APPENDIX B. HEALTH STATUS, INSURANCE, AND EXPENDITURES OF THE ELDERLY, AND BACKGROUND DATA ON LONG-TERM CARE

CONTENTS

Although the health status of the elderly has improved in recent decades, many elderly persons have conditions that require medical and long-term health care. In 1993, total spending on long term care for the elderly was around $79 billion (Price, 1996). Most persons 65 years or older have some form of health insurance. About 97 percent are covered by Medicare or Medicaid, and nearly 35 percent are insured under a union or employer's group health insurance (Smith & Nuschler, 1994). This appendix reports on the health status, health insurance, and health care expenditures of the elderly.

HEALTH STATUS

By various measures, the health status of the elderly population has been gradually improving over the years. For example, life expectancy at age 65 has increased from 13.9 years in 1950 to 17.5 years in 1992 (see table B–1). Although advance data from the National Center for Health Statistics (1996) indicates that life expectancy for the general population declined by 0.3 years in 1993, the first decrease since 1980, the overall trend this century has been an upward one. Improvements in life expectancy, as measured by declines in mortality rates, have been greater for females than for males. Some morbidity indicators, such as the incidence of high blood pressure, improved among those aged 65 to 74 years in the 1970s and 1980s (see table B–2). However, the proportion of overweight seniors seems to be increasing.

AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

TABLE B–1.—LIFE EXPECTANCY AT BIRTH AND AT 65 YEARS OF AGE BY SEX AND RACE, SELECTED YEARS 1950–92

[Remaining life expectancy in years]

Year	At birth			At 65 years [1]			At birth	
	Both sexes	Male	Female	Both sexes	Male	Female	White	Black
1950	68.2	65.6	71.1	13.9	12.8	15.0	69.1	60.7
1960	69.7	66.6	73.1	14.3	12.8	15.8	70.6	63.2
1970	70.8	67.1	74.8	15.2	13.1	17.0	71.7	64.1
1980	73.7	70.0	77.4	16.4	14.1	18.3	74.4	68.1
1988	74.9	71.4	78.3	16.9	14.7	18.6	75.6	69.2
1989	75.1	71.7	78.5	17.1	15.0	18.8	75.9	69.2
1990	75.4	71.8	78.8	17.2	15.1	18.9	76.1	69.1
1991	75.5	72.0	78.9	17.4	15.3	19.1	76.3	69.3
1992	75.8	72.3	79.1	17.5	15.4	19.2	76.5	69.6

[1] Includes deaths of nonresidents of the United States in the 1950 and 1960 data.

Source: National Center for Health Statistics (1996, p. 11); National Center for Health Statistics (1995a).

TABLE B–2.—SELECTED HEALTH STATUS INDICATORS FOR PERSONS 65–74 YEARS OF AGE BY SEX, SELECTED PERIODS 1971–91

[Percent of population]

Health status indicator	Male			Female		
	1971–74	1976–80	1988–91	1971–74	1976–80	1988–91
Hypertension [1 2]	67.2	67.1	59.0	78.3	71.8	57.8
High-risk serum cholesterol levels (Mean serum cholesterol level, [3] in mg/dL)	34.7 (226)	31.7 (221)	27.7 (218)	57.7 (250)	51.6 (246)	43.2 (234)
Overweight [4]	23.0	25.2	42.9	38.0	38.4	36.8

[1] Excludes pregnant women.

[2] Hypertension or elevated blood pressure is defined as either systolic pressure of at least 140 mmHg or diastolic pressure of at least 90 mmHg or both. If the respondent is taking antihypertensive medication, he or she is considered hypertensive.

[3] High-risk serum cholesterol levels are defined as greater or equal to 240 mg/dL (6.20 mmol/L), risk level as defined by the National Cholesterol Education Program Expert Panel on Detection, Evaluation, and Treatment of High Cholesterol in Adults, November 1987.

[4] Overweight is defined for men as body mass index greater than or equal to 27.8 kilograms/meter^2, and for women as body mass index greater than or equal to 27.3 milograms/meter^2. These cut points were used because they represent the sex-specific 85th percentiles for persons 20–29 years of age in the 1976–80 National Health and Nutrition Examination Survey.

Note.—Data are based on physical examinations of a sample of the civilian, noninstitutionalized population.

Source: National Center for Health Statistics (1995a, pp. 163–5).

Despite the trend toward improved health status among the elderly, their needs for medical and long-term care services are substantial and growing. Many of the elderly have one or more chronic

conditions, many of which give rise to the need for continuing health care. Table B–3 shows the incidence of several common chronic conditions among the elderly. Half report having arthritis, about 36 percent report high blood pressure, and over 30 percent report heart disease. The incidence of many chronic conditions is directly related to age and inversely related to family income.

