

# Alzheimer's Disease and Chronic Health Conditions: The Real Challenge for 21st Century Medicare

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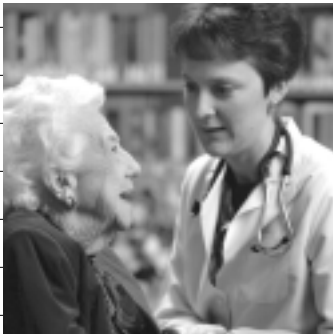
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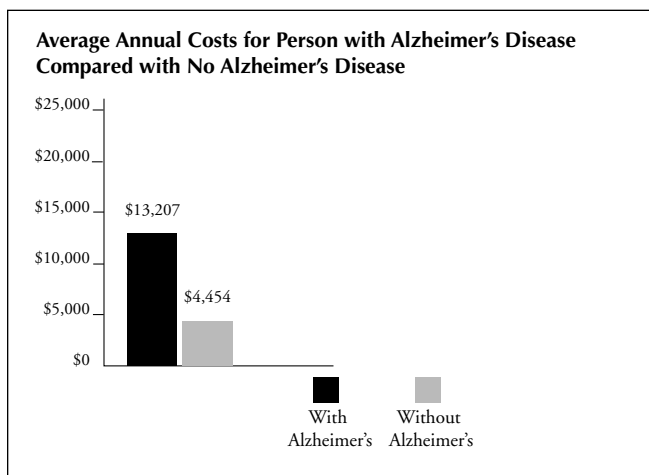
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Alzheimer's disease is driving up the high cost of Medicare because of Medicare's failure to address chronic health conditions. The current Medicare program, focused on treatment of acute episodes of illness and narrow concepts of prevention, is not working for beneficiaries with dementia. It needs to be fixed – to achieve better health outcomes for beneficiaries and to manage the high cost of chronic conditions.<sup>1</sup>

Alzheimer's disease is the proverbial elephant in Medicare's living room. It can no longer be ignored. That is the startling conclusion from the evidence presented in this report. This is the first analysis of Medicare fee-for-service claims data to draw the connection between Alzheimer's disease, chronic conditions, and Medicare costs. It shows that nearly 10% of elderly Medicare beneficiaries have dementia, and they are costing Medicare **three times** more than other beneficiaries. The already high cost of expensive chronic conditions like coronary heart disease, congestive heart failure, diabetes, or chronic obstructive pulmonary disease more than **double** when Alzheimer's disease is also present.

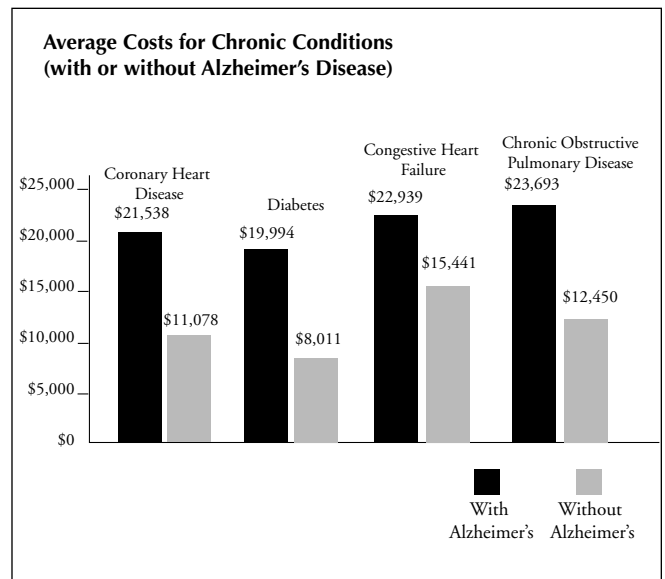


This evidence flies in the face of a widely held myth that people with Alzheimer's disease are not really Medicare's problem because what they really need is long term care and Medicare does not pay for that.

These data are a wake-up call to health care providers and policy makers. Medicare benefits must be restructured to manage the high cost of chronic conditions. But that will not happen through disease management approaches that focus narrowly on one specific disease or condition at a time. Indeed, the first target for a Medicare chronic care benefit should be beneficiaries with complex medical conditions who cannot manage those conditions because of their cognitive impairment. This is an issue that needs to be addressed now, while there is still time to fix the program and before the numbers of beneficiaries with dementia explode.

