

Alzheimer's Disease: The Impact of Multiple Chronic Conditions

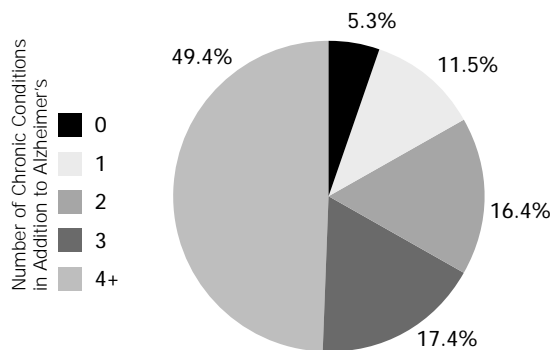
Alzheimer's disease is a chronic condition affecting four million Americans.¹³ Most people with Alzheimer's disease also have other serious health conditions, or co-morbidities, that complicate their care, treatment, and outcomes, as illustrated by the data below.

Most People with Alzheimer's Disease Have Multiple Chronic Conditions

Almost half of the people with Alzheimer's disease have four or more additional chronic conditions.

Figure 1

Percent of People with Alzheimer's Disease and Other Chronic Conditions



Source: Medicare Standard Analytic File, 1999

The most common chronic health conditions that afflict people with Alzheimer's disease are:

Conditions	Percent of Alzheimer's Patients Affected
Cardiovascular Disease	73.9%
Arthritis	30.7%
Eye Disorders (Including Glaucoma)	21.2%

Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, 1996.

Hospital Use Increases With More Chronic Conditions

Many people with Alzheimer's disease have ambulatory care sensitive conditions (ACSCs).

ACSCs are conditions in which the risk of hospitalization can be reduced with adequate primary care that can either prevent the onset of the condition or effectively manage a chronic condition.

Patients with ACSCs who receive adequate, coordinated primary care experience fewer health problems and are hospitalized less often.

Admission to the hospital for treatment of an ACSC indicates poor access to appropriate quality care. Co-morbidities increase the complexities of patient care, thus increasing the occurrence of ACSCs and complications. As the data below show, having multiple chronic conditions significantly increases the risk of hospitalization to treat an ACSC.

Number of Chronic Conditions in Addition to Alzheimer's	Hospitalizations for ACSC Admissions per 1,000 Patients Over Age 65
0	18.1
1	42.5
2	79.1
3	105.8
4	149.6
5+	265.7

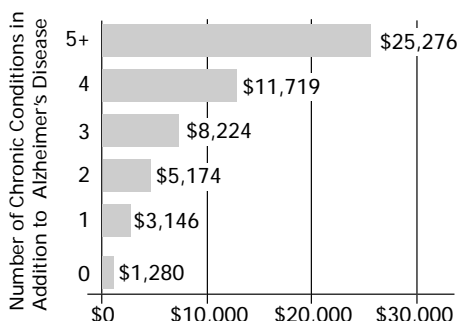
Source: Medicare Standard Analytic File, 1999.

Health Care Spending Increases With More Chronic Conditions

Co-morbidities in people with Alzheimer's disease greatly increase health care expenses, which in Figure 2 include all Medicare spending for inpatient and outpatient care. As Figure 2 shows, having just one additional chronic condition more than doubles Medicare's annual per capita expenditures.

Figure 2

Average Annual Per Capita Medicare Expenses



Source: Medicare Standard Analytic File, 1999.

Certain chronic conditions are more common than others among people with Alzheimer's disease. The combination of these conditions (and sometimes additional health concerns) can greatly increase treatment costs, as shown below.

Conditions	Annual Per Capita Medicare Expenses
Alzheimer's Disease & Arthritis	\$5,940
Alzheimer's Disease, Arthritis & Cardiovascular Disease	\$16,298

Source: Medicare Standard Analytic File, 1999.

Utilization Increases With More Chronic Conditions

People with Alzheimer's disease and other chronic conditions use more health care services. For example, people with Alzheimer's who have other chronic conditions tend to visit physicians more often (see Figure 3).

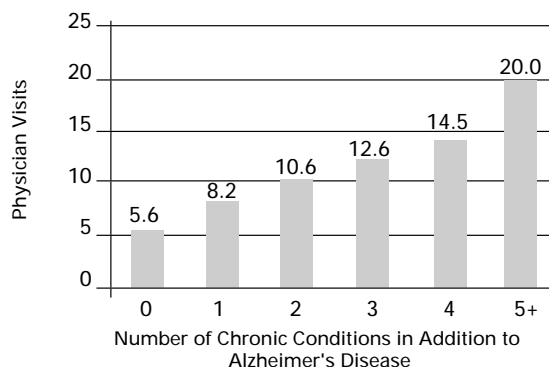
Increased use of health care services and medications has substantial implications for coordination of care and patient outcomes. Different drugs and treatment regimens can result in harmful interactions if not well managed and coordinated.

Conclusion

As the population with Alzheimer's disease and other chronic conditions continues to grow, we need to recognize that co-morbidities create extra challenges for patients, their families, and their health care providers. To respond to these

Figure 3

Average Annual Number of Physician Visits



Source: Medicare Standard Analytic File, 1999.

challenges, those who are looking to improve the health care system may want to consider:

- Re-organizing delivery and financing systems,
- Improving access to high-quality, affordable health care services, and
- Enhancing care coordination among multiple formal and informal providers.

A growing body of research suggests that patients have better outcomes at lower cost when care is coordinated. While we are seeing the benefits of specific disease management efforts, it is important to look more broadly to modify systems of care and financing to address the needs of people with Alzheimer's disease who have multiple chronic conditions.

About Partnership for Solutions

Partnership for Solutions, led by Johns Hopkins University and The Robert Wood Johnson Foundation, is an initiative to improve the care and quality of life for the estimated 125 million Americans with chronic health conditions. The Partnership is engaged in three major activities: conducting original research and identifying existing research that clarifies the nature of the problem; communicating these research findings to policymakers, business leaders, health professionals, advocates, and others; and working with public and private programs to identify promising solutions to the problems faced by people with chronic conditions.

ⁱ The definition of Alzheimer's disease includes senile and presenile, organic psychotic conditions, dementia and other conditions, and other cerebral degeneration.

ⁱⁱ Prevalence data from the Alzheimer's Association, 2001.