TABLE B–3.—SELECTED CHRONIC CONDITIONS PER 1,000 ELDERLY PERSONS BY AGE AND FAMILY INCOME, 1994

Chronic condition	All elderly	Age		Family income			
		65–74	75 and over	Less than $10,000	$10,000–$19,999	$20,000–$34,999	$35,000 and over
Arthritis	502	477	537	651	549	509	416
Cataracts	166	113	242	243	200	166	135
Hearing impairment	286	235	360	287	337	319	274
Deformity or orthopedic impairment	166	154	182	208	202	165	147
Hernia of abdominal cavity	64	63	66	52	64	90	58
Diabetes	101	102	101	134	112	88	80
Heart disease	325	281	387	477	307	349	309
High blood pressure [1]	364	347	388	525	352	372	326
Emphysema	46	47	43	49	51	44	41

[1] As self-reported in the 1994 National Health Interview Survey; the higher 1988–91 hypertension data in table B–2 are from physical examination of a sample population. Overall self-reported hypertension fell between 1991 and 1994.

Source: National Center for Health Statistics (1995c, pp. 81–2; 87–90).

Self-assessed health is a common method used to measure health status, with responses ranging from "excellent" to "poor." Nearly 72 percent of elderly people living in the community describe their health as excellent, very good, or good, compared with others their age; only 28 percent report that their health is fair or poor (see table B–4).

Family income is directly related to the elderly people's perception of their health. Income level is also strongly correlated with morbidity and mortality, lending credibility to the use of this measure as an assessment tool (Angell, 1993). In 1994, about 49 percent of older people with incomes over $35,000 described their health as excellent or very good, compared to others their age, while only 29 percent of those with low incomes (less than $10,000) reported excellent or very good health.

CAUSES OF DEATH FOR THE ELDERLY

In the United States, almost 7 out of every 10 elderly persons die from heart disease, cancer, or stroke (National Center for Health Statistics, 1996). Heart disease was the major cause of death in 1960, and remains so today even though there have been rapid de-

clines in age-adjusted death rates from heart disease, with females accounting for more of the decline. Overall age-adjusted death rates from cancer, however, continue to rise slightly in comparison to heart disease (National Center for Health Statistics, 1995). In 1993, however, heart disease still accounted for 37 percent of all deaths among persons 65+, while cancer accounted for 22 percent of all deaths in this age group. The third leading cause of death among the elderly—stroke (cerebrovascular disease)—has been decreasing over the past 30 years. In 1993, cerebrovascular disease accounted for only 8 percent of all deaths in the 65+ age group (table B–5).

TABLE B–4.—SELF-ASSESSED HEALTH STATUS OF THE ELDERLY BY FAMILY INCOME, 1994

[In percent]

Characteristic	All persons [1] (thousands)	Self-assessed health status [2]				
		Excellent	Very good	Good	Fair	Poor
All persons 65+ years [3]	31,792	15.7	23.0	33.4	18.4	9.6
Gender:						
Men	12,932	16.7	22.6	32.2	18.3	10.2
Women	18,094	14.9	23.3	34.2	18.4	9.1
Family income:						
Under $10,000	4,067	10.7	17.8	30.8	23.9	16.8
$10,000–$19,999	7,226	13.6	21.6	34.4	19.6	10.8
$20,000–$34,999	6,741	16.4	25.5	34.7	16.8	6.6
$35,000 and over	5,148	22.5	26.9	32.7	12.8	5.1

[1] Includes unknown health status.

[2] The categories related to this concept result from asking the respondent, ''Would you say health is excellent, very good, good, fair, or poor?'' As such, it is based on the respondent's opinion and not directly on any clinical evidence.

[3] Includes unknown family income.

Note.—Percentages may not add to 100 percent due to rounding. Data are based on household interviews of the civilian, noninstitutionalized population.

Source: National Center for Health Statistics (1995c, Table 70).

Table B–5 shows the 10 leading causes of death for three subgroups of the older population. The factors which have led to reductions in mortality may not necessarily lead to overall improvements in health status. If Americans continue to live only to about age 85, control of life-threatening disease could produce a healthier older population. If the lifespan is increased dramatically in future years beyond age 85, the onset of illness may only be delayed, without an actual shortening of the period of illness. Some demographers, in looking at the reductions in the projected percentage of those 65 and above who are disabled, are predicting that older people will not only have increasing longevity, but a later life with less dependency (Kolata, 1996). It should be noted that living longer seems to be the demographic trend, and it is not known what the tradeoffs may be in cost of care and quality of life.

