibility for disability benefits among beneficiaries with work earnings.

⁶ For more information on DDS and the disability determination process, see <https://www.socialsecurity.gov/disability/determination.htm>.

⁷ Younger beneficiaries are more likely to return to work than older awardees; see Stapleton and others (2010).

⁸ For individuals who applied more than once, the sample contains only the first application.

⁹ I use nominal dollars to compare earnings against SGA thresholds.

¹⁰ These are the numbers of diagnoses I observe in my sample, not the total numbers of diagnoses present among all DI applicants.

¹¹ The average earnings decline period for allowed-claim applicants with childhood and adolescent disorders not elsewhere classified is suppressed to avoid disclosing information about particular individuals.

¹² SSA does not consider alcohol addiction disorder a disability on its own merit. The applicant must have an impairment considered a disability by SSA/DDS along with an alcohol and drug addiction disorder.

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SUPPLEMENTAL SECURITY INCOME AND SOCIAL SECURITY DISABILITY INSURANCE BENEFICIARIES WITH INTELLECTUAL DISABILITY

by Gina A. Livermore, Maura Bardos, and Karen Katz*

People with intellectual disability (ID) make up about 14 percent of all working-age Supplemental Security Income and Social Security Disability Insurance (DI) beneficiaries. Because of their disabilities, many face major employment challenges and often receive federal disability program benefits for several decades. This article describes these beneficiaries and compares them to those without ID. The two groups differ markedly in a number of ways; for example, those with ID are more likely to be working, but they also earn significantly less than other disability program beneficiaries. Their relatively low earnings, combined with low benefits, contribute to a higher overall rate of poverty—particularly among those who receive only DI.

Introduction

Intellectual disability (ID) is relatively uncommon; studies have estimated that less than 5 percent of the general population has ID (McKenzie and others 2016; Maulik and others 2011). Although the prevalence of ID is rare in the general population, people with ID make up a sizable share (about 14 percent) of the 13 million working-age Supplemental Security Income (SSI) and Social Security Disability Insurance (DI) beneficiaries.¹ ID is especially common among SSI recipients—more than one-fifth of them are eligible for payments because of ID.

ID is typically diagnosed during childhood. As a result, many beneficiaries with ID enter the SSI or DI programs at a young age and receive benefits for decades. Children with ID make up about 9 percent of children enrolled in SSI (SSA 2015b), and the large majority of them (about 80 percent) continue to qualify for SSI payments after age 18 (Hemmeter and Gilby 2009). Riley and Rupp (2015) estimated that beneficiaries with ID remain in the disability

programs as working-age adults for an average of 29 years—about twice the average for all disability program beneficiaries. This long tenure contributes to much higher average DI, SSI, Medicare, and Medicaid cumulative expenditures than the estimated average for all beneficiaries (\$472,913 versus \$292,401, in 2012 dollars) (Riley and Rupp 2015).

Given their large number and long tenure on the disability rolls, beneficiaries with ID represent a potentially important target group for support services designed to enable community living, permit long-term

Selected Abbreviations

ADL	activity of daily living
DAC	disabled adult child
DD	developmental disability
DI	Disability Insurance
DOL	Department of Labor
GED	General Educational Development

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Selected Abbreviations—Continued

ID	intellectual disability
IQ	Intelligence Quotient
NBS	National Beneficiary Survey
NCI	National Core Indicators
SGA	substantial gainful activity
SSA	Social Security Administration
SSI	Supplemental Security Income

employment, and reduce reliance on public benefits. Effective supports could also affect federal and state initiatives designed to promote employment opportunities for people with ID and developmental disabilities (DDs) in competitive, community-based employment, rather than in sheltered employment settings, where they earn low wages and remain segregated from mainstream society.

Information on the characteristics and employment experiences of people with ID is limited because identifying people with ID in national surveys can be difficult (Emerson, Felce, and Stancliffe 2013; Hendershot and others 2005). In addition, the relatively low prevalence of ID in the general population makes it difficult to study a large sample. Most of the information about people with ID comes from administrative sources (such as state education, vocational rehabilitation, and DD agencies) and from special surveys (such as those conducted for the National Longitudinal Transition Study and the National Core Indicators [NCI] project, which use administrative data to identify individuals with ID). Our study adds to the existing information by profiling working-age adults with ID who receive SSI and DI benefits. We use data from several rounds of a large, nationally representative survey of SSI and DI beneficiaries to describe the personal characteristics, employment, and income sources of beneficiaries with ID, and we compare them with those of disability program beneficiaries with other impairments. Our findings provide a better understanding of the working-age population with ID that relies on federal disability program benefits, the employment challenges they face, and the differences in their employment experiences from SSI and DI beneficiaries with other significant disabilities.

Background

The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) defines ID as a childhood-onset neurodevelopmental disorder

characterized by deficits in intellectual and adaptive functioning (American Psychiatric Association 2013). A deficit in intellectual functioning is defined as being at least two standard deviations below the population average, which means having an Intelligence Quotient (IQ) test score of 70 or below. Significant limitations in adaptive functioning include limitations in communication, social skills, independence, and performance at school or work. Although many health conditions can cause significant intellectual and adaptive functioning limitations, the onset of ID during childhood or adolescence distinguishes it from otherwise similar neurocognitive disorders.

The DSM-5 further classifies levels of ID from mild to profound, based on a person's IQ and daily living skills (American Psychiatric Association 2013). About 85 percent of people with ID have conditions that are classified as mild, with IQ test scores of approximately 55–70 (National Academies of Sciences, Engineering, and Medicine 2015). Genetic and environmental factors such as low birth weight, Down syndrome, or a traumatic brain injury can contribute to ID, but in many cases, the cause is unknown.

Estimates of the prevalence of ID generally range from about 1 percent to 3 percent of the general population (Harris 2006; National Academies of Sciences, Engineering, and Medicine 2015). Recent meta-analyses placed ID prevalence at the lower end of that range, at about 1 percent, and found that ID is more common among males and in black and Hispanic populations (McKenzie and others 2016; Boyle and others 2011; Maulik and others 2011). Racial and ethnic differences in ID prevalence are likely due in part to the effects of poverty, which is strongly associated with a higher prevalence of ID (Boyle and others 2011; Durkin and others 1998; Camp and others 1998).

Because adults with ID often have significant intellectual and functional limitations that affect their ability to work, many qualify for SSI payments, DI benefits, or both. The SSI and DI programs use the same medical eligibility criteria for working-age adults. To be eligible, working-age individuals must demonstrate an inability to engage in substantial work because of a medically determinable impairment that is expected to last at least 12 months or result in death. The Social Security Administration (SSA) defines substantial work (referred to as substantial gainful activity, or SGA) as equivalent to earnings at or above an annually adjusted threshold—in 2016, \$1,130 per month for nonblind beneficiaries and \$1,820 per month for blind beneficiaries.² Claimants with ID

must provide evidence of below-average intellectual functioning coupled with adaptive functioning deficits, meeting at least one of the following criteria:

- be unable to complete an IQ test independently;
- have an IQ score below 60;
- have an IQ score of 60 through 70 and another physical or mental impairment that limits the ability to work; or
- have an IQ score of 60 through 70 and some combination of restricted activities of daily living (ADLs), difficulty maintaining social function, difficulty maintaining concentration, and repeated episodes of decompensation (SSA 2016b).^{3,4}

The prevalence of ID differs markedly between SSI and DI beneficiaries. In the SSI program, about 19 percent of working-age individuals have a primary impairment of ID (SSA 2015b). This prevalence has declined slightly since the early 2000s, when it was about 22 percent (SSA 2003). In the DI program, about 8 percent of beneficiaries have a primary impairment of ID (SSA 2015a); in the early 2000s, it was closer to 10 percent (SSA 2001). The small recent declines in ID prevalence among disability beneficiaries likely reflect the aging of the baby boom generation; as this large group has aged, greater numbers of individuals have entered the SSI and DI programs with disabilities that are more prevalent in middle-aged and older individuals.

The difference in ID prevalence among SSI and DI beneficiaries is primarily due to differences in the non-medical eligibility criteria for the two programs. DI eligibility is generally contingent upon having a sufficient number of recent and lifetime quarters of Social Security–covered employment.⁵ However, disabled widow(er)s and disabled adult children (DACs) of Social Security beneficiaries can qualify for DI based on a spouse’s or parent’s work history. In 2014, disabled workers receiving benefits based on their own work histories represented 87 percent of DI beneficiaries, DACs represented about 10 percent, and disabled widow(er)s represented about 3 percent (SSA 2015a). The DI benefits are calculated based on past earnings, meaning that individuals with higher lifetime earnings are eligible for higher DI benefits. DAC and widow(er) benefits are subject to a maximum percentage of the worker’s benefit (75 percent and 71.5 percent, respectively).