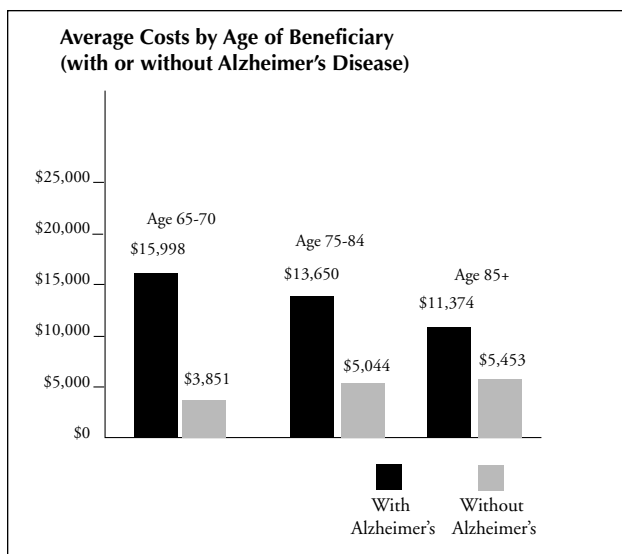
## Key Findings

1. Beneficiaries with dementia cost three times as much as other beneficiaries – \$13,207 vs. \$4,454.
2. Medicare spends more for beneficiaries with dementia in every age group, but the differences are most dramatic among younger beneficiaries. In the age group 65-74, average costs for beneficiaries with dementia are 4.2 times higher.



3. The largest part of increased Medicare costs is for hospital care. Beneficiaries with dementia are in the hospital 3.4 times more often than other elderly beneficiaries, at 3.2 times the cost to Medicare.

<sup>1</sup> A chronic condition is an illness or impairment that is expected to last a year or longer, limits what one can do, and/or may require ongoing medical care. Two-thirds of current Medicare expenditures are for beneficiaries with five or more chronic conditions.



4. When dementia exists in beneficiaries with other costly conditions – coronary heart disease, congestive heart failure, diabetes, or chronic obstructive pulmonary disease – Medicare costs are twice as high as for other beneficiaries with those conditions.

## Discussion

A closer look at the numbers suggests the reason why Alzheimer's disease is costing Medicare so much. Almost all beneficiaries with dementia (95%) have at least one other chronic health condition. But because of their impaired memory, judgment, and reasoning ability, beneficiaries with dementia cannot manage or direct their own care. They cannot follow the medication instructions or nutritional regimes their doctors give them. They cannot recognize symptoms that their condition may be getting out of control. Thus, self-management – a key concept of care for persons with chronic illness – cannot work for a person with dementia.

It is true that most beneficiaries with Alzheimer's live with a caregiver – usually a spouse or adult child. These caregivers are consumed with the emotional and physical challenges of 24-hour care and supervision. They receive little training, support, or assistance from the health care system

to monitor and manage their loved one's health condition or to prevent acute care crises. Caregivers should not be expected to take on the role of clinicians.

*The tragic and costly case of Ms. X, reported recently in the Journal of the American Medical Association, illustrates the devastating impact of dementia on health care outcomes and costs. Ms. X had probable Alzheimer's disease and osteoporosis. She was functioning well at home until a painful compression fracture in her spine sent her to the doctor. He prescribed alendronate, a drug shown to be effective in treating osteoporosis, but one that carried high risk of damaging the esophagus if not taken under carefully controlled conditions. Because of her dementia, Ms. X could not follow her doctor's orders. Four weeks after starting the drug, she was in the emergency room. Her esophagus had ruptured. The hospital responded with intense intervention, including surgery. But it was too late. Ms. X died when the ulcer caused by misuse of the drug eroded into a major blood vessel.<sup>2</sup>*

Hospital, home health, and skilled nursing facility costs are at least three times higher for beneficiaries with dementia, indicating that they have more acute health episodes than other beneficiaries. But they see their doctors at about the same rate as everyone else. This suggests that beneficiaries with Alzheimer's disease are not getting the ongoing care management they need.

