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CRS Report for Congress

Health Care Spending and the Aging of the Population

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Summary

Health care spending has been growing as a share of national income, as a share of federal spending, and as a share of many consumers' income. Because people tend to use more health care as they age, many observers are concerned that an aging population will accelerate growth in health care spending, and that such growth will lead to economic and fiscal crisis.

Over the next several decades, both national and federal spending on health care are expected to grow rapidly for two basic reasons. The first is changing demographics. As the share of older people in the population grows, health spending also will grow to reflect generally higher per capita health care costs for this population, compared with younger people.

The second and more important reason is the rising cost of health care for all age groups. In the past, growing demand for health care products and services has been significantly more important than population aging in driving health spending upward. This trend is expected to continue with both older *and* younger people using more health care in the future than they do today.

Growth in spending for health care is of particular concern to policymakers because Medicare and Medicaid already account for about 21% of federal spending.[1] As the population ages, a growing share of Americans will receive health care under these programs, putting increasing pressure on the federal budget.[2] Unchecked, this pressure is likely to affect public spending for other priorities, and also may affect economic growth.

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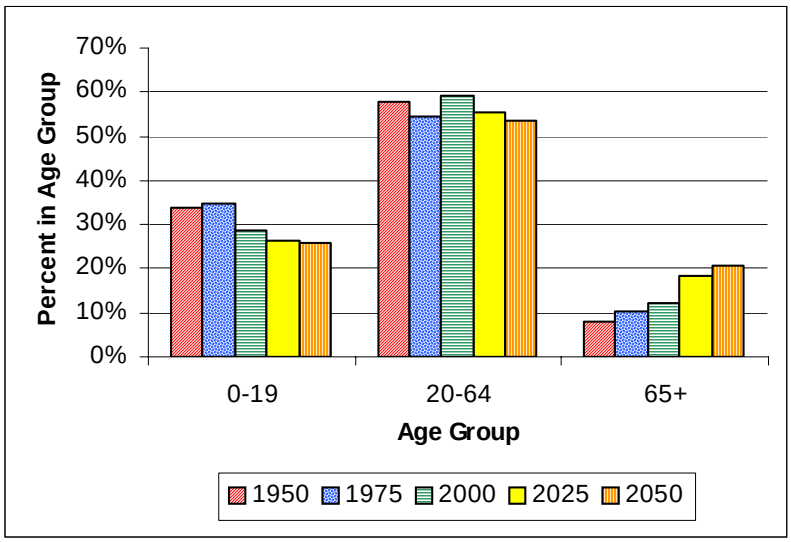
[1] The 21% share is for 2006. See U.S. Congressional Budget Office (CBO), *The Budget and Economic Outlook: Fiscal Years 2008 to 2017*, Jan. 2007, p. 50.

[2] For more information on the budget impact of an aging population, see CRS Report RS22008, *Federal Spending for Older Americans*, by April Grady and William Joseph Klunk; and CBO, *The Long-Term Budget Outlook*, Dec. 2005.

Changing Demographics

Since the middle of the 20th century, the U.S. population has been aging.[3] In 1950, 8.1% of residents were age 65 or older (see **Figure 1**). This share had grown to 12.4% in 2000, and is estimated to reach 20.6% in 2050.

Figure 1. Percent of U.S. Population, by Age Group, 1950-2050



Source: Data from the U.S. Census Bureau, as summarized in CRS Report RL32701.

The U.S. population is also getting bigger. It nearly doubled between 1950 and 2000, growing from about 152 million to 282 million people, and is projected top 420 million in 2050. Accounting for both population growth and aging, the number of people age 65 and over grew from about 12 million in 1950 to 35 million in 2000, and is expected to approach 87 million in 2050.

Older people use more health care. On average, health care spending is higher for older people than younger people. In 1999, per capita spending for personal health care for those age 65 and over was more than $11,000 — four times the amount for those under age 65 (see **Table 1**). Within the 65 and over group, spending also increases with age. In 1999, per capita spending averaged $20,000 for people age 85 and older, compared with just over $8,000 for those in the 65-74 age group.[4]

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[3] CRS Report RL32701, *The Changing Demographic Profile of the United States*, by Laura B. Shrestha.