TABLE B–5.—DEATH RATES FOR TEN LEADING CAUSES OF DEATH AMONG OLDER PEOPLE BY AGE, 1993

[Death rates per 100,000 population in age group]

Cause of death	Age			
	65+	65–74	75–84	85+
Diseases of the heart	1,891	848	2,183	6,669
Malignant neoplasms	1,133	876	1,367	1,808
Cerebrovascular diseases	401	136	479	1,608
Chronic obstructive pulmonary diseases	264	168	357	494
Pneumonia and influenza	225	58	241	1,089
Diabetes	124	80	152	269
Accidents	85	44	100	264
Nephritis, nephrotic syndrome, nephrosis	60	26	73	210
Septicemia	51	21	61	186
Atherosclerosis	50	11	47	275
All other causes	762	349	892	2,610
All causes	5,048	2,617	5,952	15,482

Source: National Center for Health Statistics (1996, Tables 7 and 19).

Alzheimer's disease (AD) death statistics appear in the 1993 mortality statistics released by the National Center for Health Statistics (1996; see chart B–1). Alzheimer's has only been classified as a unique cause of death since 1979, so reported resulting death rates have been increasing rapidly since that year, and probably do not yet reflect the actual numbers of deaths attributable to the disease. Estimates of the prevalence of AD vary, but the National Institute on Aging (1995) has estimated that as of 1995 as many as 4 million people were afflicted with AD, and about half the persons 85 years and older had contracted it. Given projected increases in longevity, by the year 2000, the 85 years and older cohort by itself will account for 4 million cases (Hodes, 1996). Presence of Alzheimer's may be masked by inability to confirm the diagnosis except by autopsy of brain tissue, although new diagnostic tools are being developed (National Institute on Aging, 1995). In the future, reporting of Alzheimer's disease as the cause of death is likely to increase, and more accurately reflect its true prevalence and impact.

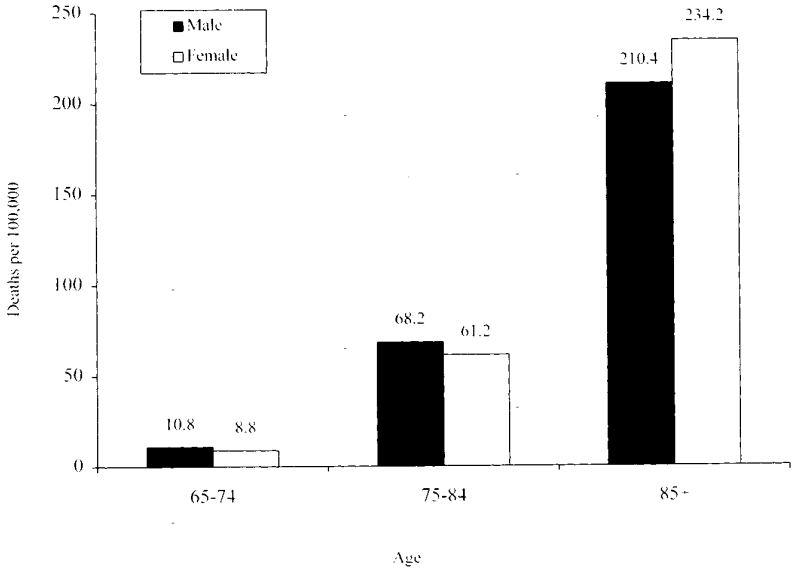
MEDICARE REIMBURSEMENT AND OUT-OF-POCKET LIABILITIES OF THE ELDERLY

Tables B–6 through B–8 illustrate for 6 selected years how Medicare reimbursement, acute health care costs, and out-of-pocket liabilities of Medicare enrollees have changed. The years chosen are 1975, 1980, 1985, 1990, 1995, and 2000 (projected values). Constant 1995 dollar values were obtained using the CPI–U.

The fastest growing component of Medicare reimbursement is for benefits under the Supplementary Medical Insurance (SMI) Program. For SMI, reimbursements increase at an annual rate of 11.5 percent, while the growth in total costs (including enrollees' share of costs) is 10.8 percent (see table B–6). As a result, the share of

SMI costs reimbursed by Medicare increases significantly over the period—from about 64 percent in 1975 to about 74 percent by 1995. The growth in Medicare's share is caused by the declining significance of the SMI deductible, so that more enrollees' costs are eligible for reimbursement.

CHART B–1. DEATH RATES AMONG THE ELDERLY FROM ALZHEIMER'S DISEASE IN 1993



Source: National Center for Health Statistics, Monthly Vital Statistics Report: Advance Report of Final Mortality Statistics, 1993, vol. 44, no. 7(S), February 29, 1996.

In the Hospital Insurance (HI) Program, by contrast, the rate of growth in reimbursement is roughly comparable to the growth in enrollee's copayment costs. Consequently, the share of HI costs reimbursed by Medicare was 93 percent in both 1975 and 1995.

Overall, the share of costs reimbursed by Medicare has increased slightly. The percentage of costs paid by Medicare for services covered under Medicare was 82.2 percent in 1975 and 84.9 percent in 1995 (see table B–6). The share of costs paid directly by enrollees is shown in the third panel of table B–7. Total direct costs plus Medicare reimbursement equals the total or 100 percent.

