



Cornell University
ILR School
Employment and Disability Institute

Research Brief:

Job-Mobility for People with Disabilities: Impact of Employer-Paid Health Insurance

Research presented at the
Innovative Research on Employer Practices:
Improving Employment for People with Disabilities

STATE OF THE SCIENCE CONFERENCE

October 22-23, 2013

Washington, D.C.

**Sponsored by the Rehabilitation and Research Training Center on
Employer Practices Related to Employment Outcomes among Individuals
with Disabilities at Cornell University**



Background

Access to health care remains to be one of the important benefits for employees who have disabilities and/or chronic health. Offering health insurance to employees is a crucial human resource tool for employers to encourage worker retention, especially in contemporary labor markets. To illustrate the importance of access to health care, in some instances, people with disabilities avoid labor market engagement subjecting themselves to lower economic conditions to become eligible and secure access to public-funded health care that often meets their needs. Some empirical data also suggests that by improving access to health care, approximately one fifth of non-working people with disabilities could consider going to work. Therefore, from the perspective of people with disabilities and policymakers, increasing access to health care might have a potential to better their labor market engagement. With an increasing prevalence of disability in general and especially among the greying workforce, providing access to health care provides tools for employers to attract and retain qualified workers who may have disabilities.


Several factors appear to influence employer decisions to offer health insurance. In general, large-size employers are more likely to provide health insurance compared to employers with less than ten workers, primarily due to cost considerations. Further, workers in higher-wage brackets or longer tenures have more success with access to employer-paid benefits compared to those in lower pay brackets or shorter tenures. Thus, the economics of providing health insurance have predominantly guided employer choices to offer health insurance more than quality of those plans. However, the quality of benefits and needs for health care including access to spousal health insurance have largely guided employees to make a choice to sign up for employer-paid health care plans. The rising cost of healthcare has, over the past decade, contributed substantially to a decline in access to employer-paid health insurance (EHI) and reduced the extent of coverage available to the families of employees. The impact of the recently enacted Patient Protection and Affordable Care Act remains uncertain, although several analyses indicate low or minimal impact where employers may continue to provide EHI to advantage them in a competitive labor market. Needless to say, access to employer-paid health insurance impacts both employers and employees contributing to labor market dynamics.

As most employers appear to make decisions to offer EHI from an economic perspective, research has yet to demonstrate how such decisions could potentially contribute to higher turnover rates as indicated by job-mobility of workers, especially among employees with disabilities. This research brief describes the results from the analysis of large national survey data examining the relationship between employer-paid health insurance and the likelihood of job-change for people with and without disabilities.

Methods & Results

Data set

We utilized the Medical Expenditure Panel Survey (MEPS) data set for the years 2004 through 2008 for the purpose of this study. The MEPS, conducted annually by the Agency for Health Care Quality, is a longitudinal panel survey providing nationally representative estimates of health care utilization/expenditures, sources of payments, and health insurance for the non-



institutionalized U.S. civilian population. We utilized the Household Component (MEPS-HC) of the MEPS survey dataset. The MEPS-HC sample is a complex national probability sample of households who participated in the previous year's National Health Interview Survey (NHIS) conducted by the National Center on Health Statistics. Each year, the MEPS-HC sample is established to form a panel and everyone within the panel is interviewed five times over a period of 30 months. The MEPS-HC collects information on key socio-demographic factors, medical conditions/events, functional limitations, costs or expenditure for medical services including physician services, drugs, procedures, hospitalization and ambulatory care, as well as information on employment, hourly wages, access to health insurance, and workplace characteristics in every interview round. This establishes longitudinal data for two years on an individual basis. Overall unweighted sample included approximately 42,158 individuals aged 18 – 65 years for the analysis. The final analytical sample did exclude individuals who indicated holding a temporary job in any of the interview rounds. Longitudinal MEPS-HC weights were applied for estimating the variance for parameters accounting for the complex sample survey design.


Dependent Variable

Changing jobs across different rounds of data collection was the dependent variable for this study. This is collected as a binary variable in the MEPS-HC questionnaire. Individuals who indicated to have retired as a reason for a change in job status were excluded from this analysis. Further, only changes in the current main jobs were tracked. It is likely that individuals were engaged in temporary jobs either along with the current main job or had temporary work as a sole mode of employment. The temporary jobs were also excluded from this analysis as the transitory nature of such work could potentially influence the overall probability of job change.

a. Disability classifications

We utilized the conceptual framework of the International Classification of Functioning, Disability and Health (ICF) developed by the World Health Organization in developing disability classifications within this research (WHO, 2001). The ICF framework for disability recognizes disability as a multi-dimensional construct along the continuum of health and well-being (Kostanjsek, 2011). This framework recognizes disability as a function of interaction between individual health conditions and the environment. In brief, the ICF construct for disability includes the interaction between health conditions, impairment of body structures and functions, activities and participation restrictions, and personal and environmental factors.

