
Patterns of Employment and Allowances for Disability Insurance Applicants

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We examine the employment and program participation patterns of Social Security Disability Insurance (DI) applicants up to 24 months before application for DI. Based on applicants' pre-application employment histories, we describe two types of applicants. Type 1 applicants are characterized by stable employment in well-paying jobs with benefits and represent the type of worker most workforce retention and early intervention proposals envision serving. The second type of applicant (Type 2) had either been out of the workforce for a lengthy period—including many for at least 24 months—or had intermittent work experiences. Proposals that focus on DI applicants with more recent attachments to the workforce are likely to miss about half of those who eventually apply. Future proposals should include outreach to individuals who lack a strong labor force attachment and who may need a broader array of supports in order to remain in the workforce.

Introduction

Various proposals related to workforce retention, early intervention, and diversion from Social Security Disability Insurance (DI) target people with disabilities along the path to applying for or receiving DI. A key concern for many of these proposals is identifying the types of people likely to apply for and receive DI benefits before they actually do so—ideally, while they are still in the labor force.

Proposals typically aim to change either employer behavior or public programs. Employer-focused proposals introduce incentives for employers to reduce the number of their workers who enter DI, such as by mandating short-term disability insurance (Autor and Duggan 2010) or by experience rating the payroll tax (Burkhauser and Daly 2011). Such proposals take advantage of the fact that employers are in good positions to observe their employees' work performances, and policies can incentivize Americans with Disabilities Act-mandated accommodation provisions that help workers stay in the labor force. A separate set of approaches would encourage public program changes, either through the Social Security Administration (SSA) and the disability determination process or through the collaboration of state-level organizations, to provide more workplace supports to people with disabilities (e.g., Liebman and Smalligan 2013; Stapleton et al. 2015).

This brief presents findings from a study that describes the employment and program participation patterns of DI applicants up to 24 months before application (Contreary et al. 2017). Such information can help inform proposals by identifying how various groups of DI applicants could be targeted and the potential reach of those efforts. We address two main research questions: (1) What are DI applicants' employment patterns before they apply for DI? and (2) How do these patterns relate to the likelihood of DI allowances?

To answer the research questions, we analyzed Survey of Income and Program Participation (SIPP) data (1996, 2001, and 2004 panels) that were linked to SSA administrative files. These data allowed us to identify individuals who applied for DI benefits, their application dates, the outcome of their application at the initial or reconsideration levels, and DI and Supplemental Security Income (SSI) receipt. The sample was restricted to DI applicants ages 25 to 55. More details on the methods can be found in Contreary et al. (2017).

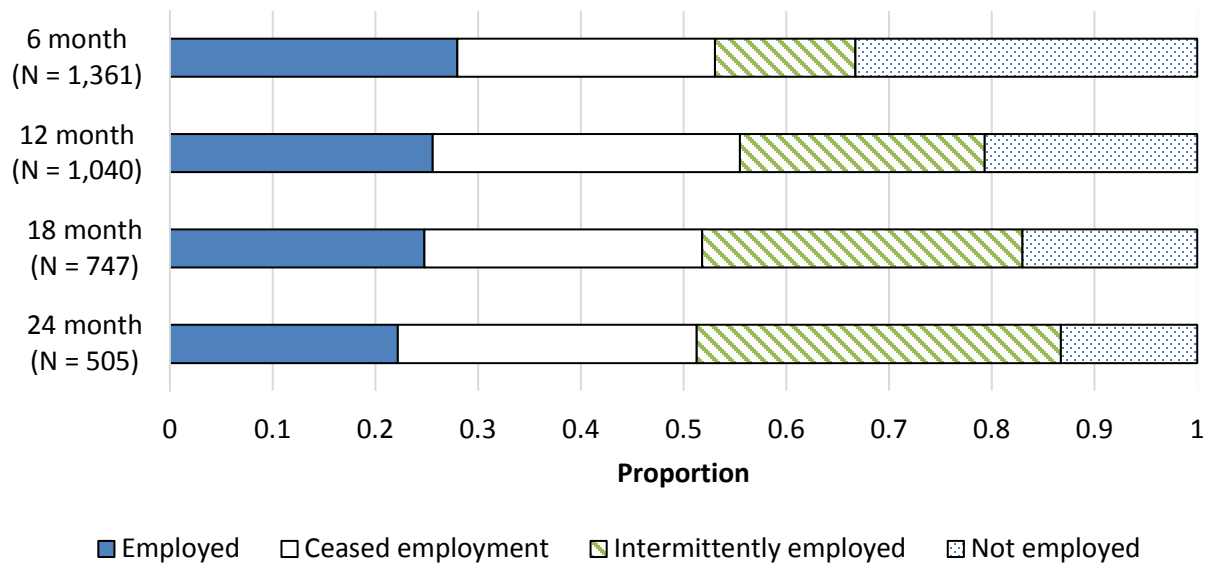
What are DI applicants' employment patterns before they apply for DI?

We tracked employment patterns before application to categorize individuals and compare various characteristics. Figure 1 shows the employment patterns of DI applicants over four observation windows (6, 12, 18, and 24 months before application for DI). We categorize applicants into four mutually exclusive categories: (1) *consistently employed*, or employed all months in the observation window before the application month; (2) *ceased employment*, or employed but with a clear and permanent cessation of employment during the observation window before the application month; (3) *intermittently employed*, or employed in some months but not others during the observation window but with no clear point at which the individual stopped working before the application month; and (4) *not employed*, or not employed during the entire observation window before the application month. As can be seen in Figure 1, a higher percentage of individuals report being not employed as the application window shortens, although a substantial fraction are already either intermittently or not employed as of 24 months before their application date.

