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# Could a Rise in Social and Cognitive Limitations Increase Enrollment in Disability Programs?

In a recent study, we examined levels of functioning among working-age adults in the United States and among working-age adults who have chronic conditions or disabilities. Using nationally representative data from the National Health Interview Survey (NHIS), we estimated trends in cognitive, emotional, movement, sensory, self-care, social, and work limitations. Our study revealed increases in social and cognitive limitations in both the general population and among people with certain medical conditions. A better understanding of these trends could help practitioners and policymakers plan interventions to improve outcomes for people with chronic conditions and disabilities.

## Background

People who have cognitive limitations reported periods of confusion or trouble remembering things. Studies show that cognitive limitation is a risk factor for physical limitation and for experiencing greater difficulty doing activities of daily living (Stuck et al. 1999). People with social limitations have difficulties engaging in leisure activities, both alone and with others, such as going to sporting events, visiting friends or engaging in other social activities, or watching television at home.

Both cognitive and social limitations can lead to social isolation, which is linked to a greater risk of early death and other detrimental physical and mental health outcomes (Holt-Lunstad et al. 2015; Uchino 2006). Research shows that people who are older or have poor health, illness, or disability often face more social isolation because of additional

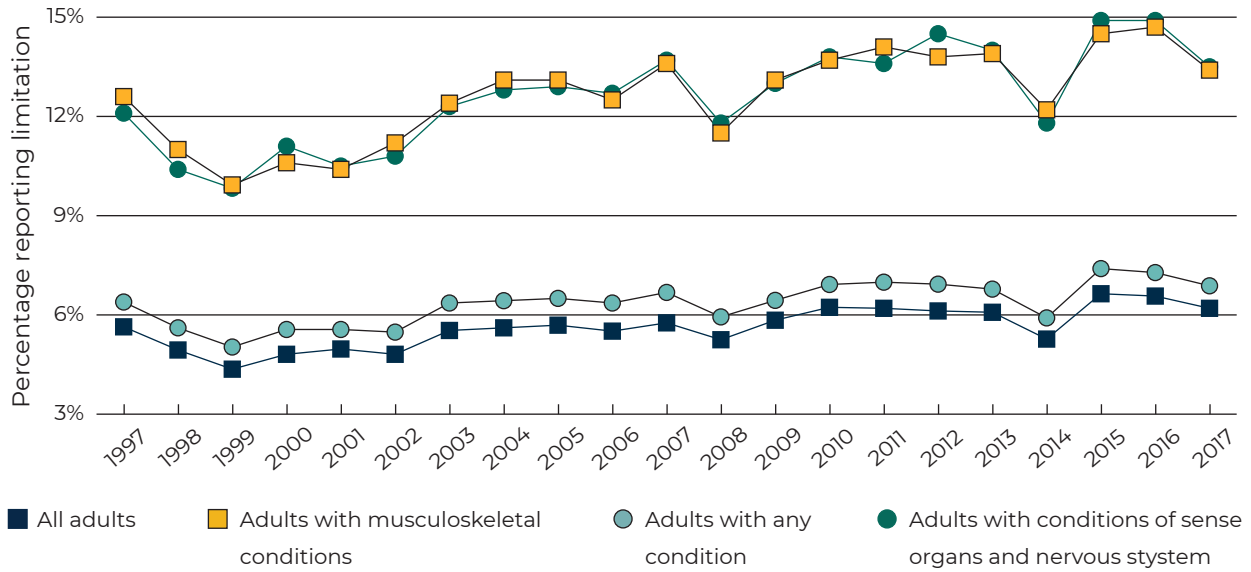
barriers that limit their social contacts (MacDonald et al. 2018; DiJulio et al. 2018). Whether social isolation is exacerbating disability or disability is exacerbating social isolation, the contributing limitations are risk factors for worse outcomes.

## Findings

We found that the percentage of people who reported at least one of the five functional limitations we examined was fairly stable over time—roughly 38 percent of the full population and 42 percent of the subset with at least one medical condition (see Data and Methodology). But underlying this flat trend was a notable rise in the share of adults who reported social and cognitive limitations.

