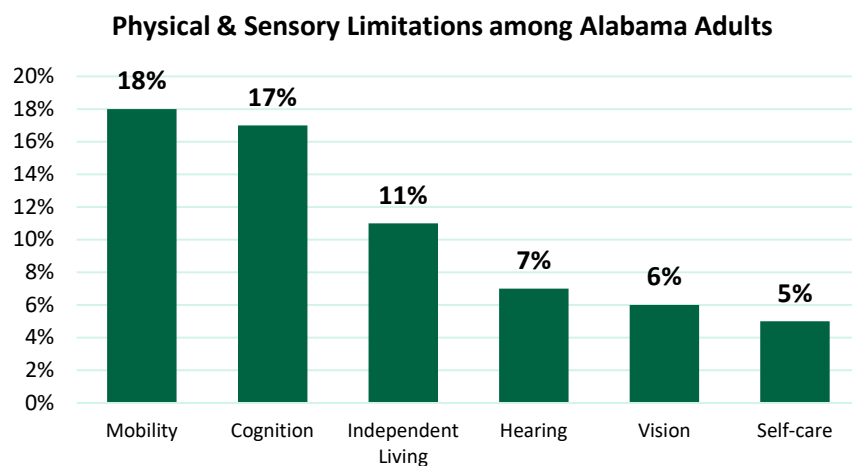
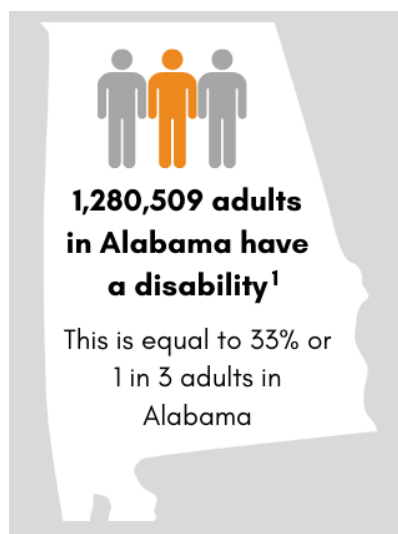


David F. Warner, PhD

As a population scientist with extensive training in sociology, demography, and gerontology, I **study the development and consequences of ill-health and disability among midlife and older adults**, with particular attention to disparities by race/ethnicity and marital status. One in 5 Americans will be over the age of 65 by 2040. Last year, the U.S. net spending on Medicare was nearly \$700 billion. The prevalence of poor health in midlife is increasing and thus understanding how ill-health and disability develop among future Medicare beneficiaries, across the life course, is a pre-requisite for prevention efforts that will reduce healthcare use and costs. Studying the development of midlife ill-health and disability is especially important for Alabama, where 1 in 3 adults have a physical or sensory impairment—a rate that is nearly 3 in 5 among those over the age of 75.



Source: Behavioral Risk Factor Surveillance System Data – BRFSS, 2019

My research on midlife health and disability has been directly supported by the Agency for Healthcare Research and Quality (AHRQ), the Centers for Disease Control and Prevention (CDC), the National Cancer Institute (NCI), and the National Science Foundation (NSF). My projects draw heavily on the federally-funded longitudinal data from the U.S. Health and Retirement Study (HRS) and the National Social Life, Health, and Aging Project (NSHAP).

The **Health and Retirement Study (HRS)**, funded by the National Institute on Aging (NIA) and the Social Security Administration, has been a key public resource for data on U.S. aging since 1992. The HRS captures important information about the challenges and opportunities of aging, such as physical and cognitive health change, health insurance use, and receipt of care from adult children.

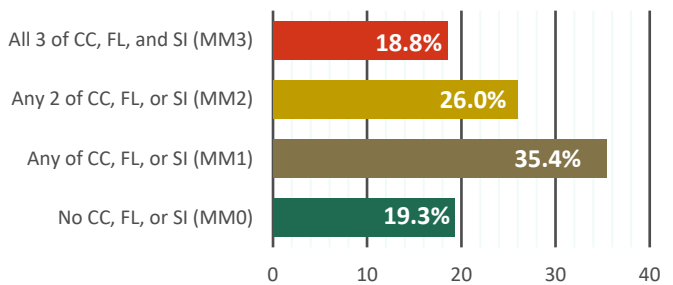
The **National Social Life, Health, and Aging Project (NSHAP)**, funded by the National Institute on Aging (NIA), is focused on examining the interactions among physical health and illness, emotional health, sensory function, and social connectedness.

Findings from ongoing and recent projects supported by federal grants include:

The Health of Midlife Adults is Increasingly Complex

- **Data:** U.S. Health and Retirement Study (HRS), funded by NIA
- **Objectives:** Describe how midlife adults present with not just chronic conditions, but also functional limitations and social impairments (geriatric syndromes).
- **Key findings:**
 - Just 1 in 5 midlife adults have no chronic conditions, functional limitations, or social impairments. About 1 in 5 have all three, signifying *complex multimorbidity*.
 - Complex multimorbidity leads to declines in self-rated health, receipt of fewer preventive services, increased health care costs, and increased mortality.
 - Complex multimorbidity is more prevalent among Black and Hispanic Americans at each age.

Proportion of Midlife Adults with Complex Multimorbidity

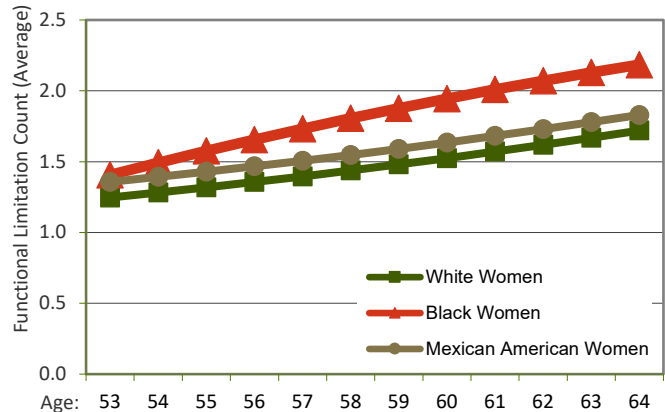


CC: Chronic Conditions ; FL: Functional Limitations; SI: Social Impairments

Black Women Accumulate Physical Disabilities Faster in Midlife

- **Data:** U.S. Health and Retirement Study (HRS), funded by NIA
- **Objectives:** Explore change in count of functional limitations with age by race/ethnicity and gender.
- **Key findings:**
 - Accounting for differences in education and marital status, there are few differences in the average number of functional limitations by race/ethnicity in the early 50s.
 - By age 65, Black women have gained limitations at nearly 2x the rate of others.
 - Functional limitations predict greater health care use and costs.

Growth in Functional Limitations with Age



Bad Marriages Exacerbate the Psychological Consequences of Disability

- **Data:** National Social Life, Health, and Aging Project (NSHAP), funded by NIA
- **Objectives:** Examine how marital and nonmarital relationships affect how older adults cope with functional limitations
- **Key findings:**
 - Being in a low-quality marriage leads to greater loneliness among midlife and older adults with functional limitations. Loneliness predicts poor physical health outcomes and mortality.
 - Men with non-supportive spouses are especially at risk of loneliness.
 - Access to family and friends does not offset the effects of a low-quality marriage.