By contrast, SSI is a means-tested program that provides benefits to aged, blind, and disabled individuals who meet income and resource limits. For nonblind

claimants younger than age 65, eligibility must be based on disability; therefore, they must also meet the medical eligibility requirements described above.⁶ The SSI payment amount is based on the individual’s monthly income and living arrangement, with lower-income individuals receiving a higher payment than higher-income individuals receive, up to an annually adjusted maximum (\$733 per month in 2016). An applicant’s resources (such as savings, investments, vehicles, and property) must be very limited to qualify for SSI; the value of an individual’s resources cannot exceed \$2,000. Individuals may qualify for both SSI and DI if their incomes (including DI benefits) and resources are low enough to meet the SSI income eligibility criteria.

Because ID onset occurs during childhood, many individuals with this condition have not acquired the work history needed to qualify for DI, in part explaining the low ID prevalence among beneficiaries in that program. Most DI beneficiaries with ID qualify as DACs (56 percent) based on a parent’s work history (SSA 2015a). Because those individuals often have low or no earnings, they are also likely to meet the income and resource requirements for SSI, contributing to the high prevalence of ID among recipients in that program.

Data and Methods

We used data from four rounds of the National Beneficiary Survey (NBS), fielded in 2004, 2005, 2006, and 2010. We pooled the data to obtain a large sample of beneficiaries with ID (3,905 of 16,190 NBS respondents; Table 1). The NBS was originally developed and implemented as part of an evaluation of SSA’s Ticket to Work program. The survey collected cross-sectional data from a national sample of working-age SSI and DI beneficiaries. The samples for each round represent SSI and DI beneficiaries (including disabled workers, DACs, and disabled widow(er)s) who were receiving benefits as of June of the calendar year preceding the survey year. The survey’s primary purpose is to provide information on the work-related activities of SSI and DI beneficiaries.⁷

NBS interviewers attempted to interview sample members directly. However, when sample members were unable to complete an interview, interviewers spoke with proxy respondents. This occurred only if sample members were not capable of providing informed consent,⁸ were not reachable because they were institutionalized or incarcerated, or could not be located. Interviewers asked proxy respondents only

Table 1.
Unweighted and weighted sample sizes of disability program beneficiaries aged 18–64 with and without ID, by program type

Measure	All beneficiaries	Beneficiaries with ID ^a				Beneficiaries with other impairments ^b			
		All	DI only	Concurrent	SSI only	All	DI only	Concurrent	SSI only
Unweighted number	16,190	3,905	630	1,081	2,194	12,285	5,415	2,391	4,479
Weighted									
Number	9,718,619	1,326,794	293,822	388,238	644,734	8,391,825	4,796,809	1,290,630	2,304,386
Percentage distribution of—									
Entire weighted sample	100.0	13.7	3.0	4.0	6.6	86.3	49.4	13.3	23.7
Each subgroup	...	100.0	22.1	29.3	48.6	100.0	57.2	15.4	27.5

SOURCE: Authors' calculations based on NBS rounds conducted 2004–2010.

NOTES: Rounded components of percentage distributions do not necessarily sum to 100.0 or to subgroup subtotals.

... = not applicable.

a. ID may be a primary or secondary impairment. Category may include beneficiaries with an additional primary or secondary impairment.

b. Excludes all beneficiaries with ID as either a primary or secondary impairment.

objective questions; they did not ask them for subjective information, such as satisfaction with services or with one's job. Proxy respondent rates were higher among people with ID (26–33 percent across the four NBS rounds) than they were among all NBS respondents (20–26 percent) (Thornton and others 2006; Stapleton and others 2008; Livermore and others 2009; Wright and others 2012).

We identified sample members with ID based on their primary or secondary impairment, as documented in SSA administrative data.^{9,10} We grouped beneficiaries by program type at the time of sampling: DI only, concurrent (both SSI and DI), and SSI only. Table 2 shows the distribution of sample members with ID by the types of primary and secondary impairments recorded by SSA. Among beneficiaries with ID, nearly all (94.0 percent) had ID listed as their primary impairment. About a third (29.7 percent) of beneficiaries with ID had an additional non-ID primary or secondary impairment. Among these beneficiaries, psychiatric conditions were the most common additional impairment, documented for 17.8 percent of all beneficiaries with ID. All other impairments were relatively uncommon, with none accounting for more than 4.5 percent of beneficiaries with ID.

We report statistics for sample members aged 18–64 (working age) at the time of the NBS interview. We derived all statistics using the relevant survey weights, and all standard errors used to compute tests of statistical significance account appropriately for the complex NBS sampling design. Monetary values are expressed in 2010 dollars. We note all differences

between beneficiaries with ID and beneficiaries with other impairments that are statistically significant at the 0.05 level.

Findings

In this section, we discuss the results obtained in the analysis pertaining to seven research questions.

Research Question 1: What Share of Beneficiaries Have ID?

In the period covered by the first four rounds of the NBS (2004–2010), individuals with ID comprised about 1.3 million of the total 9.7 million disability program beneficiaries, or 13.7 percent. Given a U.S. working-age population of about 180 million in 2010 (Census Bureau 2010) and an estimated population-wide ID prevalence of about 1 percent, those 1.3 million beneficiaries with ID may represent more than 70 percent of the roughly 1.8 million working-age people with ID overall. Thus, the Social Security disability programs provide support to a rather large share of this population.

As noted earlier, ID is much more common among SSI recipients than among DI beneficiaries. Among recipients of concurrent SSI and DI benefits, 23.1 percent have a primary or secondary impairment of ID (Table 3); the proportion is similar among SSI-only recipients (21.9 percent). Only 5.8 percent of DI-only beneficiaries have ID. We believe that the percentages shown in Table 3 reflect the prevalence of ID among beneficiaries more accurately than the previously cited SSA published statistics do. This is because our

Table 2.
Disability program beneficiaries aged 18–64 with ID, by primary and secondary impairment and program type (in percent)

Impairment	All	DI only	Concurrent	SSI only
ID as primary impairment	94.0	92.9	94.7	94.1
No secondary impairment	69.5	74.6	67.0	68.6
ID is also the secondary impairment	0.8	0.1	2.2	0.3
Other secondary impairment	23.7	18.2	25.5 *	25.2 *
ID as secondary impairment only	6.0	7.1	5.3	5.9
Impairments listed in addition to ID ^a				
Psychiatric disorders	17.8	11.4	21.0 *	18.9 *
Nervous system diseases	4.5	4.7	4.3	4.5
Musculoskeletal system diseases	2.5	2.8	4.0	1.4
Sensory disorders (speech, hearing, vision)	1.1	0.6	2.3 *	0.6
Circulatory system diseases	1.0	0.4	0.6	1.5
Endocrine, nutritional, and metabolic diseases	1.0	1.4	1.3	0.7
Respiratory system diseases	0.9	0.8	0.7	1.0
Injuries	0.7	1.3	1.0	0.4
Other	2.4	1.4	3.8 *	2.0

SOURCE: Authors' calculations based on NBS rounds conducted 2004–2010.

NOTES: The sum of the percentages of beneficiaries with ID and some other primary or secondary impairment does not necessarily equal the sum of the percentages of beneficiaries with impairments listed in addition to ID because of rounding and because recipients of concurrent benefits may have as many as four impairments listed (a primary and secondary impairment under each program).

* = difference from DI-only beneficiaries is statistically significant at the 0.05 level.

a. May be listed as either a primary or a secondary impairment, as applicable.

Table 3.
Estimated number of disability program beneficiaries aged 18–64: Overall and with ID, by program type (weighted)

Measure	All	DI only	Concurrent	SSI only
All beneficiaries	9,718,619	5,090,631	1,678,868	2,949,120
Beneficiaries with ID				
Number	1,326,794	293,822	388,238	644,734
Percent	13.7	5.8	23.1	21.9

SOURCE: Authors' calculations based on NBS rounds conducted 2004–2010.

figures account for ID as either a primary or a secondary impairment (rather than a primary impairment only) and for recipients of concurrent benefits separately (rather than including them in the calculations for both SSI and DI beneficiaries).

Research Question 2: How Do Beneficiaries with ID Differ from Beneficiaries with Other Impairments?

In this section, we examine differences in program participation, demographic characteristics, and health characteristics between beneficiaries with ID and those with other impairments.

Disability program participation. About half of beneficiaries with ID (48.6 percent) received SSI payments only, 29.3 percent received concurrent benefits, and 22.1 percent received DI benefits only (Table 4). By contrast, the majority of other-impairment beneficiaries (57.2 percent) received DI benefits only, and 27.5 percent received SSI payments only.

