

Costs of Alzheimer's disease and related dementia among Medicare beneficiaries in the United States



Chien-Yu Tseng^{a,b}, Chanakan Jenjai^{a,b}, Christopher N. Kaufmann^{b,c}, Mikael Svensson^d, Earl J. Morris^{a,b}

^aDepartment of Pharmaceutical Outcomes and Policy, College of Pharmacy, University of Florida, Gainesville, FL, USA; ^bCenter for Drug Evaluation and Safety, University of Florida, Gainesville, FL, USA; ^cDepartment of Health Outcomes and Biomedical Informatics, College of Medicine, University of Florida, Gainesville, FL; ^dUniversity of Gothenburg, Gothenburg, Sweden

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BACKGROUND

- Alzheimer's Disease and Related Dementias (ADRD) pose a substantial public health challenge in the United States, particularly as the population ages.¹
- Despite the growing burden of ADRD, limited comprehensive reviews exist that synthesize the direct and indirect cost estimates specifically within the Medicare population in the United States.

OBJECTIVE

• This review aims to analyze the costs associated with ADRD among Medicare beneficiaries in the United States.

METHODS

- A literature search was conducted in PubMed, Embase, and Web of Science, using search terms related to ADRD and healthcare costs.
- Articles were required to be written in the English language and published from 2015 to 2024.
- Existing review articles, meta-analyses, opinions, commissioned papers, letters, and abstracts were excluded from our study.
- After removing duplicates, titles and abstracts were screened, followed by a full-text assessment.
- Costs were adjusted to 2025 USD using the consumer price index of the U.S. Bureau of Labor Statistics
- Study population:
- Aged 65+ years old
- Study population included Medicare beneficiaries
- Diagnosed with ADRD but not limited to any race, gender or region in the United States

Figure 1. Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) Flow Diagram



RESULTS

- Of the 373 articles identified, 42 met the inclusion criteria and were included in this scoping review. 41 articles (98%) evaluated total direct medical costs, and 25 articles (52%) specified the categories of direct medical costs included.
- Mean total direct medical costs ranged from \$10,097 to \$142,192 per patient per year (PPPY).
- Inpatient costs often constituted the highest proportion of direct medical costs, with estimates up to \$59,900 PPPY.
- Carrier and outpatient visit costs were also commonly included, reaching up to \$9,032 and \$27,091 PPPY, respectively.
- One article estimated mean total end-of-life care costs for ADRD at \$87,023 PPPY.
- Mean total out-of-pocket costs for ADRD patients ranged from \$4,604 to \$9,781 PPPY.
- Amongst studies evaluating indirect costs, costs of informal care valued in terms of replacement costs and forgone wages were \$45,153 and \$19,447 PPPY, respectively.
- One article also found that spouses of patients with ADRD may incur up to \$1,200 more in mean PPPY costs compared to spouses of patients without ADRD.

CONCLUSION

- This review showed the burden of ADRD is substantial, and significant heterogeneity exists within current literature.
- More research is needed on indirect costs such as productivity loss and quality of life, considering future policy changes to ease the disease burden of ADRD.