Pollard, Johnston, and Dieppe (2011) distilled the ICF constructs for disabilities into three major categories of impairment in body structures and function, activity limitation, and participation restriction. The impairment of body structures and functions include specific chronic disease conditions - e.g., multiple sclerosis impacting neuromuscular system. In MEPS-HC, the information on specific health conditions is coded using the International Classifications of Diseases-9 (ICD-9) criteria by professional coding experts based on the descriptions of the conditions provided by the participants. We converted these ICD-9 diagnostic codes into specific body systems impairments using the Clinical Classification Software (CCS) developed by



AHRQ (Elixhauser, Steiner, & Palmer, 2011). Only chronic conditions were considered for inclusion in identifying impairments in body structures and functions.

The activity limitations construct includes functional limitations in the Activities of Daily Living and Instrumental Activities of Daily Living measures, as well as other tasks such as bending, standing, walking, and grasping. Specifically, to construct the activity limitations domain we included only those limitations lasting for more than three months in each of these areas in the MEPS-HC. The participation restriction includes limitations in going to work, school, participation in social and leisure time activities. We utilized specific question items from the MEPS-HC to construct the participation restriction domain. These constructs and their combinations informed development of disability classifications for this analysis. It must be noted that in our analysis individuals with only impairment of body structures and function with no activity limitation and no participation restriction are not classified as having a disability. We chose to define disability in this way since many health conditions are not disabling conditions in their contextual settings.

b. Access to employer-paid health insurance

This binary variable assessed if the respondent had access to health insurance through their employer-paid insurance. Existing MEPS-HC also inquires if the employer offers health insurance to all employees and if the respondent chose not to use employer paid insurance. However, the current analysis is limited to having an employer paid health insurance.

c. Other IVs.

These included age, gender, race/ethnicity, marital status, sociodemographic conditions, hourly wages earned, occupational category, higher health care need as indicated by the need to see a specialist for chronic health conditions, and number of employees at the current main job was utilized to account for the size of the employers.

Statistical Analysis

Univariate analysis examined the relationship between each of the independent variables and the dependent variable. Further, these relationships were studied across the five rounds of data collection to study their correlations over time. Multiple regression analytical models were constructed to study the relationship between the likelihood of job change and access to employer-paid health insurance among persons with and without disabilities, simultaneously controlling for other factors that could potentially contribute to the observed trends. As data were collected longitudinally over five rounds leading to significant correlations, Generalized Estimating Equations (GEE) method as described by Liang and Zeger (1986) was used in multiple regression analysis. Please refer to Burton, Gurrin, & Sly (1998) for further technical description of GEE method. Within our empirical model outlining the process of job change, we also embedded some important interaction effects to study if access to employer-paid health insurance differently impacted the probability of job change among people with and without disabilities. The final empirical model was as follows:

$$\ln \frac{\text{Pr(a job change in round } t)}{\text{Pr(no job change in round } t)}} = X_{it}\beta + \gamma_1 D_{it} + \gamma_2 EPHI_{it} + \gamma_3 D_{it} EPHI_{it} + \alpha_i \quad (1)$$

where X represents a set of control variables such as age, indicators of mental health impairment and need to see specialist for chronic conditions, the residuals from the wage equation (see below) and rating of health plan D represents disability type, EPHI represents his/her access to employer-paid insurance, and D*EPHI interaction term between disability and access to employer-paid health insurance. Finally, α_i is time invariant individual fixed effect the presence of which explains correlation between observations of the same individual across different rounds. The utilization of the GEE method in this context enables us to explicitly control in the empirical specification of job-change for this time invariant fixed effect to draw a more precise inference about the process of interest.


Additionally, considering that hourly wages and provision of employer-provided health insurance (the main variable of interest) in our empirical specification of job change could be confounded not only by certain work characteristics but also unobserved individual factors such as motivation and ability which are unobservable in data, we developed a linear regression model with hourly wages as the outcome variable and various workplace and individual characteristics (e.g., presence of disability, worker age group, occupation type, organizational characteristics – i.e., public vs. private, and number of employees in the workplace) as the control variables. The residuals from this wage equation was used in (1) as the independent variable to reflect unobserved individual factors which might be simultaneously correlated with both the incidence of job change and provision of employer provided health insurance in the main empirical model. It must be noted that the hourly wages were normalized using the Consumer Price Index to 2009 values for comparability purposes and the regression equation used log transformed wage values to ensure the normal distribution of wages.