As noted earlier, the comparatively large share of SSI recipients with ID partly reflects the early onset of ID; nearly three-quarters of beneficiaries with ID (72.4 percent of SSI-only recipients and 71.7 percent overall) reported experiencing disability onset during

childhood (Table 5). Early disability onset can negatively affect labor force participation (Loprest and Maag 2007) and thus make it difficult to qualify for DI, which requires an earnings history. The majority of DI beneficiaries with ID are DACs who qualify for benefits based on a parent's earnings, rather than their own (not shown).¹¹ As discussed below, about one-third of recipients of DI-only and concurrent benefits with ID have never worked for pay, meaning they cannot qualify for DI based on their own earnings. Even among those who have worked, many may have had insufficient earnings to qualify for DI.

Because of their early disability onset, a rather large share of beneficiaries with ID had received SSI as children compared with beneficiaries with other impairments (47.2 percent versus 7.4 percent) (Table 4). The shares who had received SSI payments as children were much greater among recipients of concurrent (51.7 percent) and SSI-only (55.0 percent) benefits with ID relative to their DI-only counterparts (24.2 percent). The strong relationship between poverty and ID prevalence noted earlier likely contributed to the large percentages of recipients of concurrent and SSI-only benefits who received SSI payments as children.

Early disability onset also contributed to the length of time since beneficiaries with ID had received their most recent SSI or DI award. About two-thirds (65.8 percent) had received their most recent award more than 10 years ago, compared with 39.2 percent of beneficiaries with other impairments. Likewise, the mean length of time since the most recent award was markedly higher for beneficiaries with ID than for beneficiaries with other impairments (152 months versus 109 months). Among beneficiaries with ID, the length of time since benefit award varied little between recipients of SSI-only and DI-only benefits (157 months and 164 months, respectively) but was significantly shorter for recipients of concurrent benefits (133 months).

Demographic characteristics. Consistent with their early disability onset, beneficiaries with ID were about 12 years younger than were those with other impairments; their average ages were 39.0 and 50.9, respectively. Beneficiaries with ID were also more likely to be nonwhite than beneficiaries with other impairments were (35.6 percent versus 28.7 percent) but were equally likely to be of Hispanic or Latino ethnicity (about 10 percent). There were no differences in the sex distribution of the two groups. Beneficiaries with ID were less likely than those with other impairments to have a high school diploma or

a General Educational Development (GED) certification (59.5 percent versus 34.0 percent had no degree). Furthermore, those with ID were less likely than were those with other impairments to have pursued post-secondary education (2.2 percent versus 28.4 percent). Although this difference might reflect an inability to pursue higher education because of ID,¹² it might also reflect the possibility that their education is ongoing because of their relatively young ages.

Beneficiaries with ID were less likely than beneficiaries with other impairments to live alone (17.3 percent versus 25.2 percent) and more likely to live in a group setting with nonrelatives (15.9 percent versus 5.9 percent). Similar shares of beneficiaries with and without ID reported living with family members, such as a spouse, partner, or other relatives. However, only 9.8 percent of beneficiaries with ID were married, compared with 34.7 percent of beneficiaries with other impairments. Given the low marriage rate of beneficiaries with ID, it is likely that many continued to live with their parents or other family into adulthood. Although less likely to be married, beneficiaries with and without ID were equally likely to have children younger than age 18 (about 20 percent). For beneficiaries with ID, the rate of parenthood was highest in the SSI-only group (24.0 percent) and lowest in the DI-only group (11.1 percent)—a pattern that is similar to, but not as marked as, that of beneficiaries with other impairments.

Health and functional status. For the NBS, beneficiaries reported the disabilities they believed most limiting to their daily activities. Of the limiting conditions reported by beneficiaries with ID, the most common was ID; however, only about one-third (31.0 percent) specifically said this condition was a limitation (Table 5). Consistent with this finding, Stapleton and others (2008) found that self-reported limitations in the NBS only somewhat concur with the primary and secondary impairments documented by SSA for program eligibility. The rate of concurrence for ID was markedly lower than the overall rate of concurrence for all types of impairments (46 percent versus 72 percent; not shown). We would expect differences between respondent-reported and SSA-defined impairments for several reasons. First, the former are the conditions that beneficiaries see as limiting their daily activities, whereas the latter are the most apparent or easily documented conditions that meet SSA's disability criteria. Also, respondent reports depend on the respondents' ability to describe their health conditions appropriately and on the interviewers' ability to

Table 4.
Selected demographic characteristics of disability program beneficiaries aged 18–64 with and without ID, by program type
(in percent)

Characteristic	All beneficiaries	Beneficiaries with ID ^a				Beneficiaries with other impairments ^b			
		All	DI only	Concurrent	SSI only	All	DI only	Concurrent	SSI only
Program type									
DI only	52.4	22.1 †	100.0	...	...	57.2	100.0	...	...
Concurrent	17.3	29.3 †	...	100.0	...	15.4	...	100.0	...
SSI only	30.3	48.6 †	...	...	100.0	27.5	...	...	100.0
Disability onset before age 18									
Received SSI payments as a child	12.8	47.2 †	24.2 †	51.7 *†	55.0 *†	7.4	1.7	12.1	16.6
Years since most recent DI and/or SSI award									
Fewer than 5	28.5	15.0 †	11.1 †	20.2 *†	13.7 †	30.7	30.5	38.7	26.4
5–10	28.6	19.1 †	18.8 †	26.4 *†	14.9 †	30.1	34.0	25.7	24.4
More than 10	42.9	65.8 †	70.1 †	53.3 *†	71.4 †	39.2	35.4	35.6	49.2
Mean months since most recent DI and/or SSI award	115	152 †	164 †	133 *†	157 †	109	104	100	125
Sex									
Men	49.9	51.5	61.7 †	53.5 *†	45.6 *	49.6	53.5	45.9	43.8
Age									
18–25	5.8	18.5 †	3.9 *†	11.0 *†	29.6	3.8	0.6	4.3	10.2
26–40	16.8	36.4 †	28.9 *†	41.6 *†	36.7	13.7	8.7	22.4	19.4
41–55	38.3	31.9 †	46.7 *†	33.6 *†	24.0	39.3	38.4	43.5	39.0
56 or older	39.0	13.2 †	20.4 *†	13.7 *†	9.6	43.1	52.3	29.8	31.4
Mean age (years)	49.3	39.0 †	45.7 †	40.2 *†	35.3 *†	50.9	53.9	47.6	46.7
Race									
Nonwhite	29.6	35.6 †	22.6	37.3 *	40.5 *	28.7	22.2	32.3	40.0
Hispanic or Latino	11.1	10.2	6.2	9.7 *†	12.2 *†	11.2	7.9	14.2	16.7
Education									
Did not complete high school or GED	37.5	59.5 †	60.3 †	57.5 †	60.4 †	34.0	25.1	39.9	49.1
Completed high school or GED	37.7	38.3 †	37.6 †	39.8 †	37.7 †	37.6	39.4	36.4	34.5
Education beyond high school	24.8	2.2 †	2.1 †	2.8 †	1.9 †	28.4	35.4	23.7	16.3
Spouse and children									
Married	31.3	9.8 †	15.2 †	6.7 *†	9.2 *†	34.7	49.1	17.5	14.3
Has own children younger than age 18 ^c	20.0	18.4	11.1 †	14.5 †	24.0 *	20.2	17.9	21.7	24.2

(Continued)

Table 4.
Selected demographic characteristics of disability program beneficiaries aged 18–64 with and without ID, by program type
(in percent)—Continued

Characteristic	All beneficiaries	Beneficiaries with ID ^a				Beneficiaries with other impairments ^b			
		All	DI only	Concurrent	SSI only	All	DI only	Concurrent	SSI only
Living arrangements									
Lives with spouse, partner, or relatives	63.8	62.4 †	58.0 †	55.3 †	68.7 *†	64.0	70.2	52.8	57.5
Lives alone	24.1	17.3 †	18.4 †	19.4 †	15.5 *†	25.2	22.3	32.2	27.4
Lives in a group setting with nonrelatives	7.3	15.9 †	20.4 †	19.6 †	11.6 *†	5.9	4.3	9.2	7.5
Lives with friends or roommates	4.2	3.7 †	2.7 †	4.3 †	3.8 *†	4.3	2.9	5.4	6.7
Other	0.5	0.6 †	0.5 †	1.3 †	0.3 *†	0.5	0.3	0.4	1.0

SOURCE: Authors' calculations based on NBS rounds conducted 2004–2010.

NOTES: Rounded components of percentage distributions do not necessarily sum to 100.0.

. . . = not applicable.

* = difference from DI-only beneficiaries is statistically significant at the 0.05 level.

