



## Differences in Self-Reported Cognitive Limitations by Race and Ethnicity: National Health Interview Survey Analysis

Known differences exist in Alzheimer's disease and related dementias (ADRD) prevalence across racial and ethnic groups. Previous studies have found that these groups tend to experience delayed diagnosis of ADRD that can lead to adverse health outcomes. Among the most common data sources used to study ADRD are Medicare Claims that rely on clinical diagnosis to identify ADRD. While these data may reflect receiving a diagnosis, they include misdiagnosed cases and potentially miss cases that go undiagnosed.

### CAPRA DATA BRIEF

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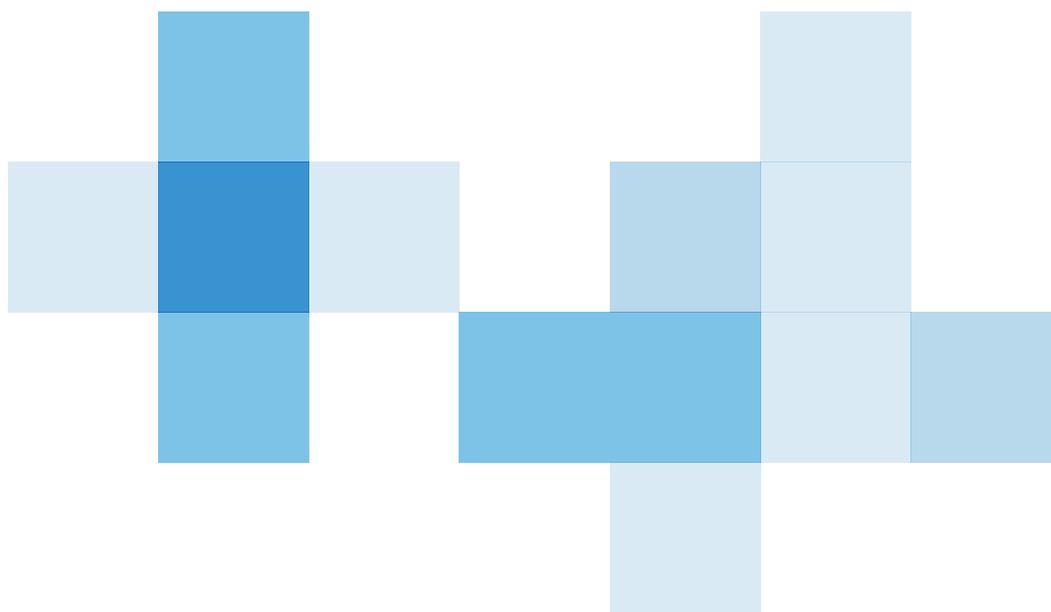
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Data sources such as the Health and Retirement Study and the National Health and Aging Trends Study utilize cognitive assessments that have the advantage of more objectively identifying ADRD. However, cognitive assessment used to determine the presence of dementia can have biases that influence prevalence estimates across race/ethnicities.

The National Health Interview Survey (NHIS) is a nationally-representative, publicly available data source that assesses self-reported cognitive limitations on an annual basis among a large sample of Americans. While self-reported cognitive limitations are inherently subjective and are not a measure of dementia, they do provide researchers with the ability to make national estimates of reported memory issues in populations across important demographic groups. Further, the NHIS specifically over-samples less represented groups to ensure adequate sample size to make stable estimates. Here we demonstrate use of NHIS to examine trends in self-reported cognitive limitations among older U.S. adults by race and ethnicity.