This is because Medicare is an acute care program, structured to intervene when a crisis occurs. Benefits are organized around specific episodes of illness and narrow concepts of prevention. Primary care physicians are not paid for the added length of time of an office visit involving a patient with dementia or for ongoing consultation with family or community agencies that share responsibility for the care of that patient. Home health care as it is now structured is not ordinarily available to monitor a patient at risk in order to prevent the crisis that sends the patient to the hospital.

<sup>2</sup>Brauner, D. et al. Treating Nondementia Illnesses in Patients with Dementia. JAMA. 283:24:3230-3235 (2000)

There is a better way. The Alzheimer's Association is working with health care providers to demonstrate that even simple interventions – early identification of dementia, consultation among care providers, education and ongoing support for caregivers – can reduce hospitalization and delay nursing home placement, lowering overall costs with better health outcomes for the individual with the disease and their caregiver.<sup>3</sup>

*The outcome in the case of Ms. X could have been much different. Had there been a more careful assessment of her cognitive ability to handle the dangerous drug, her physician might have chosen an alternative treatment. Or, if the drug was prescribed, he could have made sure that a trained caregiver was available to see that Ms. X took the drug appropriately, and could have monitored her condition to make sure complications did not develop. Tragically, although Medicare was there to pay the high cost of the futile treatment in the hospital once the crisis occurred, it would not pay for the added time and attention from the physician that might have avoided it in the first place – an approach to care that would have been far less costly to Medicare and to Ms. X.*

Some would argue this kind of effective care management can only happen in capitated managed care plans. The Association believes that, with the appropriate alignment of financial incentives and clear accountability for health outcomes, integrated health systems and managed care plans can optimize care for beneficiaries with dementia. However, it would be a gross disservice to beneficiaries and to the Medicare program to assume that enrollment in a managed care plan is the only answer to the challenge of Alzheimer's disease and chronic illness. For the foreseeable future, the majority of beneficiaries – including beneficiaries with dementia – will remain in fee-for-service and that system must respond to their chronic health care needs.

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<sup>3</sup>Unpublished data from the Cleveland Alzheimer's Managed Care Demonstration

## Policy Recommendations

The Alzheimer's Association calls for the following changes in the Medicare program to improve health outcomes for beneficiaries with dementia and to control the high cost of their care:

- 1) **A targeted care coordination benefit** for beneficiaries with complex chronic conditions that put them at risk of poor health outcomes and high care costs, including specifically those who cannot manage their own care due to Alzheimer's disease or another dementia. The benefit would include two elements: a.) payment to the beneficiary's primary health care provider for an initial assessment and development of a coordinated care plan and b.) a monthly payment to the beneficiary's primary health care provider for core activities that include:
  - coordination of clinical care across health care providers,
  - multidisciplinary care conferences,
  - management of transitions of care across practice settings and between providers,
  - medication management, review, and oversight,
  - education, counseling and ongoing consultation with the patient and family,
  - referral to and coordination with community resources, and
  - information about and assistance with end-of-life decision-making, including hospice and palliative care.
- 2) **A limited home visit benefit** for beneficiaries eligible for care coordination who are at risk of acute care crises. This would allow for a limited number of visits by a nurse or other health care professional employed by the beneficiary's primary health care provider for the purpose of monitoring health status and managing a change in condition or treatment regimen, or during transitions in care settings.

- 3) **An affordable prescription drug benefit** combined with effective medication management to prevent over- or under-utilization of drugs and adverse drug interactions. Medication and the careful management of medication is an increasingly essential element in the treatment of persons with Alzheimer's disease and other chronic conditions.

Finally and for the long term, the future of Medicare depends on finding a way to prevent the projected explosion of Alzheimer's disease. If the course of Alzheimer's is not corrected, by the middle of the century the estimated number of beneficiaries with the disease will grow from 4 million today to as many as 14 million. That prognosis can be changed. Alzheimer scientists are pursuing aggressively a two-pronged strategy – to slow or prevent the onset of disease, and to reduce the devastating effects on those who get it. Those goals are within reach. If they can accomplish them by 2010, they could reduce the numbers with the disease by one-third. Among those who have the disease, those in the moderate to severe stages – those who cannot manage their own care – would be reduced by 60 percent. That is why the Alzheimer's Association is calling for a \$1 billion annual investment in Alzheimer research as a key part of a comprehensive strategy to save Medicare – and to save American families – from the ravages of Alzheimer's disease.