† = difference from beneficiaries with other impairments is statistically significant at the 0.05 level.

a. ID may be a primary or secondary impairment. Category may include beneficiaries with an additional primary or secondary impairment.

b. Excludes all beneficiaries with ID as either a primary or secondary impairment.

c. Biological, adoptive, or foster child(ren).

Table 5.
Health and functional characteristics of disability program beneficiaries aged 18–64 with and without ID, by program type
(in percent)

Characteristic	All beneficiaries	Beneficiaries with ID ^a				Beneficiaries with other impairments ^b			
		All	DI only	Concurrent	SSI only	All	DI only	Concurrent	SSI only
Self-reported cause of activity limitation ^c									
Musculoskeletal system disease	36.9	15.9 †	16.9 †	15.6 †	15.7 †	40.3	44.6	35.6	33.7
Psychiatric condition	32.4	30.0	28.2	30.6 †	30.5 †	32.7	28.1	39.2	38.7
Circulatory system disease	22.5	10.8 †	12.1 †	12.3 †	9.4 †	24.4	27.1	19.8	21.2
Endocrine, nutritional, or metabolic disease	16.9	10.5 †	10.6 †	11.9 †	9.6 †	17.9	19.1	17.7	15.5
Nervous system disease	16.1	12.2 †	11.6 †	11.5 †	12.9	16.7	18.3	14.9	14.6
Injury or poisoning	11.7	5.4 †	5.6 †	3.3 †	6.5 †	12.7	14.4	11.5	10.0
Respiratory system disease	9.4	6.4 †	6.1	4.8 †	7.5 †	9.8	9.1	9.6	11.6
Sensory disorder (speech, hearing, vision)	9.0	8.0	4.8 †	10.3 *	8.0 *	9.1	8.7	8.8	10.1
ID	6.6	31.0 †	29.6 †	34.7 †	29.5 †	2.7	1.4	5.3	4.1
Other	33.3	35.4 †	37.3	32.8	36.1	33.0	33.3	31.5	33.1
No condition limits activities	5.7	11.6 †	14.4 †	9.4 †	11.7 †	4.7	3.6	4.8	7.0
General health									
Excellent or very good	9.9	26.2 †	34.5 †	24.4 *†	23.5 *†	7.4	6.1	7.2	10.0
Good or fair	46.9	51.0 †	43.6 †	53.0 *†	53.1 *†	46.3	45.6	49.8	45.7
Poor or very poor	43.1	22.8 †	21.9 †	22.6 *†	23.4 *†	46.4	48.3	43.0	44.2
ADL difficulties ^c									
Getting into or out of bed	36.7	17.2 †	20.1 †	18.3 †	15.2 †	39.8	41.7	34.9	38.6
Bathing or dressing	29.4	24.5 †	29.0	26.6	21.3 *†	30.1	30.7	28.0	30.1
Getting around inside the house	23.2	9.7 †	10.1 †	10.2 †	9.2 †	25.4	26.1	22.3	25.6
Eating	15.4	11.0 †	13.5	11.7 †	9.4 †	16.2	15.1	17.8	17.5
None of the above	46.7	62.8 †	55.0 †	61.6 †	67.1 *†	44.1	42.2	47.2	46.3
Instrumental ADL difficulties ^c									
Getting around outside of the home	46.9	34.4 †	32.4 †	36.0 †	34.3 †	48.8	49.1	47.6	49.1
Shopping for personal items	37.5	47.1 †	51.6 †	48.0 †	44.6 †	36.0	35.4	35.0	37.6
Preparing meals	36.8	48.2 †	55.4 †	50.1 †	43.8 *†	34.9	34.1	34.4	37.0
None of the above	39.0	36.2 †	32.5	34.0	39.2	39.5	39.5	39.1	39.5

(Continued)

Table 5.
Health and functional characteristics of disability program beneficiaries aged 18–64 with and without ID, by program type
(in percent)—Continued

Characteristic	All beneficiaries	Beneficiaries with ID ^a				Beneficiaries with other impairments ^b			
		All	DI only	Concurrent	SSI only	All	DI only	Concurrent	SSI only
Difficulty with functional activities ^c									
Walking three blocks, climbing 10 steps, standing for 1 hour, or crouching	84.5	62.7 †	62.3 †	64.1 †	62.0 †	88.0	91.0	83.3	84.4
Grasping, reaching, or lifting 10 pounds	68.2	45.9 †	48.6 †	43.6 †	46.1 †	71.8	74.7	68.1	67.7
Coping with stress	59.7	61.0	59.9	59.1	62.6	59.4	57.6	61.8	62.0
Concentrating	56.6	63.4 †	57.9	62.1 †	66.7 †	55.5	53.4	56.2	59.5
Getting along with others	27.5	35.3 †	30.4 †	34.1 †	38.3 †	26.2	23.3	27.8	31.6

SOURCE: Authors' calculations based on NBS rounds conducted 2004–2010.

NOTES: Rounded components of percentage distributions do not necessarily sum to 100.0.

* = difference from DI-only beneficiaries is statistically significant at the 0.05 level.

† = difference from beneficiaries with other impairments is statistically significant at the 0.05 level.

a. ID may be a primary or secondary impairment. Category may include beneficiaries with an additional primary or secondary impairment.

b. Excludes all beneficiaries with ID as either a primary or secondary impairment.

c. Respondents were able to select more than one response.

interpret and code the responses accurately. Finally, there is a stigma associated with ID, which might lead respondents to underreport it.

Similar shares of beneficiaries with and without ID (30.0 percent and 32.7 percent, respectively) cited a psychiatric condition as a limitation (Table 5). However, beneficiaries with ID were less likely than beneficiaries with other impairments to report musculoskeletal conditions, diseases of the circulatory system, endocrine/nutrition disorders, diseases of the nervous system, and injury or poisoning. In fact, they were more likely to report that no condition limited their activities (11.6 percent) than were those without ID (4.7 percent). Among beneficiaries with ID, there were minimal significant differences in limiting conditions by program; only the rate of sensory conditions differed significantly.

Compared with beneficiaries with other impairments, those with ID reported being in better health. They were more likely to report their health as excellent or very good (26.2 percent versus 7.4 percent) and less likely to report any difficulties with ADLs. However, beneficiaries with ID had mixed experiences with instrumental ADLs.¹³ For example, they were more likely to report difficulties shopping for personal items and preparing meals than were beneficiaries with other impairments, but those with ID were less likely to have trouble getting around outside the home. In terms of functional limitations, beneficiaries with ID were more likely to report problems with mental and emotional tasks, including concentrating and getting along with others, but less likely to report problems with physical tasks, such as climbing stairs and lifting 10 pounds. This is consistent with their lower rates of reporting physical health conditions as reasons for limitation and their higher rates of reporting nonphysical conditions, including ID.

Research Questions 3 and 4: How Much Do Beneficiaries with ID Work? What Kinds of Jobs Do They Have?

In this section, we examine the employment experiences and use of support services of beneficiaries with ID and compare them with those of beneficiaries with other impairments.

Employment. Beneficiaries with ID were more likely to use employment services and reported more interest in working than did beneficiaries with other impairments (Table 6). Nearly one-quarter (23.3 percent) had used employment-related services at some point in their lives, compared with 14.0 percent of beneficiaries with other impairments. Beneficiaries with ID were

also more likely to report having work goals or to see themselves working in the next 5 years (48.5 percent versus 40.2 percent). That result is largely due to a sharp difference among DI-only beneficiaries: A substantially larger share of those with ID had work goals and expectations (50.2 percent) than did those with other impairments (35.0 percent).

Beneficiaries with ID were more likely to be employed at the time of their NBS interview than were those with other impairments (18.5 percent versus 6.8 percent), and beneficiaries with ID were more likely to have worked during the previous calendar year (22.5 percent versus 10.5 percent).¹⁴ Employment was particularly high among DI-only beneficiaries with ID: 29.6 percent were employed at the time of their interview, and 31.7 percent worked during the previous year. This finding is consistent with administrative data, which also found relatively high employment rates among beneficiaries with ID even after controlling for other personal characteristics (such as age) that are predictive of beneficiary employment (Mann, Mamun, and Hemmeter 2015). The overall employment rate of beneficiaries with ID is somewhat lower than employment-rate estimates based on NCI data for 2014–2015. Those data indicate that 35 percent of individuals with ID/DD had paid jobs (Hiersteiner and others 2016). The employment-rate differences likely reflect differences in the NBS and NCI populations sampled. Given the medical and work-limitation criteria for SSI and DI eligibility, the NBS population was likely to have more severe disabilities, on average, than the broader population sampled in the NCI survey (adults receiving services from state DD agencies).¹⁵

Despite their greater desire to work and their higher employment rates, beneficiaries with ID were much less likely than beneficiaries with other impairments to have ever worked for pay (60.2 percent versus 89.9 percent). Beneficiaries who have never worked are likely to have sizable employment barriers, limited education, and limited skills, which may be related to the childhood onset of their disabilities.

