

Occupational Changes Following Disability Onset in the Late Working Years

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Introduction

The onset of a work-limiting health condition in the years approaching retirement significantly reduces earnings and income, and leads to a sustained increase in the risk for poverty in both the late working years and into retirement. Schimmel and Stapleton (2012) found that earnings among older workers two years after the onset of a work-limiting health condition were 50 percent lower on average, and poverty rates were nearly double the rates for individuals who did not report a work-limiting health condition. Wu and Schimmel Hyde (forthcoming) reported that the likelihood of poverty in retirement was significantly higher for Social Security Disability Insurance (SSDI) beneficiaries and denied applicants—both groups who had substantial medical conditions—relative to older adults who had never sought SSDI before retirement—and who were presumably healthier than the two SSDI groups.

Although a drop in earnings after the onset of disability has been well-documented, less is known about the changes in employment that drive these earnings down. For instance, do earnings decline because older workers who experience the onset of a work-limiting health condition exit the labor market completely? Many older workers who experience a significantly limiting condition apply for SSDI, which usually also entails a complete exit from the labor force. Or do workers who experience a new work-limiting health condition continue to work? If so, do they stay in their career occupation, or do they change course and begin to work in a different occupation?

Occupational changes when people are older are not uncommon, perhaps reflecting, in part, the response to physical and cognitive declines associated with being older but also signaling transitions to bridge jobs and the natural progression toward retirement. The share of workers who change jobs in their 50s has increased sharply since the early 1980s, with about half of all workers at ages 58 to 62 no longer working for their age-50 employer (Munnell and Sass 2008). Sanzenbacher et al. (2017) estimated that in 2015, 45 percent of employed men ages 58 to 62 were in a job they had started after turning 50. Sonnega, McFall, and Willis (2016) found that a growing share of workers transitioned to a non-career occupation as they grew older, and that many of the non-career occupations are lower in status than the jobs they held during their career. For example, older workers are most likely to move into occupations that are seasonal or easier to secure.

Analysis Overview

In the analysis documented in this paper, we examined whether occupational changes in the pre-retirement years differ for those who experience the onset of a disability relative to those who do not; the onset of disability is defined as the point at which an employee reports a work-limiting health condition). The literature on occupational changes has focused on the possibility that health status influences behavior, but to our knowledge, there has been no discussion of (1) the role played directly by disability or (2) the extent to which the path in the late working years varies by disability status.

We considered the experience of 3,105 Health and Retirement Study (HRS) respondents who were born between 1931 and 1947, and selected as part of the HRS and War Baby cohorts of the HRS (first interviewed in 1992 and 1998, respectively). When these individuals were interviewed at about age 55, they were working and did not report a work-limiting health condition at the time of the interview. It is important to note that this group is healthy relative to the full cohort of 55-year-olds, many of whom already reported a work-limiting health condition

and/or had exited the labor force by that age. More than one-third of our sample reported a work-limiting health condition in at least one interview after they were 55 and by the wave in which they reached Social Security's full retirement age (FRA) (1,136 respondents, 36.5 percent of the total). The likelihood of new onset was relatively constant over this period; about 14 percent of our sample experienced this by age 59, another 12 percent by age 63, and the remaining 10 percent by age 67.

We used an approach similar to that of Sonnega, McFall, and Willis (2016) to consider the occupational status of workers at four points in the late working years. Specifically, we compared the occupational trajectory of workers based on whether they report a new work-limiting condition between the ages of 55 and FRA. We identified workers who did not have a work-limiting health condition at age 55 and the occupation in which they were working at that time. For each worker, we tracked their occupation at approximately ages 59 (before Social Security retirement is available), 63 (after Social Security's earliest age of eligibility), and 67 (after FRA).¹

For each individual in our sample, we identified the occupations he or she held at ages 55, 59, 63, and 67, and then mapped the unmasked occupation codes available with permission in the HRS to Standard Occupational Codes (SOC).² At each age after 55, we determined whether the individual:

- Had stopped working for pay based on self-report;
- Was working in the same occupation as at age 55, with both occupations falling into the same broad SOC group;
- Was working in a different but similar occupation as at age 55, with both occupations falling into the same major SOC group and possibly into a different minor group; or
- Was working in a substantially different occupation as at age 55, with that occupation at the later age falling into a different major SOC group.