# Analysis of Medicare Fee-for-Service Claims Data for People with Alzheimer's Disease and Dementia — 2000

## High Average Use of Medicare Services and Medicare Costs

In 2000, 9% of all elderly people in fee-for-service Medicare had at least one Medicare claim that included an ICD-9 code diagnosis of Alzheimer's disease or dementia. As shown in the attached tables, these people had higher average Medicare costs, hospital stays, and physician visits than other elderly people in fee-for-service Medicare, e.g.:

- 3 times higher total Medicare costs than the average for other Medicare fee-for-service beneficiaries (\$13,207 vs. \$4,454 per person);
- 3.4 times more hospital stays than the average for other Medicare fee-for-service beneficiaries (1,091 vs. 318 hospital stays per 1000 beneficiaries);
- 3.2 times higher costs for hospital care than the average for other Medicare fee-for-service beneficiaries (\$7,074 vs. \$2,204 per person);
- 3.8 times higher Medicare home health care costs than the average for other Medicare beneficiaries (\$728 vs. \$190 per person); and
- 1.3 times more physician visits than the average for other Medicare beneficiaries (14.4 vs. 11.3 visits per person).

## Prevalence of Coexisting Chronic Medical Conditions

Ninety-five percent of all elderly fee-for-service Medicare beneficiaries with Alzheimer's disease and other dementias (AD/D) had at least one other chronic medical condition; only 5% had no other chronic medical conditions. Of those with AD/D, 29% had coronary heart disease (CHD); 28% had congestive heart failure (CHF); 23% had diabetes, and 17% had chronic obstructive pulmonary disease (COPD).

## Impact of Serious Coexisting Medical Conditions

The combination of AD/D and these four coexisting medical conditions (CHD, CHF, diabetes, and COPD) consistently increased hospital stays and Medicare costs for those age 65+ and for those in the age subgroups 65-74, 75-84, and 85+.

**Datasources and Definitions:** These figures come from FY 2000 Medicare claims for a 5% national random sample of Medicare beneficiaries. The data set is from the Centers for Medicare and Medicaid Services (CMS). The sample for this analysis is fee-for-service Medicare beneficiaries age 65+ who had both Parts A and B Medicare for the full year (or while they were alive). Those who had no claims during the year are included. Medicare beneficiaries who were in Medicare+Choice (managed care) and those under age 65 are excluded. Beneficiaries with at least one Medicare claim with an ICD-9 code diagnosis 290, 294, or 331 are defined for this analysis as beneficiaries with Alzheimer's disease and other dementias (AD/D). The coexisting medical condition groups are based on Clinical Classification Software (CCS) categories but include only people with diagnoses identified as chronic by an expert panel.

## Hospital Use and Medicare Costs for People Age 65+ with Alzheimer's Disease and Other Dementias With and Without Coexisting Medical Conditions, 2000.

Medicare Fee-for-Service Beneficiaries Age 65+	Number in 5% Medicare Sample	Average Medicare costs per person	Average hospital stays per 1000	Average hospital costs per person	Average number of doctor visits	Average SNF <sup>1</sup> costs per person	Average home health costs per person
1. All beneficiaries	1,246,427	\$5,329	387	\$2,640	11.6	\$383	\$238
2. All with no AD/D <sup>2</sup>	1,134,642	4,454	318	2,204	11.3	210	190
3. All with AD/D	111,785	13,207	1,091	7,074	14.5	2,144	728
4. AD/D only	5,837	1,256	90	394	5.2	140	170
5. AD/D + other <sup>3</sup>	105,948	13,865	1,147	7,442	15.0	2,254	758
<b>With CHD<sup>4</sup></b>							
6. All with CHD	245,343	12,478	1,002	7,323	17.6	901	474
7. CHD, no AD/D + any/none <sup>5</sup>	212,511	11,078	875	6,559	17.5	526	391
8. CHD + AD/D + any/none	32,832	21,538	1,820	12,273	18.3	3,329	1,013
<b>With Diabetes</b>							
9. All with Diabetes	215,491	9,417	705	4,997	15.9	725	550
10. Diab, no AD/D+ any/none	190,215	8,011	587	4,207	15.7	420	455
11. Diabetes+AD/D+any/none	25,276	19,994	1,589	10,943	17.3	3,021	1,265
<b>With CHF<sup>6</sup></b>							
12. All with CHF	145,203	17,039	1,396	10,237	17.8	1,579	863
13. CHF, no AD/D + any/none	114,258	15,441	1,259	9,441	18.0	1,016	765
14. CHF + AD/D + any/none	30,945	22,939	1,901	13,178	16.9	3,658	1,222
<b>With COPD<sup>7</sup></b>							
15. All with COPD	127,152	14,163	1,201	8,555	17.3	1,185	543
16. COPD, no AD/D+any/none	107,782	12,450	1,054	7,580	17.3	744	463
17. COPD + AD/D + any/none	19,370	23,693	2,022	13,980	17.7	3,643	992