For social limitations, we found modest but statistically significant increases over time in the general population and among adults with a medical

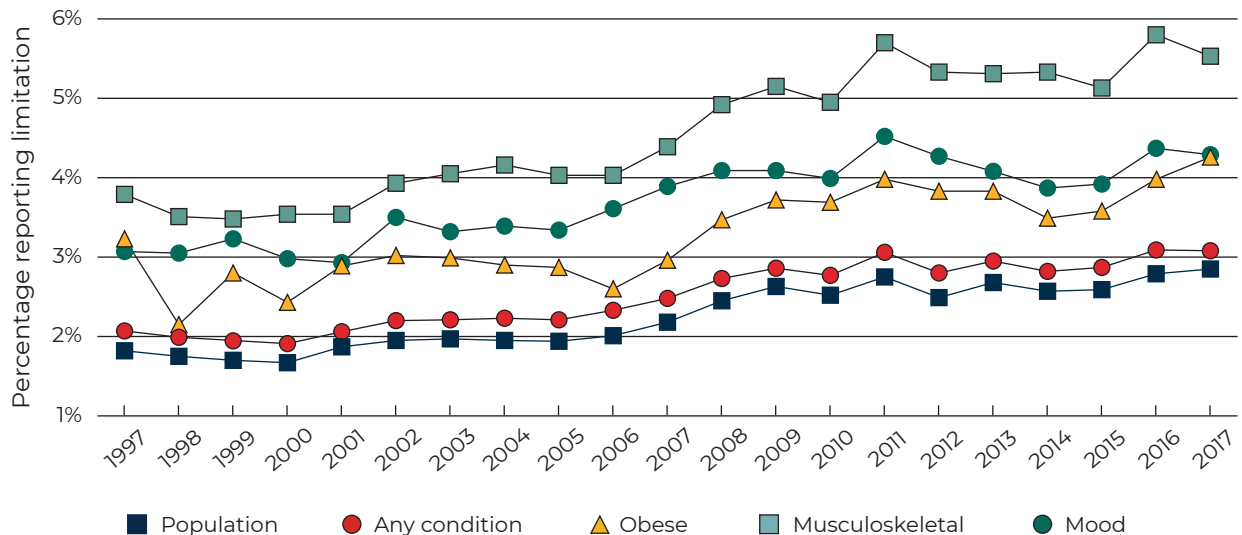
**Figure 1. Adjusted trends in social limitations among adults ages 18-64, 1997–2017**



condition (Figure 1). From 1997 to 2017, increases in social limitations were more pronounced among people with musculoskeletal conditions (12.6 percent to 13.4 percent) or nervous system and sense organ conditions (12.1 percent to 13.5 percent).

The prevalence of cognitive limitations increased over time in the general population and among people with a medical condition (Figure 2). People with musculoskeletal conditions experienced the highest rates of cognitive limitations, rising from 3.8 percent in 1997 to 5.5 percent in 2017.

**Figure 2. Adjusted trends in difficulties because of cognitive limitations among adults ages 18-64, 1997–2017**



## Discussion

Although reports of any functional limitation have remained fairly constant over time, working age people have experienced declining functioning in a number of areas. The rise in social and cognitive limitations in the full population, with or without conditions, is troubling and consistent with reports in the popular press that Americans are growing ever more socially isolated (Khullar 2016).

Also concerning is that people with chronic conditions that are seemingly unrelated to memory have much higher rates of cognitive limitations. This suggests that either the impact of these conditions over time may extend beyond the typical physical symptoms or that these people have co-occurring conditions that affect cognition. The fact that people with chronic conditions are more likely to have social and cognitive limitations suggests that these conditions can lead to social isolation, which may worsen the impact of the conditions on other areas of functioning.

Trends in these limitations could be related to trends in applications to the Social Security Administration's disability programs, besides the impacts of an aging population or condition prevalence. A better understanding of these trends could help practitioners and policymakers improve outcomes for beneficiaries of disability programs. Our results suggest a need for initiatives to improve physical and social functioning among people with chronic conditions, particularly if, as the literature suggests, increased social capital is tied to better health and employment outcomes (Brucker 2015, Nakhaie and Kazemipur, 2013).

## Data and methodology

We used data from the NHIS from 1997 through 2017, extracted from the IPUMS Health Surveys website (Blewett et al. 2018), to produce nationally representative estimates. Our study controlled for the age, gender, and racial make-up of the population when estimating trends. The sample contained 509,937 adults (ages 18 to 64)—about 25,000 adults per survey year.

We identified 11 conditions that are common or growing among adult beneficiaries in the Social Security Disability Insurance and Supplemental Security Income programs. We then mapped those conditions to the conditions recorded in the NHIS to generate population-level estimates of condition prevalence. The 11 conditions were (1) musculoskeletal system and connective tissue disorders, (2) mood disorders, (3) nervous system and sense organ disorders, (4) circulatory system disorders, (5) neoplasms (cancer), (6) endocrine, nutritional, or metabolic diseases, (7) respiratory system disorders, (8) genitourinary system disorders, (9) digestive system disorders, (10) infectious and parasitic diseases, and (11) obesity. We grouped the dozens of NHIS questions on functioning into five composite measures of functioning on cognition, mobility, emotions, sensory functions, and work.

In an accompanying [report](#) (Hill and Sevak 2019), we provide additional findings on trends from 1997 through 2017 in the prevalence of the 11 conditions and the rates of limitations in the five measures of functioning, both among non-elderly adults in the U.S., children, and among subgroups of people with the conditions.

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