Service use. Table 7 provides more detail on the reasons for using support services and on the types of services used in the previous calendar year by beneficiaries with and without ID. Beneficiaries cited the desire to improve their health as the most common reason to use services. However, those with ID were less likely than were beneficiaries with other impairments to report this reason (65.0 percent and 78.3 percent, respectively). Relative to beneficiaries with other impairments, those with ID were more likely to use

Table 6.
Employment-related activities and service use among disability program beneficiaries aged 18–64 with and without ID, by program type
(in percent)

Characteristic	All beneficiaries	Beneficiaries with ID ^a				Beneficiaries with other impairments ^b			
		All	DI only	Concurrent	SSI only	All	DI only	Concurrent	SSI only
Lifetime experience or objective									
Ever worked for pay	85.9	60.2 †	72.4 †	63.3 *†	52.7 *†	89.9	96.0	89.3	77.6
Ever used employment services	15.3	23.3 †	31.8 †	25.4 †	18.2 *†	14.0	13.0	17.5	14.3
Goals include work or see self working in next 5 years	41.3	48.5 †	50.2 †	48.1	48.0	40.2	35.0	48.7	46.1
Recent work-related activities									
Worked in calendar year before interview	12.2	22.5 †	31.7 †	25.3 †	16.6 *†	10.5	10.4	12.6	9.5
Employed at interview	8.4	18.5 †	29.6 †	22.0 *†	11.2 *†	6.8	7.3	7.1	5.5
Not employed, but looked for work in last 4 weeks	5.4	7.0 †	3.5	7.5 *	8.4 *†	5.2	4.0	7.4	6.5
Any of the above	16.9	28.3 †	34.6 †	31.7 †	23.4 *†	15.1	14.1	18.8	15.1
Recent employment service use									
Used employment-specific services in previous year	9.2	12.2 †	14.8 †	13.0	10.6 *†	8.7	8.3	11.3	8.3
Used employment or other services in previous year to get a job or increase income	3.0	4.4 †	3.6	4.1	4.8 †	2.7	2.4	3.3	3.1
Any of the above	9.8	12.8 †	14.8 †	13.2	11.5 †	9.3	8.9	11.8	8.8

SOURCE: Authors' calculations based on NBS rounds conducted 2004–2010.

NOTES: * = difference from DI-only beneficiaries is statistically significant at the 0.05 level.

† = difference from beneficiaries with other impairments is statistically significant at the 0.05 level.

a. ID may be a primary or secondary impairment. Category may include beneficiaries with an additional primary or secondary impairment.

b. Excludes all beneficiaries with ID as either a primary or secondary impairment.

Table 7.

Use of selected support services in the calendar year before interview among disability program beneficiaries aged 18–64 with and without ID, by program type (in percent)

Characteristic	All beneficiaries	Beneficiaries with ID ^a				Beneficiaries with other impairments ^b			
		All	DI only	Concurrent	SSI only	All	DI only	Concurrent	SSI only
Beneficiaries who used services									
Number (unweighted)	5,590	959	179	287	493	4,631	2,036	996	1,599
Percent (weighted)	32.9	23.7 †	26.3 †	26.4 †	20.9 †	34.4	34.1	37.0	33.5
Reasons for using services									
To improve health	77.0	65.0 †	64.3 †	67.3 †	63.7 †	78.3	77.6	78.7	79.6
To improve ability to do daily activities or be more independent	25.2	31.0 †	35.8	27.2	31.1	24.6	24.5	25.0	24.5
To find a job, get a better job, or increase income	9.0	18.4 †	13.8	15.5 †	23.2 *†	7.9	7.1	9.0	9.1
To access specific services	6.2	9.1 †	12.6 †	11.0	5.6 *	5.9	5.7	7.2	5.5
Pressured by someone to use services	2.5	3.3	0.5 †	2.2	5.8	2.4	1.8	3.4	2.9
Other	9.4	12.1 †	13.2	9.3	13.6 †	9.1	9.7	9.0	8.0
Service type									
Personal counseling or group therapy	65.9	67.0	70.8	67.2	64.6	65.7	63.2	71.0	67.9
Medical services	64.1	50.4 †	49.8 †	52.5	49.1 †	65.6	69.3	58.1	62.3
Occupational, physical, or speech therapy	35.5	32.5	28.0	30.8	36.4	35.8	36.7	33.9	35.0
Special equipment or devices	23.2	14.0 †	13.7 †	14.7	13.7 †	24.2	27.7	18.7	20.2
Training or job modification advice	21.0	47.0 †	51.7 †	45.3 †	45.5 †	18.2	15.8	22.4	20.6
Work assessment or job search assistance	20.9	44.1 †	50.9 †	40.1 †	43.3 †	18.3	17.0	23.4	18.1
Other	5.1	7.9	10.5	11.5	3.8	4.8	4.5	6.5	4.3

SOURCE: Authors' calculations based on NBS rounds conducted 2004–2010.

NOTES: Respondents were able to report more than one reason or service type.

* = difference from DI-only beneficiaries is statistically significant at the 0.05 level.

† = difference from beneficiaries with other impairments is statistically significant at the 0.05 level.

a. ID may be a primary or secondary impairment. Category may include beneficiaries with an additional primary or secondary impairment.

b. Excludes all beneficiaries with ID as either a primary or secondary impairment.

services for purposes of improving independence (31.0 percent versus 24.6 percent) and finding a job (18.4 percent versus 7.9 percent). With or without ID, most beneficiaries who used services reported using personal counseling or group therapy (about 66 percent). However, those with ID who used services were more likely than were those with other impairments to use employment-related services and less likely to use medical services or services related to special equipment and devices. These differences between beneficiaries with and without ID in the types of services used (health versus employment) broadly reflect the differences in the reasons for service use noted above.

Job characteristics. The NBS collected information about the paid jobs held by sample members for at least 1 month at the time of their interviews. Beneficiaries with ID worked the same number of hours as beneficiaries with other impairments—about 20 hours per week (Table 8)—but they earned much less. On average, they made \$5.54 an hour and \$454 a month—about 40 percent and 48 percent less, respectively, than beneficiaries with other disabilities. Consistent with their lower earnings, beneficiaries with ID were much less likely than beneficiaries with other impairments to earn above SSA’s monthly SGA level (9.4 percent and 29.3 percent, respectively).¹⁶ Working SSI-only recipients, regardless of disability, were much more likely to earn above the SGA level than working recipients of concurrent or DI-only benefits. Among employed SSI-only recipients, nearly one-quarter (22.0 percent) of those with ID and nearly one-half (45.1 percent) of those without ID earned above the SGA level. SSI recipients’ higher earnings might be partly related to the difference in how earnings are treated in the SSI and DI programs. Under SSI, payments are reduced gradually as earnings increase. Under DI, benefits cease if the beneficiary earns over the SGA level in any month after the 9-month trial work period and 3-month grace period. Thus, DI provides a stronger incentive for beneficiaries to keep their earnings below the SGA level.

The low earnings among employed beneficiaries with ID might be partly due to their high rates of working in sheltered or supported employment, which typically offer lower compensation. Beneficiaries with ID were three times more likely than were beneficiaries with other impairments to work in such settings (69.1 percent versus 23.2 percent). Section 14c of the Fair Labor Standards Act permits employers to obtain certificates that, under certain conditions, allow them to pay workers with disabilities less than the federal

minimum wage. The large majority of employers that use section 14c certificates are sheltered workshops (also referred to as center-based or facility-based employment) (General Accounting Office 2001). Unfortunately, the NBS data do not permit us to distinguish between sheltered, facility-based employment and supported employment in the community.¹⁷ However, looking at the shares of employed beneficiaries earning less than the federal minimum wage provides some indication of the extent to which employment might be in a sheltered work setting. Among employed beneficiaries with ID, 50.1 percent had hourly wages below the federal minimum wage, compared with 20.2 percent of employed beneficiaries with other impairments. Estimates based on the NCI data cited earlier indicate that in 2014–2015, about 20 percent of adults with ID/DD receiving services from state DD agencies worked in sheltered (facility-based) employment. Again, the differences in the NBS-based and NCI-based estimates likely reflect differences in the populations sampled and may also reflect changes in work settings over time—the NCI data suggest that employment in facility-based settings has declined since 2008 (NCI 2016b).

