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# Five-Year Cost of Dementia: Medicare

#### Abstract

About 5.5 million older adults are living with dementia, a chronic, progressive disease characterized by severe cognitive decline. This number will likely grow significantly as the U.S. population ages, which has cost implications for the Medicare program. A full accounting of these additional expenses will help policymakers plan for them in their Medicare budgets. In this study, Norma Coe and colleagues examined survival and Medicare expenditures in older adults with and without dementia to estimate dementia's incremental costs to Medicare in the five years after diagnosis.

**Keywords** dementia, Medicare

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# FIVE-YEAR COST OF DEMENTIA TO MEDICARE

Lindsay White, Paul Fishman, Anirban Basu, Paul K. Crane, Eric B. Larson, Norma B. Coe *Health Services Research* - published online March 13, 2019

About 5.5 million older adults are living with dementia, a chronic, progressive disease characterized by severe cognitive decline. This number will likely grow significantly as the U.S. population ages, which has cost implications for the Medicare program. A full accounting of these additional expenses will help policymakers plan for them in their Medicare budgets.

This study examined survival and Medicare expenditures in older adults with and without dementia to estimate dementia's incremental costs to Medicare in the five years after diagnosis. Patients with dementia had significantly higher expenditures in the 12 months prior to diagnosis than patients without dementia (\$17,116 vs. \$10,085).

# Study:

- Sample of 4,010 older adults with dementia from longitudinal Health & Retirement Survey
- Looked at Medicare part A and B expenditures from 1991-2012, 12 months before and up to 60 months after diagnosis
- Estimated 5-year costs for those with a dementia diagnosis and for the same participants in the absence of dementia
- Accounted for changes in survival and service use attributable to dementia

## ESTIMATED 5-YEAR MEDICARE EXPENDITURES (Parts A and B)



INCREMENTAL COST PER PATIENT \$15,704

# IN THE FIVE YEARS AFTER DIAGNOSIS, INCREMENTAL COSTS FOR PATIENTS WITH DEMENTIA WERE...

### CONCENTRATED IN YEAR 1 AFTER DIAGNOSIS

- Half of costs occurred in year 1 and decreased each year until the difference in the presence and absence of a dementia diagnosis was nearly zero by year 5.
- Average costs were lower in the last month of life for dementia patients, due to low service use.

#### DRIVEN PRIMARILY BY GREATER INTENSITY OF SERVICE USE

- Greater use of Part A services (including inpatient, skilled nursing, and hospice care) accounted for most of the cost.
- Use of Part B services (outpatient care) was higher for dementia patients in year 1, but did not differ significantly over five years.

#### AFFECTED BY DIFFERENCES IN SEX-SPECIFIC SURVIVAL

- For women, survival time was unchanged by a dementia diagnosis. Costs were higher because of increased use of services.
- For men, a dementia diagnosis reduced survival. Greater use of services was offset substantially by decreased survival time.

## **IMPLICATIONS**

- Dementia's incremental costs to Medicare are significant: the 480,000 patients newly diagnosed with Alzheimer's in 2017 will add \$3.2 billion to Medicare spending in the next five years.
- Given lower costs in the last month of life, policies to reduce end-of-life costs for dementia patients may not be effective in reducing overall Medicare expenditures.
- Forty percent of the sample was diagnosed in an inpatient setting, leading to high costs around the time of diagnosis. Future work should examine what role early detection could play in reducing these costs.
- Subsequent research should explore sociodemographic differences in dementia costs and how to reduce preventable Part A service use.