To determine which characteristics were associated with being categorized in each of the four employment groups, we estimated a multinomial logistic regression model of employment category as a function of demographic, program participation, and employment characteristics (Table 1). The patterns shown in Figure 1 and Table 1 indicate that applicants can be thought of as belonging to one of two distinct types.

- Type 1 applicants make up about half our study sample and are characterized by stable employment in well-paying jobs, often with benefits such as private health insurance. These individuals are likely to report working consistently up to the point of application or shortly before.
- Type 2 applicants had either been out of the workforce for a lengthy period—including many for at least 24 months—or had an intermittent work history. Members of this group tended to rely more on means-tested programs or employment-related programs (such as unemployment benefits and workers’ compensation) for support.

Figure 1. Half of all DI applicants had lower labor force attachment, no matter the length of the observation window



Note: Sample size as indicated in the figure for each observation window. Figure shows the proportion of DI applicants for each pre-application employment category across observation windows (along the left axis).

Table 1. Type 1 and 2 categories have distinct demographic, program participation, and employment characteristics

	Type 1		Type 2	
	Consistently employed	Ceased employment	Intermittently employed	Not employed
Demographic characteristics ^a	Female (less likely) Race other than White or Black (less likely) Marital status other than married or never married (more likely) Less than high school (less likely) High school or GED (less likely) Some college (less likely)	Some college (more likely)		Never married (less likely) Marital status other than married or never married (less likely)
Program participation characteristics	Private health insurance (more likely) Own disability insurance (less likely) SNAP (less likely) TANF (less likely) Unemployment insurance (less likely) Workers' compensation (less likely)	Medicaid (less likely) Private health insurance (more likely)	Own disability insurance (less likely)	Medicaid (more likely) Private health insurance (less likely) Unemployment insurance (more likely) Workers' compensation (more likely)
Employment characteristics			Service industry (more likely)	

Note: Table shows demographic, program participation, and employment characteristics associated with pre-application employment categories for 6-month observation window at $p < 0.05$, along with the direction of the association, based on multinomial logistic regression results.

^a Demographic characteristic results based on model that examined demographic and program participation characteristics but not employment characteristics.

How do employment patterns relate to the likelihood of DI allowance?

Another way Type 1 and Type 2 applicants differed is in the likelihood of DI allowance. Figure 2 shows the allowance rates for the four employment categories across all observation windows. Across all windows, applicants who were employed or who ceased employment after working consistently were much more likely to be allowed than those who worked only intermittently or not at all (a difference of over 10 percentage points in each window).

We estimated logistic regression models of the likelihood of DI allowance as a function of employment category to test whether these categories served as useful predictors of DI allowance after controlling for various individual characteristics. We found that, relative to applicants who were consistently employed, applicants who ceased employment did not have a significantly different probability of allowance. In contrast, applicants who were intermittently or not employed were significantly less likely to be allowed, with the association particularly strong in the shorter time windows.

Policy implications

Return-to-work or early intervention programs that focus on DI applicants with more recent attachments to the workforce (Type 1) are likely to miss about half of those who eventually apply for DI. The question, therefore, is whether proposed policies can capture Type 2 applicants when they still consider themselves to be in the labor force but do not have a long-term attachment to an employer. Employer-focused proposals might have less reach than broader systemic approaches that either improve supports for those seeking DI benefits or shift focus toward work capacity.

Figure 2. DI allowance rates were higher for Type 1 employment categories regardless of the observation window



Note: Figure shows the proportion of DI applicants awarded DI benefits at the initial or reconsideration levels for each pre-application employment category and observation window.

Relative to Type 1 applicants, Type 2 applicants typically have lower educational attainment and less recent work experience as well as low income and other resources—characteristics that in combination with medical problems may make it difficult for them to find and maintain good jobs. Given their economic situations, their opportunity costs for applying to DI might be lower than those for Type 1 applicants, and their lower DI allowance rates might reflect lower severity disabilities. Efforts to help them may not be successful unless they can be identified either when they are still working (with early interventions services that address the full array of issues that prevent them from holding better jobs) or after they have left the labor market (with services that help reconnect them to employers). Efforts to identify such people before they apply may have to focus on outreach via health and mental health providers, other programs in which they may participate, and the media. If intermittent work history is symptomatic of a disability that could be managed with appropriate supports, options to improve workforce attachment through condition management and ongoing support might be good opportunities for Type 2 applicants.

It is hard to know whether the return on investing in early intervention services for Type 2 applicants would be higher or lower than for Type 1 applicants. On the one hand, Type 1 workers' long-standing attachment to the workforce—and potentially to a particular employer—might make it easier to retain them in the workplace, as they may need only timely access to rehabilitation services, workplace accommodations, or supportive technology to remain productive. On the other hand, Type 2 applicants likely have lower human capital, are more difficult to target, and may require a broader array of services (including ongoing support) to stay employed, but they may be less likely than Type 1 applicants to already have access to services that would keep them in the workforce. Even if Type 2 applicants ultimately present a lower return on investment, efforts to target them could likely be justified on equity grounds because of their low income, frequency of experiencing poverty, and other potential barriers to employment.

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