Perhaps owing to the prevalence of low-paying jobs, employment in sheltered work settings, and part-time jobs (among SSI-only recipients), working beneficiaries with ID were also less likely to be offered employer-sponsored health insurance than were working beneficiaries with other impairments (12.8 percent versus 24.8 percent).

Beneficiaries with ID also held different types of jobs than did beneficiaries with other disabilities. Those with ID were more likely to work in occupations involving manual labor (such as transportation and material moving; production; and building, grounds cleaning, or maintenance) and were less likely to hold service-oriented jobs (such as office and administrative support, personal care and services, and sales).

Research Question 5: What Employment Barriers Do Beneficiaries with ID Report?

As noted earlier, beneficiaries with ID were more likely to be working (or looking for work) than were beneficiaries with other impairments. Those who indicated having work goals or expectations, but who were not working at the time of their interview, gave reasons for not working (Table 9). About 75 percent of beneficiaries with ID cited a physical or mental health condition, compared with about 85 percent of

Table 8.
Selected characteristics of main job among employed disability program beneficiaries aged 18–64 with and without ID, by program type
(in percent)

Characteristic	All beneficiaries	Beneficiaries with ID ^a				Beneficiaries with other impairments ^b			
		All	DI only	Concurrent	SSI only	All	DI only	Concurrent	SSI only
Number employed (unweighted)	2,029	772	191	268	313	1,257	595	246	416
Employment rate (weighted)	8.4	18.5 †	29.6 †	22.0 *†	11.2 *†	6.8	7.3	7.1	5.5
Usual hours worked per week									
1–10	24.2	23.3	19.2	21.6	30.3 *†	24.6	28.6	20.0	16.8
11–20	34.4	37.5	48.0	40.1	22.0 *†	33.0	35.3	39.1	22.2
21–34	22.6	23.8	19.3	27.6	24.8 *†	22.1	21.4	26.1	21.2
35 or more	18.8	15.3	13.5	10.8	22.9 *†	20.3	14.7	14.8	39.8
Mean hours worked per week	21.4	20.3	19.5	20.1	21.4 †	21.9	20.1	21.6	27.3
Hourly wage									
Less than \$5.00	22.3	41.9 †	44.8 †	40.9 †	39.8 *†	13.9	8.8	28.4	17.5
\$5.00–\$7.25	20.7	24.1 †	21.4 †	27.7 †	23.2 *†	19.3	20.3	16.8	18.1
\$7.26 or more	57.0	33.9 †	33.8 †	31.4 †	37.0 *†	66.9	70.9	54.8	64.4
Wage is lower than federal minimum wage ^c	29.2	50.1 †	56.4 †	46.9 †	46.3 †	20.2	17.0	31.1	21.4
Mean hourly wage (\$)	8.08	5.54 †	5.35 †	5.53 †	5.76 †	9.18	9.91	7.00	8.74
Monthly earnings									
Less than \$200	19.9	31.3 †	23.7 †	32.5 †	38.9 *†	15.0	12.5	21.4	17.5
\$200–\$799	50.1	52.9 †	67.9 †	55.9 †	31.3 *†	48.9	54.5	51.5	31.2
\$800 or more	30.0	15.9 †	8.4 †	11.6 †	29.8 *†	36.1	33.0	27.1	51.3
Monthly earnings exceed SGA	23.3	9.4 †	3.3 †	4.9 †	22.0 *†	29.3	25.8	21.2	45.1
Mean monthly earnings (all jobs) (\$)	743	454 †	391 †	431 †	556 *†	868	849	673	1,061
Job is in sheltered or supported employment	37.0	69.1 †	81.2 †	64.3 *†	60.0 *†	23.2	18.6	35.7	27.0
Employer offers health insurance ^d	20.9	12.8 †	7.9 †	10.2	21.8 *†	24.8	21.4	17.1	38.8

(Continued)

Table 8.
Selected characteristics of main job among employed disability program beneficiaries aged 18–64 with and without ID, by program type
(in percent)—Continued

Characteristic	All beneficiaries	Beneficiaries with ID ^a				Beneficiaries with other impairments ^b			
		All	DI only	Concurrent	SSI only	All	DI only	Concurrent	SSI only
Occupation									
Transportation and material moving	17.3	22.0 †	17.2 †	23.2	26.3 †	15.3	15.0	17.2	15.0
Building, grounds cleaning, or maintenance	12.5	21.2 †	22.8 †	23.3	16.9 †	8.8	7.6	10.3	11.0
Office and administrative support	11.2	5.4 †	6.0 †	4.6	5.7 †	13.7	15.9	8.2	11.7
Production	10.4	14.5 †	15.3 †	15.7	12.0 †	8.7	6.7	16.4	8.9
Food preparation or serving	8.4	12.2 †	12.1 †	11.2	13.7 †	6.8	5.2	12.5	7.1
Sales	6.9	3.2 †	3.0 †	2.4	4.5 †	8.4	10.5	4.0	5.8
Personal care and services	5.5	3.1 †	3.6 †	3.1	2.4 †	6.5	5.9	6.7	8.0
Other	26.8	17.9 †	19.6 †	16.6	17.3 †	30.7	32.8	21.9	31.1
Unknown	0.9	0.5 †	0.4 †	0.0	1.3 †	1.0	0.4	2.9	1.4

SOURCE: Authors' calculations based on NBS rounds conducted 2004–2010.

NOTES: Monetary values are expressed in 2010 dollars.

Rounded components of percentage distributions do not necessarily sum to 100.0.

* = difference from DI-only beneficiaries is statistically significant at the 0.05 level.

† = difference from beneficiaries with other impairments is statistically significant at the 0.05 level.

a. ID may be a primary or secondary impairment. Category may include beneficiaries with an additional primary or secondary impairment.

b. Excludes all beneficiaries with ID as either a primary or secondary impairment.

c. The federal minimum wage was \$5.15 in 2004–2006 and \$7.25 in 2010.

d. Among working respondents who are not self-employed.

Table 9.
Reasons for not working among disability program beneficiaries aged 18–64 with and without ID who are not working but who have work goals or expectations, by program type (in percent)

Characteristic	All beneficiaries	Beneficiaries with ID ^a				Beneficiaries with other impairments ^b			
		All	DI only	Concurrent	SSI only	All	DI only	Concurrent	SSI only
Beneficiaries not working but having work goals									
Number (unweighted)	6,857	1,447	167	353	927	5,410	1,959	1,210	2,241
Number (weighted)	3,253,121	405,068	61,862	104,206	239,000	2,848,053	1,356,255	545,958	945,841
Percent (weighted)	33.5	30.5 †	21.1 †	26.8 †	37.1 *†	33.9	28.3	42.3	41.0
Reason for not working ^c									
Physical or mental condition prevents work	83.7	75.4 †	83.8	68.1 *†	76.4 †	84.9	86.5	83.8	83.2
Discouraged by previous work attempts	37.5	34.4	45.1	33.9	31.9 *	38.0	37.9	40.5	36.6
Cannot find a job for which he or she is qualified	32.4	48.1 †	59.8 †	43.8 *†	47.0 *†	30.2	26.5	35.3	32.6
Workplaces are not accessible	31.5	35.4	38.3	31.6	36.3	30.9	28.5	33.8	32.7
Others do not think he or she can work	27.7	25.4	28.3	24.1 †	25.3	28.1	27.4	32.0	26.7
Employers will not give him or her a chance	24.7	29.0 †	35.9 †	26.6	28.3	24.1	22.1	26.8	25.3
Lacks reliable transportation to/from work	23.9	32.9 †	32.3 †	28.8	34.9	22.6	15.9	26.3	30.1
Cannot find a job he or she wants	20.1	24.7 †	28.0 †	25.1	23.7	19.5	17.0	21.9	21.6
Does not want to lose cash/health insurance benefits	16.7	16.2	13.3	17.9	16.2	16.8	14.8	18.4	18.8
Is caring for children or others	11.0	11.8	10.8	10.9	12.5	10.8	9.5	12.0	12.1
Waiting to finish school or training program	8.8	12.6 †	10.0	8.7	14.9	8.3	4.8	11.6	11.4
Other reason	3.4	3.5	2.6	4.1	3.5	3.4	3.1	5.5	2.7

SOURCE: Authors' calculations based on NBS rounds conducted 2004–2010.

NOTES: * = difference from DI-only beneficiaries is statistically significant at the 0.05 level.

† = difference from beneficiaries with other impairments is statistically significant at the 0.05 level.

a. ID may be a primary or secondary impairment. Category may include beneficiaries with an additional primary or secondary impairment.

b. Excludes all beneficiaries with ID as either a primary or secondary impairment.

c. Respondents were able to select more than one response.

those with other impairments. This may be because beneficiaries with ID reported better health than beneficiaries without ID. Beneficiaries with and without ID were about equally likely to report several of the employment barriers queried. However, those with ID were more likely to cite the inability to find a job they wanted or were qualified for, lack of transportation, employers' unwillingness to give them a chance, and waiting to finish school as their reasons. After poor health, the inability to find a job for which they were qualified was the most-cited barrier, reported by 48 percent of beneficiaries with ID.