In constant dollars, HI copayments increased the most rapidly between 1975 and 1990. However, between 1990 and 1995, SMI copayments and premium costs rose the most rapidly. In contrast, the cost to the enrollee from balance-billing has decreased significantly since 1985—a direct policy result of the participating physician program and the imposition of lower limits on balance billing (see table B–8 for deductible amounts and monthly premium amounts under Medicare).

TABLE B–6.—REIMBURSEMENTS AND OUT-OF-POCKET COSTS UNDER MEDICARE, SELECTED YEARS 1975–2000

[Incurred costs per HI or SMI enrollee]

Source	Year						Annual growth 1975–2000 (percent)
	1975	1980	1985	1990	1995	2000	
	In current dollars						
Hospital insurance:							
Reimbursement	$466	$920	$1,570	$1,981	$3,167	$4,519	9.5
Copayments	34	67	119	187	250	328	9.4
Total	500	986	1,690	2,168	3,417	4,847	9.5
Supplementary medical insurance:							
Reimbursement	186	399	766	1,307	1,848	2,828	11.5
Copayments	84	137	248	400	631	952	10.2
Balance-billing	22	56	87	68	13	18	−0.8
Total	291	592	1,101	1,775	2,492	3,798	10.8
Total Medicare reimbursement	651	1,318	2,336	3,288	5,015	7,347	10.2
Total costs under Medicare	792	1,579	2,791	3,944	5,909	8,645	10.0

TABLE B–6.—REIMBURSEMENTS AND OUT-OF-POCKET COSTS UNDER MEDICARE, SELECTED YEARS 1975–2000—Continued

[Incurred costs per HI or SMI enrollee]

Source	Year						Annual growth 1975–2000 (percent)
	1975	1980	1985	1990	1995	2000	
	In constant 1995 dollars						
Hospital insurance:							
Reimbursement	1,263	1,703	2,226	2,310	3,167	3,907	4.6
Copayments	93	124	169	218	250	284	4.5
Total	1,357	1,827	2,395	2,529	3,417	4,191	4.6
Supplementary medical insurance:							
Reimbursement	503	738	1,085	1,524	1,848	2,445	6.5
Copayments	227	254	352	467	631	823	5.3
Balance-billing	60	104	124	80	13	16	−5.3
Total	790	1,097	1,561	2,071	2,492	3,284	5.9
Total Medicare reimbursement	1,766	2,442	3,311	3,835	5,015	6,353	5.3
Total costs under Medicare	2,147	2,924	3,955	4,600	5,909	7,475	5.1
Percent of costs paid by Medicare	82.3	83.5	83.7	83.4	84.9	85.0	0.1

Note.—Values after 1995 are projected. The CPI–U was used to get constant dollars. HI = hospital insurance, SMI = supplementary medical insurance.

Source: Congressional Budget Office.

TABLE B–7.—ENROLLEE COSTS UNDER MEDICARE, SELECTED YEARS 1975–2000

[Incurred costs per HI or SMI enrollee]

Source	Year						Annual growth 1975–2000 (percent)
	1975	1980	1985	1990	1995	2000	
	In current dollars						
HI copayments	$34	$67	$119	$187	$250	$328	9.4
SMI copayments	84	137	248	400	631	952	10.2
Balance-Billing	22	56	87	68	13	18	−0.8
Total direct costs	140	260	456	656	894	1,298	9.3
Premium costs	80	110	186	343	553	620	8.5
Total enrollee costs	221	371	641	999	1,447	1,918	9.0
Enrollee per capita income [1]	5,158	8,431	12,767	15,454	16,460	22,008	6.0
	In constant 1995 dollars						
HI copayments	93	124	169	218	250	284	4.5
SMI copayments	227	254	352	467	631	823	5.3
Balance-Billing	60	104	124	80	13	16	−5.3
Total direct costs	381	482	644	765	894	1,122	4.4
Premium costs	218	204	264	400	553	536	3.7

TABLE B–7.—ENROLLEE COSTS UNDER MEDICARE, SELECTED YEARS 1975–2000—Continued

[Incurred costs per HI or SMI enrollee]

Source	Year						Annual growth 1975–2000 (percent)
	1975	1980	1985	1990	1995	2000	
Total enrollee costs	599	687	908	1,165	1,447	1,659	4.2
Enrollee per capita income [1]	13,983	15,614	18,095	18,025	16,460	19,029	1.2
	Percent of costs under Medicare paid by enrollees, by source of payment						
HI copayments	4.4	4.2	4.3	4.7	4.2	3.8	−0.5
SMI copayments	10.6	8.7	8.9	10.1	10.7	11.0	0.2
Balance-Billing	2.8	3.6	3.1	1.7	0.2	0.2	−9.9
Total direct costs	17.7	16.5	16.3	16.6	15.1	15.0	−0.7
Premium costs	10.2	7.0	6.7	8.7	9.4	7.2	−1.4
Total	27.9	23.5	23.0	25.3	24.5	22.2	−0.9
Enrollee-paid costs as a percent of enrollee per capita income [1]	4.3	4.4	5.0	6.5	8.8	8.7	2.9

[1] From the Current Population Survey, with income adjusted for underreporting.

