Project Title: Changes in Work, Injury and Illness Risks: Implications for Disability Programs

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Focal Areas: 3 and 4

The American labor market is undergoing important changes with respect to the composition of jobs and the structure of employment. These changes may have fundamental impacts on the risk of serious illness and injury for U.S. workers. Employment, health and disability are linked in important ways: the physical requirements of jobs, scheduling, workplace stress, environmental conditions, location of industries, and the provision of health insurance all potentially affect the risk of significant illness and injury. One example of an important change is the decline in job tenure, which has been going on for over three decades (tabulations from Current Population Survey 1982-2012). This long-term trend has accelerated recently with the rapid growth in the gig economy and other alternative work arrangements (Katz and Krueger, 2019). Today, the gig economy is estimated to employ between 26 million (based on Katz and Krueger, 2019) and 57 million (Gallup, 2018) people; the higher figure represents 36% of the 2019 U.S. labor force. This change may be having a substantial impact on health. Jobs in the gig economy are less likely than traditional jobs to include workplace benefits, including health insurance. These jobs often pay less, relative to educational attainment, than do traditional jobs Abraham et al, 2018). Gig jobs also often have non-standard safety and shift environments, which may raise further health and safety hazards. The rise of the gig economy is just one of several long-term trends in the US labor market that are likely to have health and disability consequences.

The Project

A great deal has been written about the potential impacts on the economy of the rise of robots, AI and other forms of automation, the gig economy, globalization, and other labor-market transforming forces. These projections often go out 20 to 30 years in the future, and there is considerable variation among them. Moreover, projections 20 to 30 years are always subject to the risk that technological or other forces are likely to change between now and then.

Both forecast accuracy and policy relevance are likely to be improved by focusing on the nearer-term future. Automation, globalization, and the gig economy, among other changes, are already here, but we know little about how these changes have affected the content of employment or the health of workers. Forecasts of near-term changes in these forces are reasonably reliable and can be combined with what we can learn about these effects today to

derive near-term estimates of the likely impact of these forces on health and disability applications.

Our proposed project seeks to explore the linkages between projections on the future of work, health and disability claims. The proposed project has two principle aims.

1. To use existing forecasts of changes in the structure of employment to project the changing structure of work including the structure between traditional and contingent/ alternative work environments, occupational structure, location (region/urban-rural) and the composition of jobs by demographic characteristics (age, race/ethnicity, gender)
2. To link the forecasts to trends in the health characteristics of jobs and the risks of serious injury and illness for job holders that may result in disability.

We would pursue these aims by assembling and synthesizing projections about the changing occupation, industry, education, and skill structure of employment. This will include projections by the Bureau of Labor Statistics, the Federal Reserve Bank of Atlanta, McKinsey Global, the Brookings Institution, International Labour Organization, Mastercard, Morgan Stanley, and the OECD among others. These sources include projections by industry and occupations (e.g. McKinsey and OECD) as well as for the gig economy and alternative work arrangements (Mastercard, Morgan Stanley). Together, these projections would provide estimates of anticipated changes in levels of employment, industry and occupational structure, the location of jobs and the demographic and occupational characteristics of jobs that are growing and shrinking.

The second step in the research would be to create a database that combines information from several sources relating the projection categories (industry, occupation, demography) to information about the risks of serious injury and disease leading to disability (mostly SSDI) applications. These data sets would include the National Health Interview Survey (NHIS) and its Occupational Supplements, the Current Population Survey (and its supplement on contingent work arrangements), O*NET, the Bureau of Labor Statistics Survey of Occupational Injuries and Illnesses (SOII) and data on disability applications by occupation and industry. The disability and SSDI program participation measures would rely primarily on data from the CPS ASEC and the NHIS. These data sets both ask about disability program participation and work history (albeit somewhat differently). These data would enable us to establish connections between occupations, serious injury and illness and enrollment in SSDI. This information would be used to construct industry/occupation specific risk of illness and disability indicators. Together these

data sets would allow us to create a profile of how the dimensions of employment changes considered by the forecasts are likely to affect the risk of serious injury and illness. We would then combine the projections with the estimates of relationships of industry/occupations and serious illness and injury to assess how near-term changes might be expected to affect disability claims. We can use variation in the projections to conduct sensitivity tests of the projected health impacts stemming from projected changes in employment.

We anticipate that the results of this project would create a new understanding of the health and disability program demand consequences of anticipated changes in employment. These estimates would be useful in informing policy efforts and private and public investments that could attenuate the potential adverse effects of changes in the nature of work.

References

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