Key Findings

We found important differences in the occupational trajectory of workers who experienced disability onset after age 55 relative to those who did not. Figure 1 shows the unadjusted occupational status at ages 59, 63, and 67 relative to the job held at age 55, stratified by disability onset.

Consistent with the findings of Sonnega, McFall and Willis (2016), we found that occupational transitions are common after age 55, with major occupational changes being more common than more modest changes. For example, at age 63, just about one-third of the workers experiencing disability onset and nearly 40 percent of the workers who did not had changed their occupation. Although occupational changes were more common among those who did not

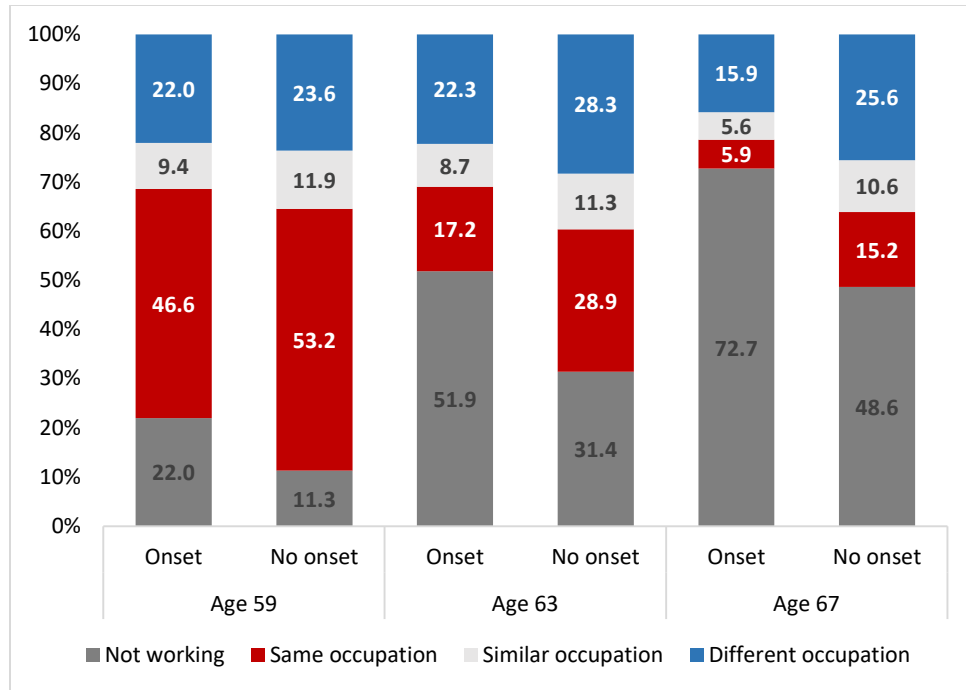
¹ We defined these three key points based on HRS waves relative to the wave in which a respondent was 54 to 56. The wave in which a respondent was 58 to 60 is two waves after the HRS wave in which a respondent was 54 to 56, and a wave in which a respondent was 66 to 68 is six waves after the HRS wave in which a respondent was 54 to 56.

² The 2000 SOC system contains 819 detailed occupations aggregated into 449 broad occupations, 96 minor groups, and 23 major groups. To use the HRS occupational data, we had to work across three SOC schemes (1980, 2000 and 2010), then convert all back to the 2000 classifications.

experience disability onset in absolute terms, major changes were, in proportional terms, more common among those who did experience disability onset.