Note.—Values after 1995 are projected. The CPI–U was used to calculate constant dollars. HI = hospital insurance, SMI = supplementary medical insurance.

Source: Congressional Budget Office.

TABLE B–8.—COPAYMENT AND PREMIUM VALUES UNDER MEDICARE, SELECTED CALENDAR YEARS

	Year						Annual growth 1975–2000 (percent)
	1975	1980	1985	1990	1995	2000	
In current dollars							
Hospital insurance:							
Hospital deductible	$92	$180	$400	$592	$716	$868	9.4
Supplementary medical insurance:							
Annual deductible	60	60	75	75	100	100	2.1
Monthly premium [1]	6.70	9.20	15.50	28.60	46.10	51.70	8.5
In constant 1995 dollars							
Hospital insurance:							
Hospital deductible	249	333	567	690	716	751	4.5
Supplementary medical insurance:							
Annual deductible	163	111	106	87	100	86	−2.5
Monthly premium [1]	18.16	17.04	21.97	33.36	46.10	44.70	3.7

[1] The 1980 supplementary medical insurance monthly premium amount is the average of values for the first and second halves of the year.

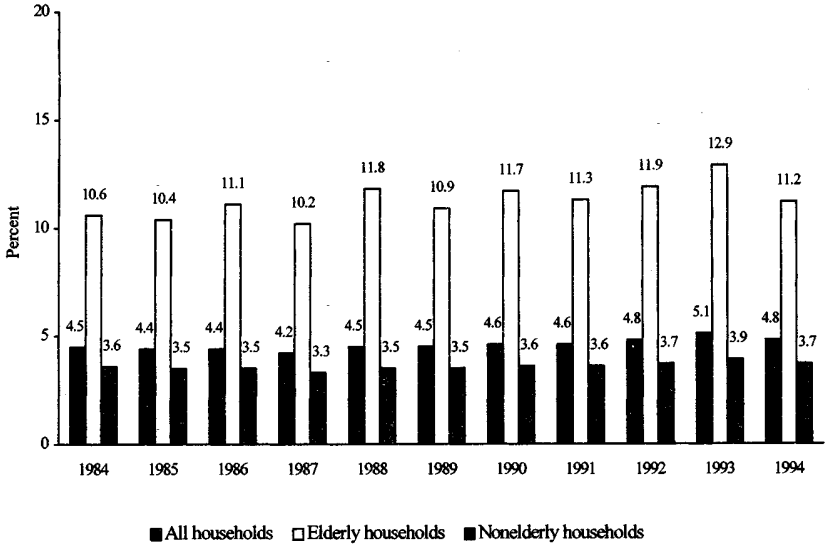
Note.—Values after 1995 are projected. The CPI–U was used to calculate constant dollars.

Source: Congressional Budget Office.

Enrollees are spending an increasing share of their income for health care. In 1975, about 4.3 percent of enrollees' per capita income went to cover their share of acute health care costs under Medicare. By 2000, enrollees will have to pay an estimated 8.7 percent of their per capita income to cover their share of costs (see table B–7).

Although total direct household spending for all health care by elderly households as a share of household income has increased since the early 1970s, it has remained relatively stable in recent years. Chart B–2 illustrates direct household spending for health care as a percentage of household income before taxes for elderly and nonelderly households for years 1984 through 1994. In 1994, direct household spending for health care as a percentage of household income for elderly households was 11.2 percent, on average, up slightly from 10.6 percent in 1984. Over the same period, nonelderly households spent around 3.6 percent of their household income for health care.

CHART B–2. DIRECT HOUSEHOLD SPENDING FOR HEALTH CARE AS A PERCENTAGE OF HOUSEHOLD INCOME BY TYPE OF HOUSEHOLD, 1984–92



Source: Congressional Budget Office.

CHANGES IN REAL SPENDING PER MEDICARE ENROLLEE, 1967–2005

Real Medicare spending per enrollee removes the effects of changes in Medicare enrollment and general inflation from total Medicare spending (see table B–9). Since both enrollment and prices are almost always increasing, the growth of real per enrollee spending is slower than the growth of total spending. Overall, real spending per enrollee grew at an average annual rate of 7.0 percent over the 1980–85 period; the rate declined to 4.8 percent per enrollee over the 1990–95 period. Similarly, real inpatient hospital spending per enrollee grew at an annual rate of 6.4 percent between 1980 and 1985; the rate declined to 2.5 percent over the 1990–95 period. The difference in these rates is attributable to changes in admissions per enrollee and real expenditures per admission. The reduction in real expenditures per admission reflects the impact of the implementation of the hospital prospective payment system.