[4] These estimates are for health care spending by all sources, including Medicare, Medicaid, private health insurance, and consumer out-of-pocket payments. More recent estimates are available for Medicare spending by age. In 2003, per capita spending by Medicare was $5,042 for beneficiaries in the 65-74 age group, $7,789 for those 75-84, and $9,243 for those 85 and older. Medicare estimates are from the Medicare Payment Advisory Commission, *A Data Book: Healthcare Spending and the Medicare Program*, Jun. 2006, p. 20 (Chart 2-2).

Spending for older people is higher for all types of services, although relative spending varies by service. In 1999, per capita spending for physician and other professional services was about 2½ times higher for the 65 and over population, compared with those under age 65. The ratios for other services are: 3 times higher for prescription drugs, 4 times higher for hospital services, 10 times higher for home health care, and 30 times higher for nursing home care.

Table 1. Per Capita Spending on Personal Health Care, by Age Group and Type of Service, 1999

	All ages	Under age 65	Age 65 & over	Age 65-74	Age 75-84	Age 85 & older
Hospital	$1,416	$1,027	$4,132	$3,298	$4,786	$5,791
Physician, clinical, and other professional services	$1,107	$936	$2,301	$2,185	$2,485	$2,273
Prescription drugs	$376	$301	$900	$895	$922	$858
Nursing home	$322	$69	$2,087	$611	$2,221	$7,818
Home health care	$116	$54	$553	$252	$655	$1,518
Other	$497	$406	$1,116	$926	$1,175	$1,743
Total	$3,834	$2,793	$11,089	$8,167	$12,244	$20,001

Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group. Data from tables at [http://www.cms.hhs.gov/NationalHealthExpendData/downloads/agetables.pdf].

Note: As explained in Sean P. Keehan, et al, "Age Estimates in the National Health Accounts," *Health Care Financing Review — Web Exclusive*, vol. 1, no. 1 (Dec. 2, 2004), pp. 1-16, complete data on personal health care spending by age are not readily available. The estimates in this table are based on administrative data for Medicare and Medicaid, household survey data from the Agency for Health Care Research and Quality, and various provider surveys. Estimates for 1999 are the most current available.

While per capita spending for health care is consistently higher for older people, relative growth in spending for the over- and under-65 populations has varied over time (see **Table 2**). Over the 1963-2000 period, real (inflation-adjusted) growth in spending for people age 65 and over averaged 5.8% annually, compared with 4.1% for those under 65. Within the period, per capita spending for people in the older group grew faster from 1963 to 1987, and slower from 1987 to 2000. Relatively slow growth since 1987 in per capita spending for the elderly can be explained in part by changes in Medicare policy. These changes include the implementation of prospective payment for inpatient hospital care beginning in 1984, and for many other services following passage of the Balanced Budget Act of 1997 (BBA).[5]

[5] For a summary of changes in payment methods and rates under the BBA, see the *2004 Green Book*. U.S. Congress, House Committee on Ways and Means, *2004 Green Book: Background Material and Data on the Programs within the Jurisdiction of the Committee on Ways and Means,* committee print, 108th Cong., 2nd sess., Mar. 2004, WMCP: 108-6 (Washington: GPO, 2004), pp. 2-132 — 2-134.

Table 2. Health Care Spending Per Capita and Average Annual Growth Rates, by Year and Age Group, 1963-2000

	Per capita spending (in inflation-adjusted 2002 dollars)			
	1963	**1987**	**1996**	**2000**
Under age 65	$606	$1,548	$2,348	$2,761
Age 65 & over	$1,430	$8,299	$11,418	$12,271
	Average annual growth in per capita spending			
	1963-1987	**1987-1996**	**1996-2000**	**1963-2000**
Under age 65	3.9%	4.6%	4.0%	4.1%
Age 65 & over	7.3%	3.5%	1.8%	5.8%

