

Alzheimer's Disease in MCOs: Utilization and Costs

Gutterman EM, Markowitz JS, Lewis B, Fillit H. Cost of Alzheimer's disease and related dementia in managed Medicare. *J Am Geriatr Soc* 1999;47:1065-71.

Study Overview

Objective. To examine whether persons diagnosed with dementia in a large managed care organization (MCO) have higher health care utilization and costs than enrollees without dementia, and to assess the key drivers of any identified differences in utilization and costs.

Design. Retrospective case-control study using a database comprised of linked medical and prescription claims data.

Setting and participants. An MCO covering 81,586 Medicare enrollees in 4 geographic regions (Northeast, Southwest, Mid-Atlantic, and Midwest) between January 1996 and March 1998. 677 dementia cases were identified using ICD-9 codes related to dementia, including senile-dementia, senility, Alzheimer's disease, and senile degeneration. 677 controls were selected randomly and matched to cases by age, gender, and geographic region.

Main outcome measures. Total costs and number of claims (overall and by health care setting: inpatient, outpatient clinic, office, emergency department, and skilled nursing facility), annualized and adjusted for age, gender, and comorbidity.

Main results. The prevalence of dementia in this managed care population was 0.83%. Prevalence rates increased significantly with age, with rates of 0.26%, 0.87%, 2.33%, and 4.39% in the age groups 60 to 69 years, 70 to 79 years, 80 to 89 years, and 90-plus years, respectively ($P < 0.001$). Prevalence of dementia varied little by gender.

When annualized and adjusted for level of comorbidity, mean total costs were 1.5 times higher for patients with dementia compared with controls (\$13,487 versus \$9276; $P < 0.001$). Nearly 75% of the higher total costs among dementia patients were linked to higher inpatient expenses, which were 1.5 times higher in dementia patients. Emergency care costs were 2.5 times higher among dementia patients but comprised only 8% of the difference in total costs. Annualized medical claim costs (excluding prescription

costs) differed significantly at \$12,824 for dementia patients and \$8591 for controls ($P < 0.001$), but there was no significant difference in annualized prescription costs (\$663 for dementia patients and \$685 for controls).

Conclusion

The costs of care for patients with dementia were significantly higher than for matched controls after adjustment for age, gender, and comorbidity; the higher total costs were driven by higher inpatient costs.

Commentary

In 1996 and 1997, prescription drug costs comprised only about 5% of the total cost of care for dementia patients. However, as new-generation drugs for dementia are approved, we can expect expenditures on prescription drugs to increase. It will be interesting to see what impact this will have on the overall costs of care for dementia patients. Nonetheless, Gutterman and colleagues show that there is substantial opportunity to reduce inpatient utilization and costs through better management of care. Such reductions could more than offset additional costs from increased drug expenditures.

Applications for Clinical Practice

Despite the high-profile retrenchment by some MCOs in certain geographic areas, the proportion of Medicare beneficiaries enrolled in MCOs continues to grow and is expected to double from 10% in 1996 to 20% by 2001 [1]. As new medications for dementia are developed and approved, studies will be needed to evaluate what role the medications will play in the process of care of these patients.

References

1. Growth in Medicare managed care enrollment: CYs 1985-96. In: Medicare and Medicaid statistical supplement, 1996. U.S. Department of Health and Human Services, Health Care Financing Administration. Health Care Financ Rev Stat Suppl 1996:126-7.

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