Costs in hospital outpatient departments have dropped relative to the previous trend, indicating that hospital inpatient costs have not simply been shifted to the outpatient sector. Introduction of a new payment methodology (a blend of a fixed rate and the hospital's costs) for certain surgical procedures performed in outpatient departments tended to reduce costs somewhat, but this effect was partially offset by the shift of services from the inpatient sector.

At least some portion of growth in the volume of covered home health visits may represent a delayed response to an increasing

need for skilled home care resulting from incentives contained within Medicare's hospital prospective payment system to discharge patients more quickly to their homes. During early years of hospital prospective payment, HCFA had in place medical review and claims processing policies that had resulted in high denial rates for provided care. These policies were relaxed by 1989. In addition, the 1989 revised coverage policy guidelines are believed to account for a large portion of the increase in volume because they liberalized coverage policies.

Growth in spending for physicians' services reflects the fact that Medicare began paying for physicians services on the basis of a fee schedule beginning in 1992. Payments for laboratory services have been constrained by the implementation of tighter controls under the laboratory fee schedule.

Spending for skilled nursing facilities (SNFs) increased significantly. During the period from 1975 through 1980, real spending per enrollee for SNFs was falling. This trend was reversed during the 1980s. In 1988, growth in SNF spending accelerated sharply because of a revision in the manual used by administrative agents to determine Medicare coverage that greatly relaxed the definition of covered care to make it conform with legislative language. Growth in SNF spending further accelerated in 1989 under provisions of the Medicare Catastrophic Coverage Act, which briefly eliminated the requirement for a hospital stay prior to a covered SNF stay and which reduced the copayments required of enrollees for SNF stays.

Table B–9 shows Medicare spending per enrollee in constant 1995 dollars. The first column includes both Medicare benefits and administration. All other columns include spending on benefits only.

SUPPLEMENTARY MEDICAL INSURANCE COVERAGE OF THE ELDERLY

Over 95 percent of the aged population is enrolled in Medicare. In addition, the vast majority of these persons also have some supplementary coverage. In 1991, an estimated 89 percent of the Medicare population age 65 and over had additional coverage through private insurance, public programs, or both. An estimated 33 percent had employer-sponsored coverage; 36.8 percent had individually purchased coverage; and 5 percent had both types of coverage. In addition, 11.9 percent had Medicaid protection, with an additional 2 percent reporting other types of coverage. Table B–10 shows that the percentage of elderly persons with private employer-sponsored coverage declines with age while those with Medicaid protection increases.

TABLE B–9.—REAL SPENDING PER ENROLLEE, FISCAL YEARS 1967–2005

[In constant 1995 dollars]

Fiscal years	Medicare	Hospital insurance	Supplementary medical insurance	Hospital inpatient	Skilled nursing facility	Home care & hospice	Outpatient departments	Physician & lab
	Estimates by the Health Care Financing Administration							
1967	762	553	157	528	21	5	3	153
1968	1,146	787	311	705	72	12	10	298
1969	1,339	932	345	849	73	14	16	325
1970	1,359	904	385	837	56	16	19	360
1971	1,405	963	371	917	38	14	25	340
1972	1,494	1,026	389	989	29	14	31	353
1973	1,463	1,013	381	977	27	14	30	346
1974	1,520	1,033	396	994	28	20	43	344
1975	1,740	1,212	450	1,164	32	25	63	378
1976	1,901	1,304	507	1,248	33	35	79	415
1977	2,066	1,421	570	1,360	33	41	94	462
1978	2,208	1,517	608	1,455	31	46	106	486
1979	2,284	1,550	655	1,487	29	49	116	524
1980	2.412	1,631	706	1,568	27	52	126	565
1981	2.607	1,766	765	1,702	24	55	137	613
1982	2,840	1,926	841	1,839	25	66	163	675
1983	3,018	2,012	935	1,906	28	78	179	755
1984	3,123	2,064	982	1,951	27	87	178	802
1985	3,384	2,260	1,042	2,142	26	94	187	853
1986	3,441	2,212	1,151	2,095	26	92	226	923
1987	3,532	2,151	1,305	2,042	27	84	253	1,051
1988	3,570	2,103	1,387	1,989	29	87	266	1,119