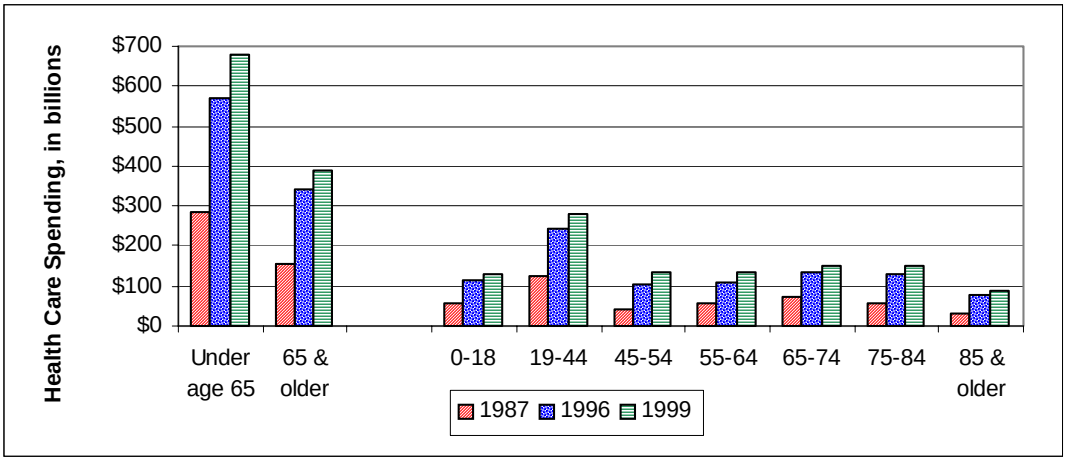
Source: Ellen Meara, et al, "Trends in Medical Spending By Age, 1963-2000," *Health Affairs*, vol. 23, no. 4 (Jul./Aug. 2004), p. 180.

Note: Per capita spending estimates in this table are based on data from the National Health Accounts and several national household surveys. The amounts are not exactly comparable to spending estimates in **Table 1** because of differences in data sources and methods, and because data in this table are adjusted for inflation.

Aging is a Minor Factor in Health Care Spending Growth

Population aging and higher per capita spending for older people contribute to growth in national spending for personal health care, but aging is not the dominant factor. Population changes occur gradually, while health care spending has grown rapidly. As shown in **Figure 2**, national spending for personal health care more than doubled over the 1987 to 1999 period not just for those over 65, but also for those under 65 and population subgroups across the age continuum.

Figure 2. National Spending for Personal Health Care, by Age Group, 1987, 1996, and 1999



Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group. Data from tables at [http://www.cms.hhs.gov/NationalHealthExpendData/downloads/agetables.pdf].

Note: Because age group categories include different numbers of people, spending amounts do not provide information about relative per capita spending by age group. See Table 1 for additional information on age group estimates.

Research and analysis on aging and health care spending — over different historical and projected time periods, and both in the United States and abroad — consistently show that population aging is itself a relatively minor factor in the growth of national spending for health care.[6] Other factors, including rising per capita income, the availability of new health care products and services, health insurance coverage, and characteristics of the health care system, play a much bigger role.

Over the 1970-2002 period, real (inflation-adjusted) growth in health care spending per capita averaged 4.3% per year in the United States, compared with 3.8% for a subset of countries in the Organization for Economic Cooperation and Development (OECD).[7] In both the U.S. and OECD countries, about 2 percentage points of the growth could be explained by real growth in gross domestic product per capita (see **Figure 3**). Put another way, the fact that economic output grew by about 2% annually over the period allowed people to buy both more health care and more of everything else. Population aging was a much smaller factor, accounting for 0.3 percentage points of growth in health spending the U.S., and 0.5 percentage points in OECD countries. The higher rate of growth from aging in OECD countries reflects the fact that population aging has been more rapid in many OECD countries than in the U.S.[8]

The remaining, or excess, growth in health care spending is simply growth from all factors except GDP and population aging. Health insurance coverage and new health care technologies contribute to excess growth in both the U.S. and other countries. Insurance coverage protects individuals and families from catastrophic health expenses, but it also leads to higher spending because patients do not bear the full cost of the health care products and services they use.

Excess cost growth from the use of new health care technologies is not necessarily bad if benefits exceed costs, and if society values the additional health care more than it values what otherwise would have been produced with the resources.

At 2 percentage points annually over 1970-2002 period, excess growth in the U.S. was about double the rate for OECD countries. One possible reason for faster growth in the U.S. is the more rapid diffusion of new health care technologies. Other reasons relate to characteristics of the health care financing and delivery system, including the absence of global budgets for health care, relatively high prices, fee-for-service payment, and weak controls on the supply and use of services. Together, these characteristics reward providing more health care services, as opposed to using resources more efficiently.

