

More than Cognitive Care: AD therapies as catalysts for better overall chronic disease management

INTRODUCTION

- Alzheimer’s Disease (AD) places a severe financial burden on the Medicare system, a strain largely exacerbated by the high rates of concurrent medical conditions in the aging population.
- Standard AD clinical trials rigorously patients with complex, life-limiting comorbidities. These trial cohorts fail to represent the reality of the average Medicare beneficiary.
- This exclusion a “real-world evidence gap”, obscuring both the true clinical profile of the real-world AD patient and the full economic value of disease-modifying therapies.
- This analysis looks to quantify the prevalence of trial-excluded comorbidities in the real-world AD population and estimate the synergistic Medicare cost savings achieved by slowing cognitive decline.

METHODS

- Use Medicare data reported by the Alzheimer’s Association in 2026 to evaluate the synergistic effect between comorbidities and Alzheimer’s Disease.
- Estimate real-world benefit from lecanemab and donanemab in a comorbid population.
- Management Deficit model:

$$E = A(1 + MS)$$
- $E$ : Total treatment efficacy.
- $A$ : Direct clinical benefit from treatment using pooled percent slowing from Clarity AD and TRAILBLAZER-ALZ 2.
- $M$ : Interactive synergy effect between AD treatment and comorbidities.
- $S$ : Synergy coefficient, or the degree to which a patient’s systemic health depends on cognitive stability.
- Confidence intervals for  $E$  and sampling variance for  $A$  were generated via 10,000 bootstrap samples of primary MMRM results.
- Patient counts were estimated by combining Medicare AD prevalence, comorbidity rates, and anti-amyloid eligibility rates (assuming these comorbidities do not trigger trial exclusion).

DISCUSSION

Current clinical trial frameworks fail to capture the multi-morbid reality of the Medicare population. Where comorbidities are common in AD populations, treating AD in comorbid populations may act as a “Disease Management Enabler”, potentially leading to real-world treatment effects and cost savings that are significantly higher than those observed in controlled clinical trials.

RESULTS

- The presence of Alzheimer’s Disease drastically inflates the baseline cost of managing concurrent medical conditions.
- Comorbidities commonly excluded from clinical trials are highly prevalent in the real-world Medicare population. Coronary Artery Disease (CAD) and Chronic Kidney Disease (CKD) each affect approximately 46% of AD patients.
- Estimated savings are robust across all major comorbidities. Overall savings are predicted to range from nearly \$7,700 to \$15,700
- Estimated savings across the entire Medicare AD population is \$1.1 billion to \$8.5 billion.**

Figure 1. Average annual Medicare payments with and without AD is present alongside common comorbidities.