1989	3,685	2,171	1,427	1,995	85	93	283	1,142
1990	3,913	2,325	1,506	2,098	99	130	304	1,199
1991	3,883	2,257	1,544	1,999	81	180	313	1,228
1992	4,187	2,527	1,570	2,164	117	248	345	1,223
1993	4,392	2,700	1,610	2,235	157	312	347	1,260
1994	4,684	2,888	1,710	2,304	202	384	388	1,319
	Projections by the Congressional Budget Office							
1995	4,950	3,077	1,790	2,375	247	455	434	1,356
1996	5,245	3,269	1,897	2,464	285	520	468	1,429
1997	5,510	3,425	2,006	2,540	308	577	504	1,503
1998	5,790	3,578	2,133	2,633	322	622	543	1,590
1999	6,050	3,715	2,256	2,722	336	657	588	1,668
2000	6,305	3,843	2,383	2,806	349	688	636	1,747
2001	6,564	3,968	2,517	2,889	362	717	687	1,830
2002	6,825	4,087	2,659	2,968	374	744	741	1,919
2003	7,112	4,210	2,823	3,054	385	771	794	2,029
2004	7,424	4,343	3,002	3,149	395	798	846	2,156
2005	7,748	4,477	3,192	3,248	405	824	895	2,297
	Average annual growth rates (in percent)							
1975–1980	6.8	6.1	9.5	6.1	−3.4	16.3	14.7	8.4
1980–1985	7.0	6.7	8.1	6.4	−0.7	12.5	8.3	8.6
1985–1990	2.9	0.6	7.6	−0.4	30.8	6.8	10.2	7.1
1990–1995	4.8	5.8	3.5	2.5	19.9	28.4	7.4	2.5
1995–2000	5.0	4.5	5.9	3.4	7.2	8.6	7.9	5.2
2000–2005	4.2	3.1	6.0	3.0	3.0	3.7	7.1	5.6

Note.—Column 1 includes both benefit and administrative costs. All other columns include only benefits. The CPI–U was used to calculate constant dollars.

Source: Congressional Budget Office.

TABLE B–10.—SUPPLEMENTARY HEALTH INSURANCE COVERAGE OF MEDICARE ELDERLY BY AGE, 1991

Age group	Percent of enrollees in age group	Number	Medicare only	Private individual purchase	Private employer-sponsored	Private (individual and private)	Medicaid	Medicare and other
				Persons				
65–69 Years	29.4	8,570	954	2,817	3,553	498	676	72
70–74 Years	27.2	7,931	817	3,034	2,842	442	702	95
75–79 Years	20.0	5,840	633	2,319	1,826	264	666	131
80–84 Years	13.4	3,897	460	1,579	946	167	626	119
85 Years or over	10.1	2,938	460	975	454	96	790	164
Total	100.0	29,176	3,324	10,725	9,621	1,467	3,459	581
				Percent share				
65–69 Years	.....	100.0	11.1	32.9	41.5	5.8	7.9	0.8
70–74 Years	.....	100.0	10.3	38.3	35.8	5.6	8.9	1.2
75–79 Years	.....	100.0	10.8	39.7	31.3	4.5	11.4	2.2
80–84 Years	.....	100.0	11.8	40.5	24.3	4.3	16.1	3.1
85 Years or over	.....	100.0	15.7	33.2	15.5	3.3	26.9	5.6
Total	.....	100.0	11.4	36.8	33.0	5.0	11.9	2.0

Note.—Numbers in thousands. Includes Medicare persons age 65 or over who were alive during all of 1991. All numbers have relative standard errors of less than 30 percent.

Source: Chulis et al. (1993).

BACKGROUND DATA ON LONG-TERM CARE

The phrase "long-term care" refers to a broad range of medical, social, personal, supportive, and specialized housing services needed by individuals who have lost some capacity for self-care because of a chronic illness or condition. Chronic illnesses or conditions often result in both functional impairment and physical dependence on others for an extended period of time. Major subgroups of persons needing long-term care include the elderly and nonelderly disabled, persons with developmental disabilities (primarily persons with mental retardation), and persons with mental illness. This section of appendix B focuses on the elderly long-term care population.

The range of chronic illnesses and conditions resulting in the need for supportive long-term care services is extensive. Unlike acute medical illnesses, which occur suddenly and may be resolved in a relatively short period of time, chronic conditions last for an extended period of time and are not typically curable. Although chronic conditions occur in individuals of all ages, their incidence, especially as they result in disability, increases with age. These conditions may include heart disease, strokes, arthritis, osteoporosis, and vision and hearing impairments. Dementia, the chronic, often progressive loss of intellectual function, is also a major cause of disability in the elderly.

The presence of a chronic illness or condition alone does not necessarily result in a need for long-term care. For many individuals, their illness or condition does not result in a functional impairment or dependence and they are able to go about their daily routines without needing assistance. But when the illness or condition results in a functional or activity limitation, long-term care services may be required.