<sup>1</sup> SNF = Medicare-covered skilled nursing facility

<sup>2</sup> AD/D = Alzheimer's disease and other dementias

<sup>3</sup> Other = Any other chronic condition

<sup>4</sup> CHD = Coronary atherosclerosis and other heart disease

<sup>5</sup> Any/none = With or without any other chronic condition

<sup>6</sup> CHF = Congestive heart failure

<sup>7</sup> COPD = Chronic obstructive pulmonary disease, including emphysema

**Acknowledgments:** This analysis was conducted by Katie Maslow, Alzheimer's Association.

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### Age 65-74

Medicare Fee-for-Service Beneficiaries Age 65-74	Number in 5% Medicare Sample	Average Medicare costs per person	Average hospital stays per 1000	Average hospital costs per person	Average number of doctor visits	Average SNF <sup>1</sup> costs per person	Ave. home health costs per person
1. All beneficiaries	623,357	\$4,241	295	\$2,151	10.8	\$149	\$113
2. All with no AD/D <sup>2</sup>	603,321	3,851	262	1,912	10.6	97	98
3. All with AD/D	20,036	15,998	1,268	9,327	17.1	1,696	564
4. AD/D only	1,048	1,201	81	341	5.5	100	138
5. AD/D + other <sup>3</sup>	18,988	16,815	1,334	9,823	17.7	1,785	588
<b>With CHD<sup>4</sup></b>							
6. All with CHD	100,443	11,824	906	7,230	17.5	421	267
7. CHD, no AD/D + any/none <sup>5</sup>	94,726	10,894	827	6,653	17.2	281	233
8. CHD + AD/D + any/none	5,717	27,237	2,210	16,791	21.9	2,738	824
<b>With Diabetes</b>							
9. All with Diabetes	108,169	8,405	609	4,550	15.7	389	336
10. Diab, no AD/D+any/none	102,191	7,469	535	3,982	15.4	255	294
11. Diabetes+AD/D+any/none	5,978	24,392	1,879	14,260	20.1	2,690	1,051
<b>With CHF<sup>6</sup></b>							
12. All with CHF	40,856	19,623	1,527	12,539	19.9	979	629
13. CHF, no AD/D + any/none	36,772	17,993	1,401	11,555	19.7	690	567
14. CHF + AD/D + any/none	4,084	34,304	2,659	21,404	21.9	3,577	1,183
<b>With COPD<sup>7</sup></b>							
15. All with COPD	54,761	13,277	1,105	8,311	17.6	650	330
16. COPD, no AD/D+any/none	50,698	12,059	1,003	7,540	17.3	460	292
17. COPD + AD/D + any/none	4,063	28,463	2,386	17,932	20.8	3,017	811