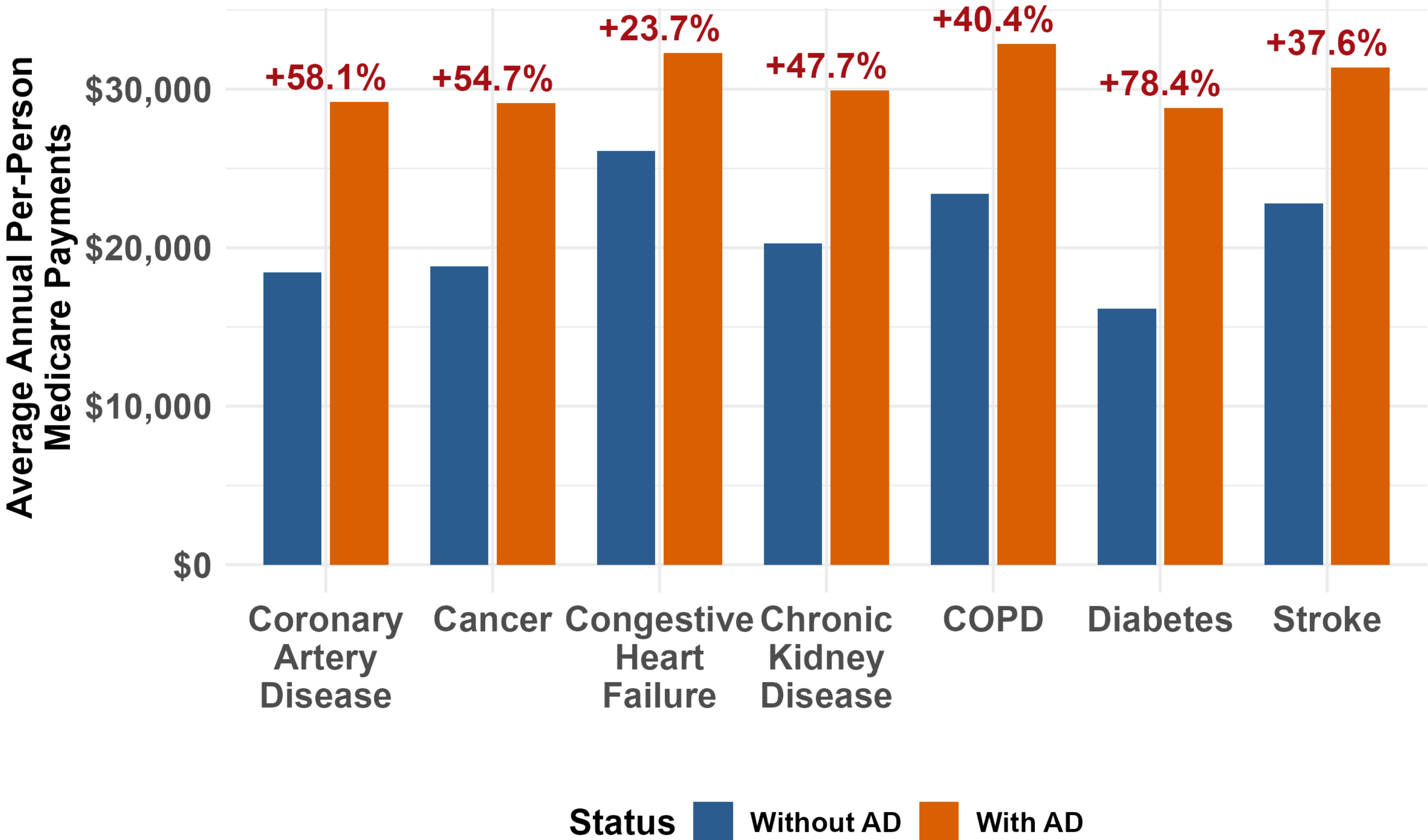
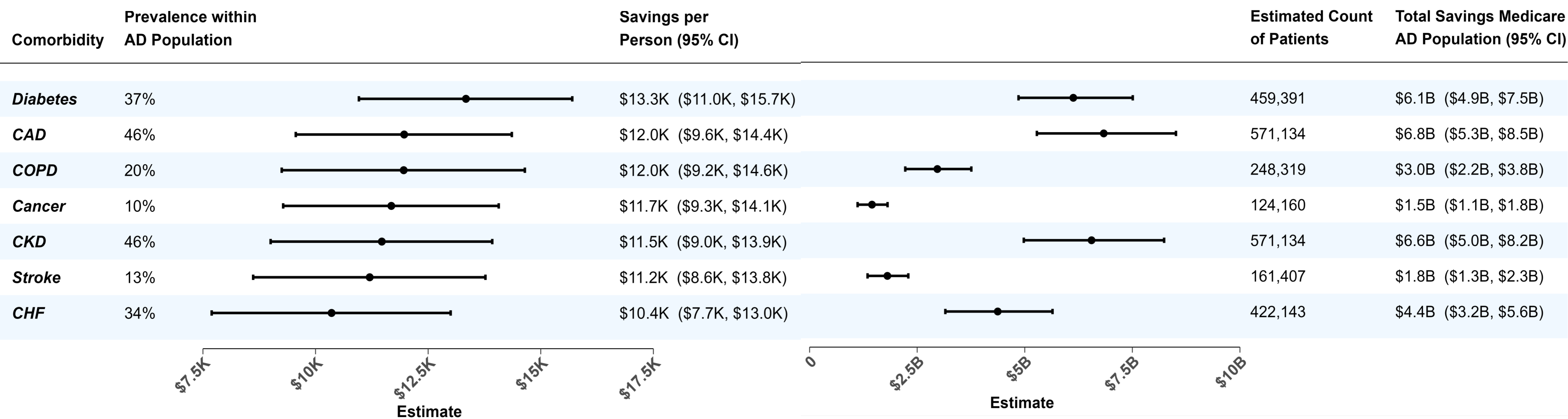


Figure 4. Estimated per-patient Medicare savings by comorbidity with 95% confidence intervals (CAD = Coronary Artery Disease, COPD = Chronic Obstructive Pulmonary Disease, CKD = Chronic Kidney Disease, CHF = Congestive Heart Failure)



REFERENCES

- 2026 Alzheimer’s disease facts and figures. *Alzheimer’s Dement.* 2026;22:e71345. Published 2026 Apr 21. doi:10.1002/alz.71345
- Sims JR, Zimmer JA, Evans CD, et al. Donanemab in Early Symptomatic Alzheimer Disease: The TRAILBLAZER-ALZ 2 Randomized Clinical Trial. *JAMA.* 2023;330(6):512-527. doi:10.1001/jama.202313239
- Dyck CH van, Swanson CJ, Aisen P, et al. Lecanemab in Early Alzheimer’s Disease. *N Engl J Med.* 2023;388(1):9-21. doi:10.1056/NEJMoa2212948
- Claus JJ, vom Hofe I, van IJlzinga Veenstra A, et al. Generalizability of trial criteria on amyloid-lowering therapy against Alzheimer’s disease to individuals with mild cognitive impairment or early Alzheimer’s disease in the general population. *Eur J Epidemiol.* 2025;40:327-337. doi:10.1007/s10654-025-01220-1

CONTACT

Garrett Duncan, M.Sc.  
Manager of Statistics  
Pentara Corporation  
gduncan@pentara.com