Among beneficiaries with ID, barriers to working were generally cited more frequently by DI-only beneficiaries than by SSI-only recipients or concurrent beneficiaries; among beneficiaries with other impairments, that pattern was largely reversed. As noted earlier, it may be that many DI-only beneficiaries with ID are DACs, who receive benefits based on a parent's earnings history. Their own limited earnings might be a consequence of the barriers cited.

Research Questions 6 and 7: What Kinds of Unearned Income and Benefits Do Beneficiaries with ID Receive? How Does Their Economic Well-Being Compare with That of Beneficiaries with Other Impairments?

In this section, we examine four types of unearned income that beneficiaries with ID receive: SSA program benefits, benefits from non-SSA programs, other sources of income, and health insurance. Then, we compare their unearned income to that of beneficiaries with other impairments.

SSA program benefits. Most beneficiaries with ID reported receiving cash benefits from one or both of the disability programs administered by SSA (92.8 percent), although the share was slightly lower than that for beneficiaries with other impairments (95.1 percent; Table 10). This is likely because beneficiaries with ID have higher employment rates (as was seen in Table 8), meaning they are more likely to have earnings that might offset cash disability benefits.¹⁸ On average, beneficiaries with ID received \$684 per month, much less than the average amount received by those with other disabilities (\$938 per month; Table 10). Further, only 10.8 percent of those with ID received monthly benefits of \$1,000 or more, compared with 39.5 percent of beneficiaries with other impairments. One reason for these differences is that beneficiaries with ID rely more on SSI than on DI. Another reason may be that DI benefit amounts are

tied to lifetime earnings, which tend to be lower for beneficiaries with ID. Indeed, the gap between the average monthly benefits of beneficiaries with and without ID is largest among those receiving DI-only benefits (\$843 and \$1,131, respectively).

Benefits from non-SSA programs. Beneficiaries with ID also received less public income support from non-SSA sources. Most (67.8 percent) received no benefits from non-SSA programs. On average, those with ID received about \$81 in non-SSA program benefits per month—less than half of the average amount received by beneficiaries with other impairments (about \$216 per month). However, those with ID were more likely than were beneficiaries with other impairments to receive means-tested support, such as food assistance from the Supplemental Nutrition Assistance Program (31.4 percent and 25.8 percent, respectively) and public cash assistance or welfare (4.9 percent and 3.4 percent, respectively). The greater use of means-tested programs among beneficiaries with ID reflects their greater likelihood of both receiving SSI payments (described earlier) and living in households with income below the federal poverty level (further discussed below).

Other sources of income. Beneficiaries with ID were significantly less likely than beneficiaries with other impairments to receive income from pensions or retirement savings, private disability insurance, workers' compensation, or veterans' benefits; less than 1 percent received income from each of these sources. As these income sources are generally tied to past employment, this finding is not surprising given the large share of beneficiaries with ID who had never worked for pay.

Health insurance. Regardless of impairment, nearly all beneficiaries were insured through Medicare or Medicaid, although the share was slightly higher for beneficiaries with ID than for those with other impairments (93.3 percent versus 90.0 percent). Almost 10 percent of those with ID were insured through a private source, such as an employer or family member. This rate was significantly lower than that for beneficiaries with other impairments (23.1 percent), which may in part reflect the markedly lower marriage rates among beneficiaries with ID (Table 4) and thus the lack of access to health insurance through a spouse's employment. One exception to the overall trend in private insurance coverage was the rate among SSI-only recipients: those with ID were more likely than those with other impairments to have private health insurance (9.1 percent versus 5.5 percent) (Table 10).

Table 10.**Selected types of unearned income or assistance in the month before NBS interview and income relative to the federal poverty level among disability program beneficiaries aged 18–64 with and without ID, by program type (in percent)**

Characteristic	All beneficiaries	Beneficiaries with ID ^a				Beneficiaries with other impairments ^b			
		All	DI only	Concurrent	SSI only	All	DI only	Concurrent	SSI only
Unearned income or assistance									
SSA program benefits	94.8	92.8 †	94.2	94.5	91.1	95.1	97.1	96.1	90.4
Medicare or Medicaid	90.4	93.3 †	95.2 †	96.0 †	90.9 *	90.0	89.0	93.3	90.1
Food assistance	26.6	31.4 †	17.9 †	34.7 *	35.6 *†	25.8	12.5	40.5	45.3
Private health insurance (any source)	21.3	9.9 †	17.6 †	5.3 *	9.1 *†	23.1	36.3	5.1	5.5
Pension or retirement income	7.9	0.9 †	1.9 †	0.2 *†	0.9	9.0	15.3	1.0	0.4
Private disability insurance	3.7	0.7 †	0.3 †	1.2 *	0.5	4.2	6.9	0.8	0.6
Veterans' benefits	3.6	0.5 †	1.7 †	0.1 †	0.1 *†	4.1	6.2	1.3	1.3
Public cash assistance or welfare	3.6	4.9 †	1.5 †	5.6 *	6.0 *	3.4	0.8	5.3	7.6
Workers' compensation	1.4	0.3 †	0.9 †	0.1	0.0	1.6	2.5	0.6	0.2
Unemployment insurance	0.2	0.1	0.1	0.0	0.1	0.2	0.2	0.2	0.3
Other	4.8	3.3 †	2.8 †	3.7	3.3	5.0	5.1	5.1	4.9
SSA program benefits									
No benefits	4.6	6.7 †	7.5 †	3.4 *†	8.4 *	4.3	2.5	1.5	9.4
\$1–\$499	6.5	9.4 †	4.7 †	10.8 *†	10.7 *	6.0	3.2	6.0	12.1
\$500–\$999	53.3	73.1 †	54.5 †	79.0 *†	78.1 *	50.2	31.5	75.7	74.8
\$1,000 or more	35.6	10.8 †	33.3 †	6.8 *†	2.8 *	39.5	62.8	16.9	3.7
Mean monthly SSA program benefit (\$)	903	684 †	843 †	673 *†	618 *	938	1,131	798	614
Monthly benefits from non-SSA programs ^c									
No benefits	62.4	67.8 †	78.3 †	65.7 *†	64.3 *†	61.5	67.2	56.0	52.8
\$1–\$199	18.0	19.5 †	13.4 †	20.2 *†	21.9 *†	17.8	10.9	24.8	28.3
\$200–\$499	8.2	7.8 †	5.2 †	8.3 *†	8.6 *†	8.2	5.8	12.4	11.0
\$500 or more	11.4	4.9 †	3.1 †	5.7 *†	5.3 *†	12.5	16.1	6.9	7.9
Mean monthly benefits from non-SSA programs (\$) ^c	197.9	80.8 †	61.7 †	89.7 †	84.1 †	216.4	286.9	119.0	124.3

(Continued)

Table 10.

Selected types of unearned income or assistance in the month before NBS interview and income relative to the federal poverty level among disability program beneficiaries aged 18–64 with and without ID, by program type (in percent)—Continued

Income	All beneficiaries	Beneficiaries with ID ^a				Beneficiaries with other impairments ^b			
		All	DI only	Concurrent	SSI only	All	DI only	Concurrent	SSI only
Household income relative to the federal poverty level									
Less than 100%	48.5	64.7 †	51.1 †	70.5 *†	67.4 *†	45.9	26.7	68.3	73.5
100%–299%	39.4	27.9 †	37.3 †	24.4 *†	25.8 *†	41.5	54.2	28.5	22.4
300% or more	11.9	7.4 †	11.6 †	5.1 *†	6.8 *†	12.6	19.1	3.3	4.1

SOURCE: Authors' calculations based on NBS rounds conducted 2004–2010.

NOTES: Monetary values are expressed in 2010 dollars.

Rounded components of percentage distributions do not necessarily sum to 100.0.

* = difference from DI-only beneficiaries is statistically significant at the 0.05 level.

† = difference from beneficiaries with other impairments is statistically significant at the 0.05 level.

a. ID may be a primary or secondary impairment. Category may include beneficiaries with an additional primary or secondary impairment.

b. Excludes all beneficiaries with ID as either a primary or secondary impairment.

c. Includes public assistance/welfare, private disability insurance, workers' compensation, veterans' benefits, unemployment insurance, and the value of food assistance and other noncash benefits such as housing or energy assistance.