### Age 75-84

Medicare Fee-for-Service Beneficiaries Age 75-84	Number in 5% Medicare Sample	Average Medicare costs per person	Average hospital stays per 1000	Average hospital costs per person	Average number of doctor visits	Average SNF <sup>1</sup> costs per person	Ave. home health costs per person
1. All beneficiaries	458,553	\$5,969	443	\$3,036	12.7	\$462	\$283
2. All with no AD/D <sup>2</sup>	409,262	5,044	362	2,511	12.4	261	230
3. All with AD/D	49,291	13,650	1,117	7,388	15.1	2,138	722
4. AD/D only	2,483	1,260	85	382	5.3	146	172
5. AD/D + other <sup>3</sup>	46,808	14,308	1,172	7,760	15.7	2,244	751
<b>With CHD<sup>4</sup></b>							
6. All with CHD	103,944	12,872	1,030	7,529	18.3	957	504
7. CHD, no AD/D + any/none <sup>5</sup>	89,084	11,320	892	6,653	18.2	570	420
8. CHD + AD/D + any/none	14,860	22,177	1,859	12,782	19	3,273	1,009
<b>With Diabetes</b>							
9. All with Diabetes	83,566	10,177	766	5,382	16.5	882	668
10. Diab, no AD/D+ any/none	71,689	8,563	631	4,472	16.3	524	563
11. Diabetes+AD/D+any/none	11,877	19,920	1,579	10,876	17.5	3,044	1,305
<b>With CHF<sup>6</sup></b>							
12. All with CHF	62,004	17,490	1,423	10,582	18.5	1,583	844
13. CHF, no AD/D + any/none	49,574	15,515	1,263	9,503	18.6	1,020	735
14. CHF + AD/D + any/none	12,430	25,368	2,062	14,883	18.1	3,826	1,275
<b>With COPD<sup>7</sup></b>							
15. All with COPD	53,308	14,755	1,242	8,879	17.8	1,324	599
16. COPD, no AD/D+any/none	44,269	12,782	1,077	7,722	17.8	835	517
17. COPD + AD/D + any/none	9,039	24,416	2,047	14,544	18.0	3,720	997

<sup>1</sup> SNF = Medicare-covered skilled nursing facility

<sup>2</sup> AD/D = Alzheimer s disease and other dementias

<sup>3</sup> Other = Any other chronic condition

<sup>4</sup> CHD = Coronary atherosclerosis and other heart disease

<sup>5</sup> Any/none = With or without any other chronic condition

<sup>6</sup> CHF = Congestive heart failure

<sup>7</sup> COPD = Chronic obstructive pulmonary disease, including emphysema



## Age 85+

Medicare Fee-for-Service Beneficiaries Age 85+	Number in 5% Medicare Sample	Average Medicare costs per person	Average hospital stays per 1000	Average hospital costs per person	Average number of doctor visits	Average SNF <sup>1</sup> costs per person	Ave. home health costs per person
1. All beneficiaries	164,517	6,981	581	3,394	11.5	1,050	588
2. All with no AD/D <sup>2</sup>	122,059	5,453	442	2,611	11.2	594	510
3. All with AD/D	42,458	11,374	978	5,646	12.6	2,361	812
4. AD/D only	2,306	1,276	100	431	4.9	151	183
5. AD/D + other <sup>3</sup>	40,152	11,954	1,029	5,945	13.0	2,488	848
<b>With CHD<sup>4</sup></b>							
6. All with CHD	40,956	13,080	1,165	7,030	15.8	1,937	910
7. CHD, no AD/D + any/none <sup>5</sup>	28,701	10,934	983	5,955	15.9	1,195	826
8. CHD + AD/D + any/none	12,255	18,104	1,590	9,549	15.7	3,673	1,105
<b>With Diabetes</b>							
9. All with Diabetes	23,756	11,350	923	5,679	14.6	1,697	1,111
10. Diab, no AD/D+ any/none	16,335	8,979	718	4,452	14.6	991	991
11. Diabetes+AD/D+any/none	7,421	16,569	1,373	8,379	14.7	3,253	1,373
<b>With CHF<sup>6</sup></b>							
12. All with CHF	42,343	13,884	1,229	7,512	14.6	2,153	1,116
13. CHF, no AD/D + any/none	27,912	11,947	1,065	6,546	14.7	1,438	1,079
14. CHF + AD/D + any/none	14,431	17,632	1,547	9,381	14.4	3,537	1,187
<b>With COPD<sup>7</sup></b>							
15. All with COPD	19,083	15,051	1,363	8,348	15.4	2,334	1,001
16. COPD, no AD/D+any/none	12,815	12,847	1,175	7,244	15.4	1,550	951
17. COPD + AD/D + any/none	6,268	19,557	1,749	10,604	15.3	3,936	1,102

<sup>1</sup> SNF = Medicare-covered skilled nursing facility

<sup>2</sup> AD/D = Alzheimer's disease and other dementias

<sup>3</sup> Other = Any other chronic condition

<sup>4</sup> CAD = Coronary atherosclerosis and other heart disease

<sup>5</sup> Any/none = With or without any other chronic condition

<sup>6</sup> CHF = Congestive heart failure

<sup>7</sup> COPD = Chronic obstructive pulmonary disease, including emphysema

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