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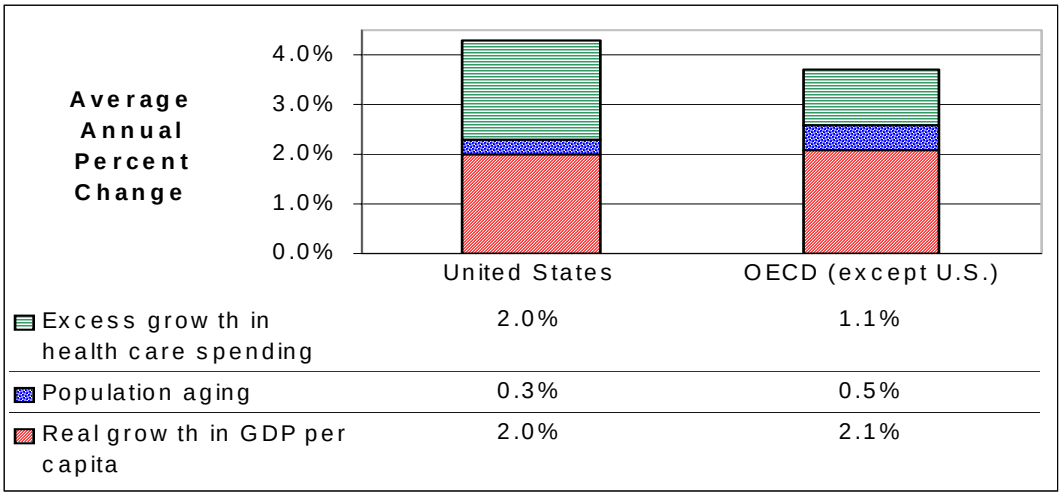
[6] Uwe E. Reinhardt, "Does the Aging of the Population Really Drive the Demand for Health Care?" *Health Affairs*, vol. 22, no. 6 (Nov./Dec. 2003), pp. 27-39.

[7] The OECD estimate excludes the U.S. and was calculated using data from: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Japan, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom. Other OECD countries were excluded from the analysis because of missing data. The 3.8% estimate does not equal the sum of the components in **Figure 3** because of rounding. See Chapin White, "Health Care Spending Growth: How Different is the United States from the Rest of the OECD?" *Health Affairs*, vol. 26, no. 3 (Jan./Feb. 2007), pp. 154-161.

[8] For example, in Japan, real growth in health spending was 4.4% over the 1970-2002 period, and about 1% of this growth could be attributed to population aging.

Figure 3. Components of Real Growth in Health Care Spending per Capita, United States and Other OECD Countries, 1970-2002



Source: White, "Health Care Spending Growth: How Different is the U.S. from the Rest of the OECD?"

Note: OECD = Organization for Economic Cooperation and Development, GDP = gross domestic product.

Federal Budget and Economic Impact

Even if population aging has a relatively small impact on *national* health spending in the future, it is likely to have a big impact on *federal* spending because a growing share of the population will get health coverage through Medicare and Medicaid.[9] Outlays for these programs are projected to grow from about 21% of federal spending in 2006 to about 31% of spending in 2017.[10] The expected increase will result primarily from excess growth in health care spending and enrollment growth in Medicare. As Medicare enrollment grows, the cost of beneficiaries' health care will be transferred from private sources to the federal government.

As a share of the U.S. economy, federal spending for Medicare and Medicaid is expected to grow from about 4.3% of GDP in 2006 to about 5.9% in 2017. All budget estimates are uncertain, and long-term estimates are especially so; nonetheless, CBO projects that federal spending for Medicare and Medicaid could consume between 7% and 22% of GDP in 2050.[11] To the extent that Americans value health care highly, they may be willing to devote ever more resources to these programs, but doing so implies increasingly difficult tradeoffs between health care and other goods and services, as well as between the beneficiaries who receive benefits and the workers and taxpayers who help finance benefits. In addition, to the extent that health care benefits are financed through debt, their cost will be shifted to future generations and the lower national saving that results could reduce economy-wide productivity.

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[9] In 2007, about 22% of Medicaid spending is expected to pay for benefits for the elderly. CBO, "Fact Sheet for CBO's March 2007 Baseline: Medicaid," at [http://cbo.gov/budget/factsheets/2007b/medicaid.pdf].

[10] CBO, *The Budget and Economic Outlook: Fiscal Years 2008 to 2017*, p. 50.

[11] CBO, *The Long-Term Budget Outlook*, Dec. 2005, p. 10.