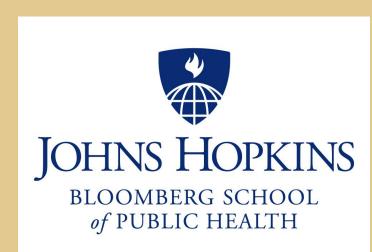
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Association of Cognitive Impairment with Benzodiazepines Use in The U.S.:

An Analysis of Medical Expenditure Panel Survey



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BACKGROUND



- The American Geriatrics Society's Beers Criteria recommend avoiding benzodiazepines in older adults due to statistically and clinically significant risks of falls, fracture and death.
- Individuals with established cognitive impairment or dementia are at increased risk.

OBJECTIVE

- 1. To describe the time trends in benzodiazepine utilization among older adults in the U.S.
- 2. To determine association of cognitive impairment with benzodiazepine use among older adults in the U.S.

METHODS



- <u>Data Source:</u> Medical Expenditure Panel Survey (MEPS), 2016 2022
- <u>Design</u>: Retrospective cross-sectional study
- <u>Cohort</u>: Community-dwelling adults aged 65 years or older (n=379,947,499)
- Outcome: Benzodiazepine use Yes vs. No
- Cognitive Impairment: Dementia ICD-10-CM codes (G30 and F03) or family reported cognitive limitations



- <u>Covariates:</u> Age (continuous), sex, race/ethnicity, education, income, marital status, region, and year (categorical)
- <u>Descriptive Statistics</u>: To describe cohort characteristics
- Weighted Linear Regression Model: To assess time trends in Benzodiazepine use
- Logistic Regression Model: To determine the association between patient demographics and Benzodiazepine use

CONCLUSION

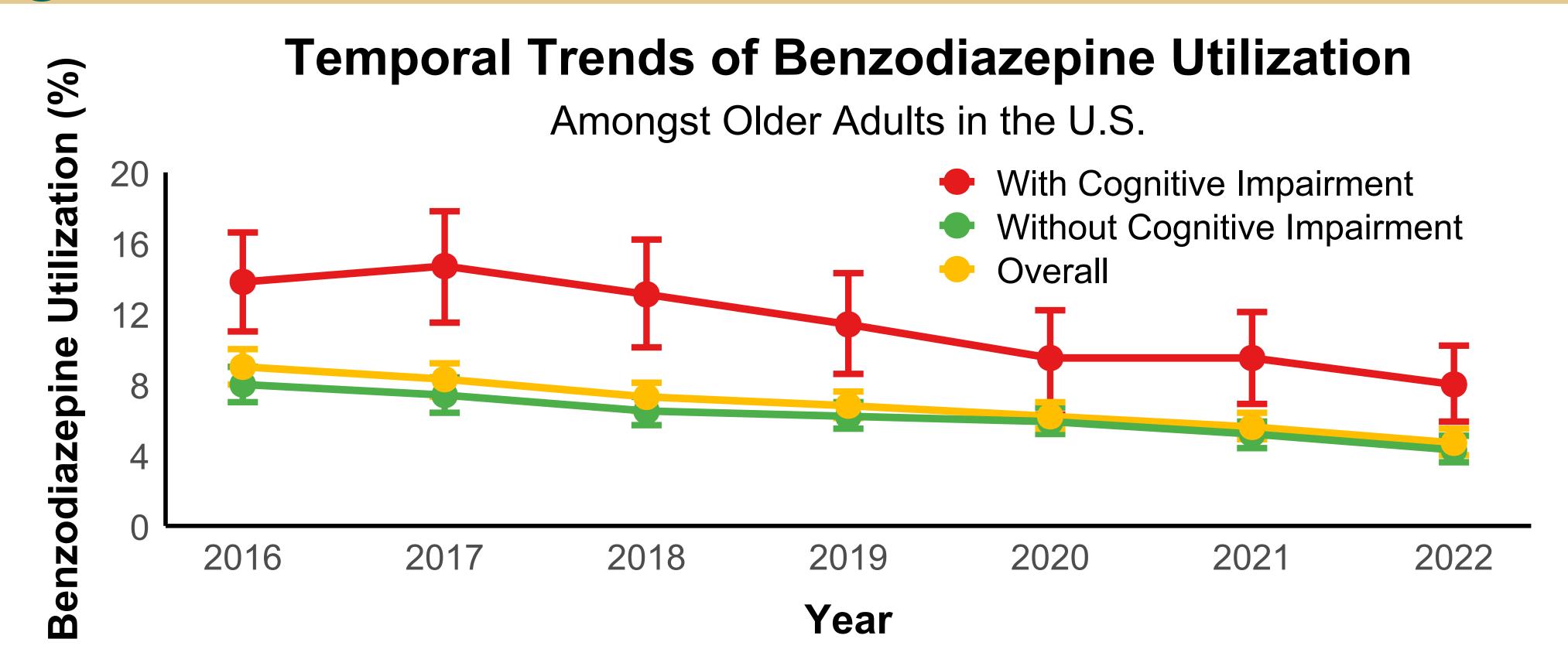
Although the overall prevalence of benzodiazepine utilization amongst older adults in the U.S. declined over time, individuals with cognitive impairment exhibited an increased likelihood of being prescribed potentially inappropriate benzodiazepines.