In addition, predicted probabilities for job-change were computed for the representative sample based on the estimates of the empirical model and then averaged by disability and insurance status. These probabilities were plotted to study if the likelihood of job-change in relation to access to employer-paid insurance varied across disability status.

Results

a. Study Population:

Based on the ICF framework of disability classification, 12% of the sample population had disabilities – 3.3% had impairments, activity limitation and participation restriction; 2.7% had activity limitation and participation restriction; 2.6% had activity limitation only; and 1.7% had participation restriction only. Less than 1% had disability with the combination of activity limitation and impairment or participation restriction and impairment. The majority of the study population belonged to the 25-44 year age group (43%) with 45-65 the next larger group (42%) followed by youth and young adults (15%). Two thirds of the study population were Non-Hispanic Whites (66.6%), 12% were Non-Hispanic African Americans, 15% were Hispanics, and 5% were Asians. Examining these distributions across disability status, it is apparent that a greater proportion of people with disabilities belonged to older adults in the age groups of 45 – 65 compared to their non-disabled peers (64.9% vs. 36.7%). People with disabilities had a higher



proportion of individuals with only high school or no high school degree and a lesser proportion of individuals with post-secondary education compared to people without disabilities. Only 43% of people with disabilities were employed compared to 82.5% of people without disabilities, and a higher proportion of people with disabilities are employed in service occupations, whereas a higher proportion of people without disabilities were employed in professional occupations, such as management and business.

b. Univariate Analysis:

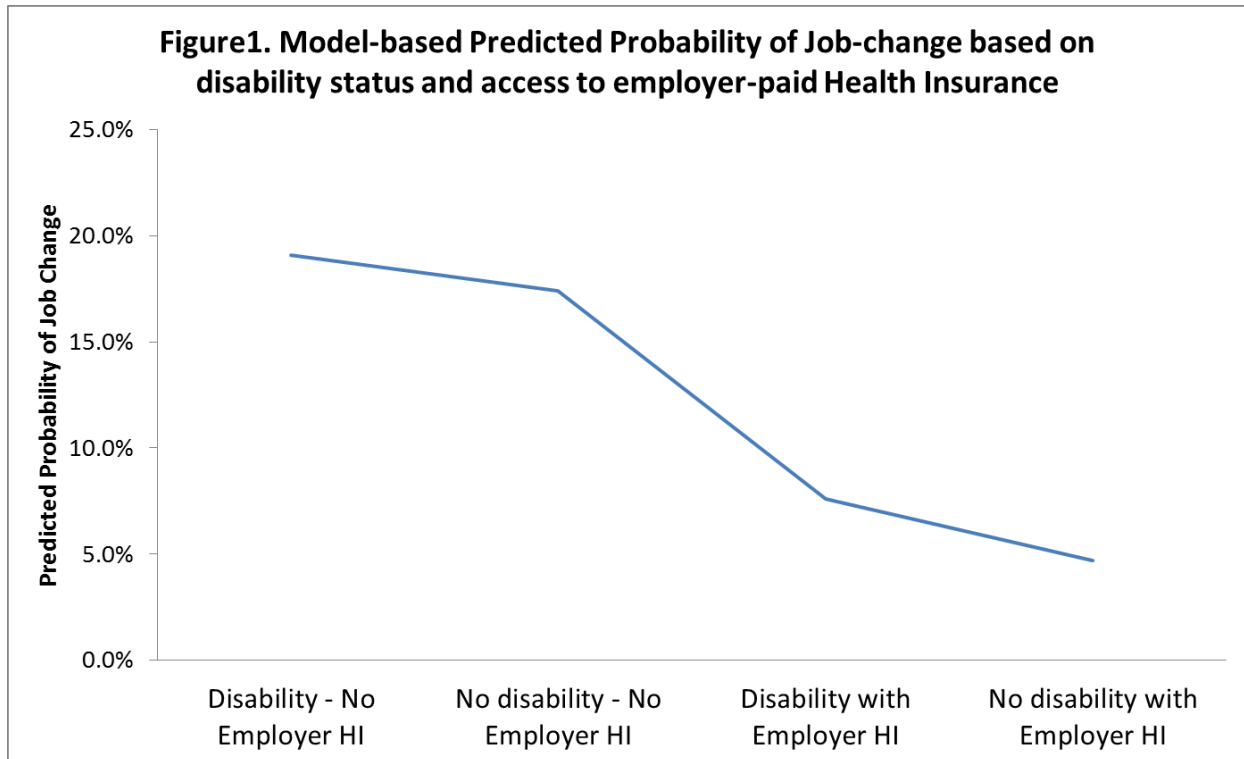
Among employed individuals, 53% of people with disabilities had employer-paid health insurance whereas about 57% of people without disabilities had employer-paid health insurance. Nearly 60% of adult workers (i.e., age groups 25-44 and 45-65) had access to employer-paid health insurance compared to younger workers (34%). Workers with post-secondary education were more likely to have access to employer-paid health insurance compared to their counterparts with lesser educational attainment. Further, temporary workers were half as likely to have access to employer-paid health insurance compared to full-time workers (27.4% vs 58.5%). Only 22.5% of those working in Farming, Fishing and Forestry, 36.1% in Service Occupations, and 45.7% in Sales and Related Occupations had access to employer-paid health insurance. Access varied from 50 – 60 % among the remainder of the occupational categories. Further, a higher proportion of workers with chronic conditions needing specialist services had access to employer-paid health insurance compared to their peers without such service needs (62.9% vs 54.4%).