This may be because many SSI-only recipients with ID were covered under a parent's plan.¹⁹

Poverty. Overall, beneficiaries with ID were more likely than were those with other impairments to live in households with income below the federal poverty level (64.7 percent and 45.9 percent, respectively). This higher poverty rate is driven by the poverty rates among DI-only beneficiaries; those with ID were about twice as likely to live in poor households as were their counterparts without ID (51.1 percent and 26.7 percent, respectively). This disparity is consistent with the lower average amounts of SSA and non-SSA program income among DI-only beneficiaries with ID noted earlier. The poverty rates among recipients of concurrent and SSI-only benefits differed less markedly between those with and without ID.

Summary and Implications of the Findings

People with ID represent an important group of disability program beneficiaries, especially in the SSI program, where they make up more than one-fifth of recipients. These individuals receive benefits for extended periods, resulting in high DI, SSI, Medicare, and Medicaid program expenditures during their working-age years.

Beneficiaries with ID differ from those with other disabilities in many respects. For example, they reported better health and fewer activity limitations in the NBS, and they were more likely to be employed or interested in employment. Most of those who worked did so part time and for low wages; their average monthly earnings were about half the earnings of beneficiaries with other impairments, and the percentage of beneficiaries with ID earning above the SGA level was less than one-third of that for beneficiaries with other impairments. Relative to the latter, beneficiaries with ID received less income from public and private sources of assistance and were at greater risk of poverty.

Although many beneficiaries with ID were employed at the time of their NBS interview, the findings suggest that they faced numerous obstacles to substantial employment and independence. The majority of the beneficiaries with ID in our study had never worked for pay. Disability onset during childhood, along with significant cognitive limitations, may have restricted their opportunities for paid employment and for completing a high school or equivalent education. Most of those who worked were employed in sheltered or supported work settings.

One-half of the beneficiaries with ID earned below the federal minimum wage, suggesting that many were in jobs with limited earnings potentials or opportunities to advance.

Despite the hurdles faced by people with ID, early intervention, education, and employment supports may help many of them to lead more productive and fulfilling lives in their communities. Studies have shown that high parental expectations and early work experience in community-based employment are associated with a greater likelihood of employment success among transition-age youths with disabilities (Carter, Austin, and Trainor 2012; Siperstein, Heyman, and Stokes 2014). There is also evidence that supported-employment approaches lead to better employment outcomes, but the evidence of their cost effectiveness is mixed (Nord and others 2013). The programs and policies that promote skill development and competitive employment in the community could help to reduce poverty and dependence on public programs among these beneficiaries. These approaches would need to address the low levels of education, lack of work experience, and numerous other job-related challenges reported by beneficiaries with ID, including issues related to job qualifications, accommodations, negative perceptions of beneficiaries' ability to work, and co-occurring psychiatric and physical health conditions.

In its 1999 *Olmstead v. L.C.* decision, the Supreme Court confirmed the Americans with Disabilities Act mandate that people with ID and other significant disabilities receive services in the most integrated setting appropriate to their needs. Although it was initially applied to the provision of health care, *Olmstead* has influenced the provision of a wide array of services that promote the community integration of people with significant disabilities, including employment services (Musumeci and Claypool 2014). Recently, government agencies have implemented initiatives to promote more integrated employment opportunities for people with disabilities in lieu of sheltered workshop settings. Some of these include the following:

- Department of Justice actions in two states to phase out sheltered workshops for people with DD (Department of Justice n.d.);
- the Department of Labor's (DOL) Employment First initiative, which provides resources and technical assistance to states to promote greater opportunities for integrated employment for people with disabilities (DOL n.d. b); and

- Workforce Innovation and Opportunity Act provisions that place limits on the use of section 14c special minimum wage certificates and add new requirements for employers that use them.²⁰

A variety of other federal and state agencies have initiated efforts to find new and better ways to provide employment services and supports to people with disabilities and to provide strong evidence of their effectiveness. Many have a special focus on youths with significant disabilities, among whom ID is a leading cause of disability. Examples include the following:

- DOL's Disability Employment Initiative, which provides grants to states to improve the way they deliver services to people with disabilities, including youths and young adults (DOL n.d. a);
- the Department of Education's Transition Work-Based Learning Model Demonstrations, which provides Disability Innovation Fund grants to support state vocational rehabilitation agencies in developing and testing new ways to help transition-age youths with disabilities become employed (Department of Education 2016); and
- the Promoting Readiness of Minors in SSI demonstration, administered jointly by the Department of Education and SSA, which is testing whether the early and more coordinated provision of employment-related services to youths who receive SSI, and their families, will improve their posteducational outcomes (Department of Education 2013).

The persistence of low earnings, employment in segregated settings, high poverty rates, and potentially high lifetime public expenditures for SSI and DI beneficiaries with ID suggest a need for new service-delivery approaches. It is hoped that these and other rigorous efforts to test innovative approaches will yield strong and convincing evidence that will spark systematic changes that significantly improve the lives of people with ID and other disabilities.

Notes

¹ This estimate is based on this study's findings and data from SSA (2016a).

² Blind individuals are subject to a higher SGA amount.

³ Decompensation refers to a deterioration of functioning.

⁴ In January 2017, SSA implemented revised criteria for evaluating mental disorders, including intellectual disability. Among other minor modifications, the new regulations for evaluating intellectual disability include

criteria to assess significant deficits in adaptive functioning (SSA 2016c).

⁵ Quarters of coverage are earned by working and earning a minimum amount at a Social Security–covered job. The minimum earnings required changes each year with changes in the national average wage; in 2016, earnings of at least \$1,260 earned one quarter of coverage. A worker can earn up to four quarters of coverage in a year. To be covered by DI, workers must be fully insured (have between 6 and 40 lifetime credits, depending on their age at the time the disability began) and must also have recent work (earned at least 20 quarters of coverage during the 10 years preceding disability onset). Special rules apply to those younger than age 31; younger workers need a minimum of 6 credits, regardless of their age at disability onset, and at least one quarter of coverage for every two quarters elapsing between age 21 and the onset date.

⁶ Children younger than age 18 are subject to different medical eligibility criteria from those applied to adults. Individuals aged 65 or older may qualify for SSI based on their age, regardless of their disability status.

⁷ Technical information about the NBS data and methods is available at <https://www.socialsecurity.gov/disabilityresearch/nbs.html>.

⁸ Three questions ascertained potential respondents' ability to provide consent and effectively participate in the survey. Interviewers read three statements about the survey topics and about the confidential and voluntary nature of the survey. After each question, respondents were asked to restate the information in their own words. Interviewers evaluated their responses to determine whether a proxy interview was necessary.

⁹ The agency's disability examiner or examiners designate the primary and, if applicable, secondary impairment on which medical eligibility for DI and/or SSI will be decided.

¹⁰ Selected administrative variables are provided in both the public-use and restricted-access NBS files. Data on SSA impairments come from the restricted-access file.

¹¹ The NBS data do not permit identification of DACs.

¹² Relative to beneficiaries with other impairments, a larger share of beneficiaries with ID left high school with a certificate of completion (12 percent and 2 percent, respectively; not shown). In place of a diploma or GED, this certificate, typically given when students complete high school without fulfilling all graduation requirements, might also limit opportunities to pursue postsecondary education.

¹³ ADLs are basic, everyday tasks such as eating, bathing, dressing, and toileting. Instrumental ADLs are more complex tasks required for self-sufficiency, including shopping, cooking, paying bills, and doing housework.

¹⁴ The NBS defines employment as work at a job for pay or profit.

¹⁵ NCI survey respondents (56 percent) were more than twice as likely as NBS respondents (26 percent) to report their health as excellent or very good (NCI 2016a).

¹⁶ As described earlier, SGA is a monthly earnings level established by SSA to determine initial and ongoing eligibility for SSI and DI benefits. The SGA level is adjusted annually to reflect average wage growth across the nation. During the period covered by the four NBS rounds, the monthly SGA level for nonblind individuals ranged from \$810 in 2004 to \$1,000 in 2010.

¹⁷ The NBS question that elicits this information asks about sheltered or supported employment without distinguishing between the two.

¹⁸ A number of SSI and DI program provisions allow beneficiaries to maintain eligibility for a period after their cash benefits have been suspended because of earnings.

¹⁹ The NBS data presented here generally precede the implementation of the 2010 Affordable Care Act (ACA); however, some respondents in the 2010 NBS would have been interviewed after ACA implementation. The ACA allows children to remain on a parent's health care plan until age 26. Before the ACA, coverage for a child on a parent's plan often ended at age 19 or upon graduation from college (Goldman 2013). However, some plans allowed children with disabilities to remain on a parent's plan longer.

²⁰ For details, see Section 511 of the Workforce Innovation and Opportunity Act.

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