RESULTS

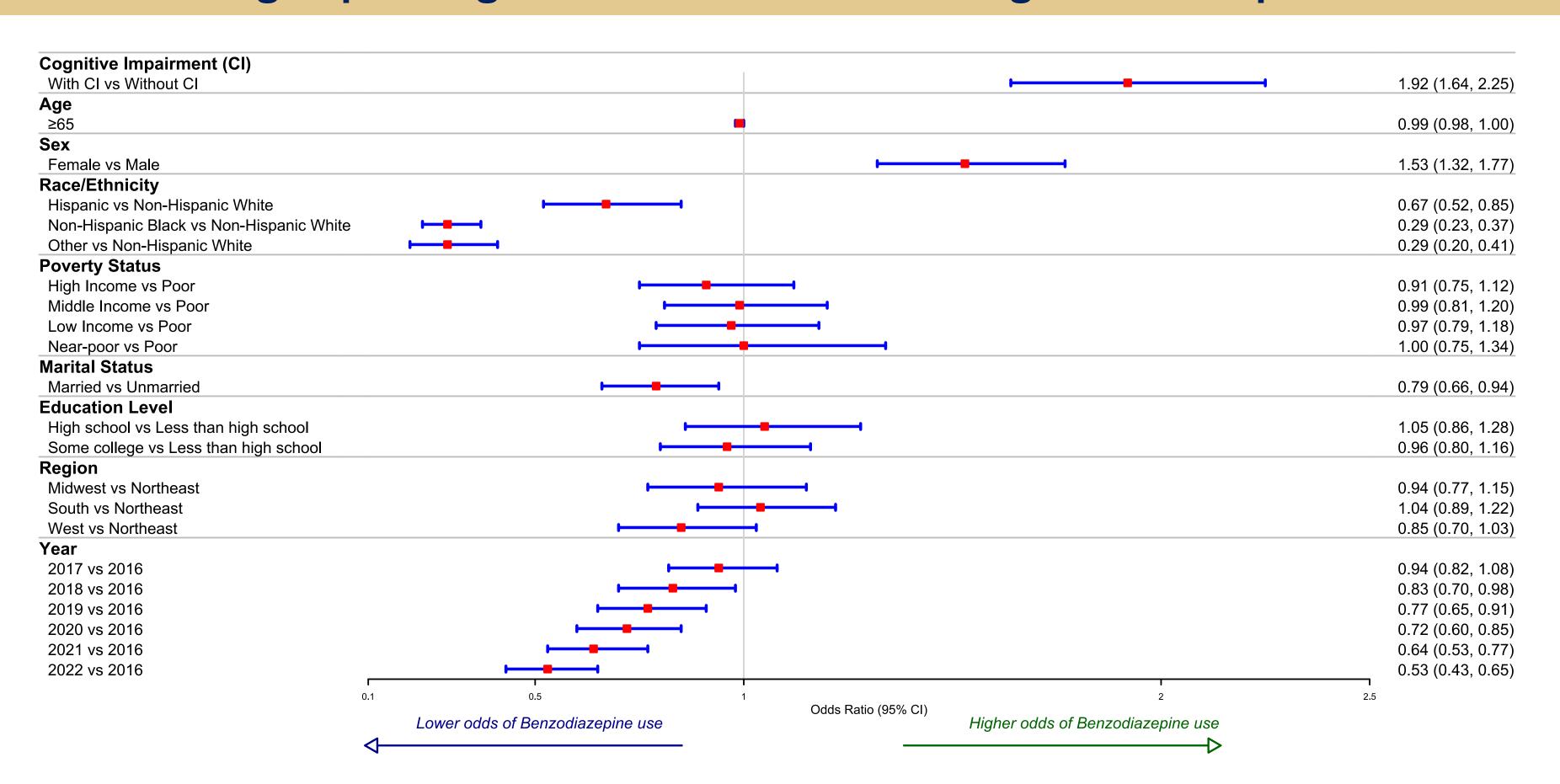
Did benzodiazepine use decline over time? - Yes.





- Benzodiazepine use among older adults declined from 9.0% (95% CI, 8.0-10.0) in 2016 to 4.7% (95% CI, 4.0-5.5) in 2022 (p<0.0001), and declined among individuals with and without cognitive impairment.
- Overall, the use of benzodiazepine was greater among people with cognitive impairment than without (11.6% vs. 6.1%).

Are some groups at higher or lower risk of receiving benzodiazepines? – Yes.



- After controlling for patient characteristics, cognitive impairment was significantly associated with an increased use of benzodiazepines (*OR*, 1.92, 95% *CI*, 1.64-2.25).
- Females were more likely to receive benzodiazepines, while racial/ethnic minorities and married individuals were less likely to use them.

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