Nearly 14% of employees with disabilities changed jobs across five waves of data collection, compared to 10% of employees without disabilities. Among employees with disabilities, frequency of job-change was highest among employees having impairment and participation restriction (18%) and lowest among those with activity limitation only (12%). Further, job change frequency was highest among young adult workers (21%) and lowest among older adult workers (8%). Employees with lower educational attainment had a higher frequency of job-change compared to those with post-secondary education (<HS: 16%; HS: 12%; PS: 8%). Employees who changed jobs had 19% lower hourly wages and worked in firms with 25% lesser employees compared to their peers who did not change jobs.

c. Multivariate Analysis:


Employees with disabilities were 1.5 times more likely to change jobs compared to their peers without disabilities (OR: 1.5; 95% CI: 1.3 – 1.7). Employees who do not have access to employer-paid health insurance are 2.8 times more likely change jobs across each round of data collection compared to their peers who had access to employer-paid health insurance (OR: 2.8; 95% CI: 2.5 – 3.1). Other variables in the model included age group, hourly wages earned, need to see a specialist, and diagnosis of psychiatric illness. Further, the disability status and access to employer-paid health insurance interaction term was statistically significant in multivariate models, indicating a varying impact of access to employer-paid health insurance across disability status on job change probability. Figure 1. Illustrates the model-based predicted probability of job change by disability status and access to employer-paid health insurance. It can be observed that employees with disabilities who do not have access to employer-paid health insurance have

the highest probability of job-change, followed by employees without disabilities who do not have access to employer-paid health insurance. The probability decreases for employees with disabilities who have access to employer-paid health insurance and is lowest for employees without disabilities who have access to employer-paid health insurance.

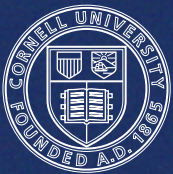


Discussion and Implications

As the global economy continues to recuperate, the chances of employee turnover are higher, especially among high-earning workers. Sometimes labor turnover costs are almost one fifth of the annual salary of high-earning workers and continue to cost a substantial amount to employers. With some employers re-evaluating whether to offer health insurance benefits under the ACA, it is likely that employees who value their benefits could move to jobs that provide such benefits. With job-locks substantially reduced by policies such as the Health Insurance Portability and Accountability Act (HIPAA), our research demonstrates that lack of EHI contributed to higher rates of job-change among employees with disabilities compared to their peers without disabilities after controlling for all other correlates of job-change. With increasing portability of insurance and access to more options through health insurance exchanges, workers have more options to change jobs in a good labor market, and employers might want to consider offering EHI as a benefit to retain their high performing workers, who may have disabilities. It is important to note that this research only examined access to EHI, and did not study the quality and extent of access as these parameters continually change in response to premium costs. It is important to understand to what extent these dimensions also impact employee turnover, to provide guidance to employers for investing in benefit packages that advantages them in retaining high performing employees with disabilities and minimizing their turnover rates in a recovering economy.



This brief was prepared by Melissa Bjelland, Arun Karpur, and Zafar Nazarov to summarize a presentation for a state of the science conference entitled *Innovative Research on Employment Practices: Improving Employment for People with Disabilities* sponsored by the Employer Practices Related to Employment Outcomes among Individuals with Disabilities Rehabilitation Research and Training Center funded to Cornell University by the U.S. Department of Education National Institute on Disability and Rehabilitation Research (Grant #H133B100017) held October 22-23, 2013 in Crystal City, MD.



Cornell University



This state of the science conference and research is funded to Cornell University by the U.S. Department of Education National Institute on Disability and Rehabilitation Research (NIDRR) for a Rehabilitation Research and Training Center (RRTC) on Employer Practices Related to Employment Outcomes among Individuals with Disabilities (grant #H133B100017). The contents of this research brief do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government (Edgar, 75.620 (b)).