We also found that at each later age (59, 63, and 67), not working is more common among those who experienced disability onset. For instance, by age 59, more than twice as many workers who experienced disability onset were not working. By FRA, 73 percent were not working, compared with 49 percent of workers who did not experience onset. Among older workers remaining employed at each later age, occupational changes in the late working years are about as common for workers experiencing disability onset as for workers who do not.

Figure 1. Occupational Changes at Ages 59, 63, and 67 Relative to the Job Held at Age 55, by Disability Status



Source: Authors' calculations using the HRS.

At age 55, workers who experienced disability onset in the late working years were less educated than those who did not experience onset. They were also in lower-paying jobs and less likely to be self-employed at age 55 (not shown). To understand how disability onset is associated with occupational change in the late working years, and accounting for these and other observable differences, we estimated a multinomial logistic regression model, appropriate for jointly estimating discrete categorical outcomes. We estimated a model of the following form:

$$OCC_{it} = \alpha + \beta_1 * DISAB_i + \beta_2 * X_i + \epsilon_{it}$$

OCC_{it} is the categorical measure of occupational transitions just described, for person i at age t , and $DISAB_i$ indicates whether the person reported a work-limiting health condition between ages 55 and FRA. X_i is a vector of individual demographic and employment characteristics measured at age 55. We intentionally excluded individual health characteristics because they are highly correlated with the subsequent disability onset.

The results from this model showed that disability onset after age 55 results in a significantly lower likelihood of remaining in the same occupation through FRA (Table 1). Transitioning out of work is much more likely among those who experience disability onset than among those who do not. Disability onset, to a lesser extent, also increases the likelihood of a transition to a significantly different occupation (relative to remaining in the same occupation) at each of the later ages. The effect of disability onset on the transition to a different but similar occupation is not as consistent across the ages. However, across the full period from age 55 to FRA, disability onset is associated with a significantly higher likelihood of changing to a similar occupation relative to remaining in the same one (not shown).

Table 1. Relative likelihood of occupational transition for individuals experiencing disability onset relative to those who did not

Occupation at Age t	Age 59	Age 63	Age 67
Not working for pay	0.80 *** (0.11)	1.01 *** (0.10)	1.31 *** (0.15)
Working in a substantially different occupation than at age 55	0.07 (0.10)	0.30 ** (0.12)	0.40 ** (0.16)
Working in a different but similar occupation than at age 55	-0.08 (0.13)	0.30 (0.15)	0.28 (0.20)

Source: Authors' calculations using the HRS linked to restricted occupation file

Note: Values shown are the coefficients from the multinomial logit model, with standard errors in parentheses. *** indicates a *p*-value of < 0.01, ** indicates a *p*-value of < 0.05, and * indicates a *p*-value of < 0.10. Coefficients represent the likelihood of the given outcome (relative to staying in the same occupation) for those who experienced disability onset relative to those who did not. We controlled for demographic and socioeconomic characteristics at age 55, including gender, marital status, race, Hispanic ethnicity, education, and household income, along with characteristics of the job held at age 55, including full-time status, self-employment status, firm size, tenure on the current job, and hourly wage.

Next Steps

We are currently exploring how disability onset interacts with job requirements to affect occupational change in the late working years. The impact of disability onset on employment is likely to vary by the requirements of one's job when disability strikes. For example, the employment trajectory after the onset of a back injury may be quite different for a lawyer than for a manual laborer. To consider the role of job characteristics in the subsequent occupational path, we are using respondents' reports of job demands as well as links to the Department of Labor's O*NET data to classify the skill requirements and demands of the job held at age 55. Sonnega, McFall, and Willis (2017) noted that the self-reported measures and O*NET categorizations are complementary. We will stratify workers based on the characteristics of the job held at age 55 and on how the role of disability onset varies according to those attributes.

Understanding whether the attributes of the job held at age 55 protect against or predict occupational changes among those with a new onset of disability could provide policymakers with actionable information about the types of retraining that could be provided to older workers to help them transition into other occupations and thus remain in the labor force longer.

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