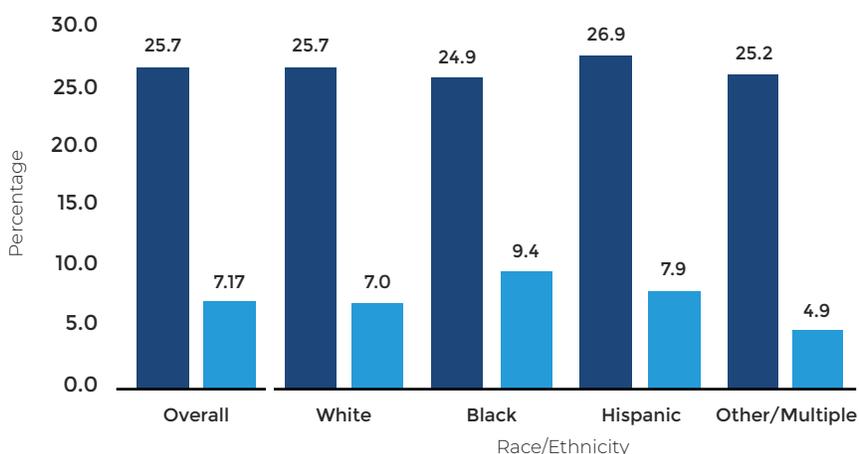


## What we did.

We used data from the 2011 to 2018 NHIS Sample Adults Files and the Adult Functioning and Disability (AFD) supplement to estimate the prevalence of self-reported cognitive limitations. All analyses were restricted to adults participants in the AFD supplement who were 65 years or older at the time of the survey. Race and ethnicity was categorized as Non-Hispanic White, Non-Hispanic Black, Hispanic, and other/multiple. Estimates were extrapolated to represent the U.S. older adult population and annual estimates were aggregated to two-year increments to increase reliability of estimates. To assess potential differences in self-report versus diagnosis, we compared self-reported cognitive limitations to ADRD diagnosis obtained from estimates using Medicare claims.

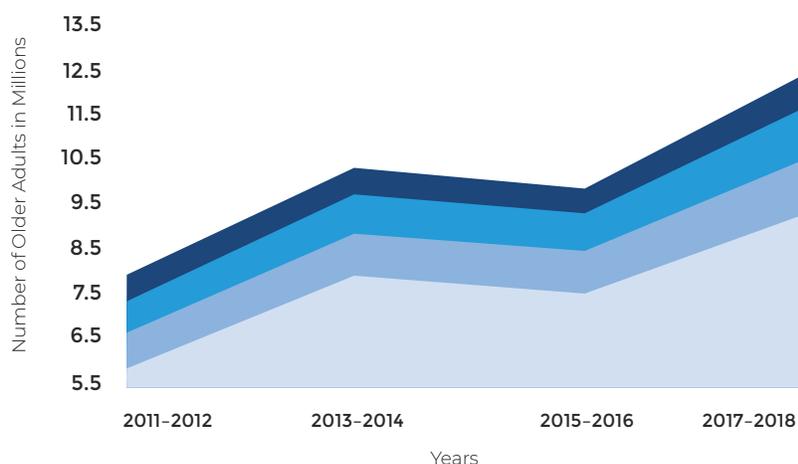
**Figure 1.** Prevalence of Older Adults Self-Reporting Difficulty Remembering or Concentrating vs. Prevalence of Diagnosed ADRD in Medicare FFS

- 2017–2018 Proportion of Older Adults Self-Reporting Difficulty Remembering or Concentrating
- 2018 Medicare FFS ADRD Prevalence



**Figure 2.** Estimated Number of Older Adults Self-Reporting Difficulty Remembering or Concentrating

- White
- Black
- Hispanic
- Other/Multiple



## What we found.

- Among older Americans in 2017-18, despite only 7.1% having an ADRD diagnosis in Medicare claims, 25.7% report a cognitive limitation.
- By race/ethnicity, the prevalence of self-reported cognitive limitations varied little (ranged from 24.9% to 26.9%) despite larger variability in diagnosis.
- The estimated number of older Americans reporting cognitive limitations has grown from 8 million in 2011-12 to 12 million in 2017-18—a 50% increase.
  - The increased number of cases of reported cognitive limitations is related to the population of older adults getting larger in the United States.

## What does this mean for ADRD research?

This report demonstrates the use of a national health survey to assess self-reported cognitive limitations by race/ethnicity. A distinct advantage is the ability to generate national estimates and the consistent NHIS assessment of limitations across time. While self-reported limitations are not as objective as direct cognitive assessments, there may be advantages for populations known to less likely to be diagnosed and in tracking general population trends.

In the U.S. the number of older adults with self-reported cognitive limitations is increasing significantly

- These analyses align with other estimates that show a growing number of Americans with ADRD due to aging of the population and underscores the importance of planning future resources.

Approximately 25% of older adults report a cognitive limitation

- Experiencing a limitation is not the same thing as a diagnosed dementia. However, the overall high prevalence of a self-reported cognitive issues has important ramifications for population health.
  - This may underscore the importance of ongoing cognitive assessment in clinical practice to help ensure timely diagnosis of ADRD.

The data used to create this brief report are available and can be found at the [capra data resources page](#).