The need for long-term care by the elderly is often measured by assessing limitations in a person's capacity to manage certain functions or activities. For example, a chronic condition may result in dependence in certain functions that are basic and essential for self-care, such as bathing, dressing, eating, toileting, and/or moving from one place to another. These are referred to as limitations in "activities of daily living," or ADLs. Another set of limitations, which reflect lower levels of disability, are used to describe difficulties in performing household chores and social tasks. These are referred to as limitations in "instrumental activities of daily living," or IADLs, and include such functions as meal preparation, cleaning, grocery shopping, managing money, and taking medicine. Limitations can vary in severity and prevalence, so that persons can have limitations in any number of ADLs or IADLs, or both.

Long-term care services are often differentiated by the settings in which they are provided. In general, services are provided either in nursing homes or in home and community-based care settings. Nursing home care includes a wide variety of services that range from skilled nursing and therapy services to assistance with such personal care functions as bathing, dressing, and eating. Nursing home services also include room and board.

Home and community-based care also includes a broad range of skilled and personal care services, as well as a variety of home

management activities, such as chore services, meal preparation, and shopping. Home care services can be provided formally by home care agencies, visiting nurse associations, and day care centers. Home care is also provided informally by family and friends who are not paid for the services they provide. In contrast to nursing home care, which by necessity is formally provided care, most home and community-based care is provided informally by family and friends. Research has shown that more than 70 percent of those elderly persons living in the community and needing long-term care assistance rely exclusively on nonpaid sources of assistance for their care.

THE LONG-TERM CARE POPULATION

Limitations in ADLs and IADLs can vary in severity and prevalence. Persons can have limitations in any number of ADLs or IADLs, or both. An estimated 7.3 million elderly persons required assistance with ADLs and IADLs in 1994. This is nearly one-quarter of the Nation's elderly. Of this total, an estimated 5.7 million elderly persons resided in their own homes or other community-based settings and 1.6 million elderly were residing in nursing homes. Of the total residing in the community, 2.1 million had severe disabilities, needing help with at least the ADLs or required substantial supervision due to cognitive impairment or other behavioral problem. The remaining 3.6 million resided in the community with were lower levels of disability.

The need for long-term care assistance is expected to become more pressing in years to come, given the aging of the population and especially the growing numbers of the age 85+ population who are at the greatest risk of using long-term care. Estimates show that the number of elderly needing help with ADLs and/or IADLs may grow from 7.3 million to 10 to 14 million by 2020, and 14 to 24 million by 2060 (U.S. General Accounting Office, 1994, p. 8).

PAYING FOR LONG-TERM CARE SERVICES

Table B–11 indicates that sizable public and private funds are being spent on long-term care for the elderly—nearly $80 billion in 1993. Federal and State governments account for the bulk of this spending, $46 billion or 58 percent of the total.

Almost three-quarters of long-term care spending on the elderly is for nursing home care. Examination of the sources of payment for nursing home care reveals that the elderly face significant uncovered liability for this care. Two sources of payment—the Medicaid Program and out-of-pocket payments—account for nearly 90 percent of this total.

Medicaid is the Federal-State health program for the poor. It limits its coverage to those people who are poor by welfare program standards or those who have become poor as a result of incurring large medical expenses. Medicaid Program data show that spending for the elderly is driven largely by its coverage of people who have become poor as the result of depleting assets and income on the cost of nursing home care. In most States, this "spend-down" requirement means that a nursing home resident without a spouse can not have more than $2,000 in countable assets before becoming

eligible for Medicaid coverage of their care. This is not difficult for persons needing nursing home care, with average cost in excess of $35,000 per year.

Table B–11 also indicates that nearly all private spending for nursing home care is paid directly by consumers out-of-pocket. At present, private insurance coverage for long-term nursing home care is very limited, with private insurance payments amounting to 0.2 percent of total spending for nursing home care in 1993. (Private long-term care insurance is discussed in additional detail below.)

TABLE B–11.—ELDERLY LONG-TERM CARE EXPENDITURES BY SOURCE OF PAYMENT, 1993

[In billions of dollars]

Source of spending	Amount
Nursing home care:	
Medicaid	$23.5
Medicare	5.5
Other Federal	0.7
Other State and local	0.6
Out-of-pocket payments and other	28.2
Private insurance	0.1
Total	58.6
Home care:	
Medicaid	3.8
Medicare	9.4
Other Federal	1.6
Other State and local	0.5
Out-of-pocket payments and other	5.2
Private insurance	0.1
Total	20.6
Total long-term care	79.2

Source: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services.

While most persons needing long-term care live in the community and not institutions, comparatively little long-term care spending is for the home and community-based services that the elderly and their families prefer. In 1993, spending on home care for the elderly amounted to $21 billion, or about one-quarter of total long-term care spending for the elderly in that year. This spending does not take into account the substantial support provided to the elderly by family and friends. Studies have found that about 65 percent of functionally impaired elderly living in the community rely exclusively on unpaid sources, generally family and friends, for their care. Surveys have found that eight of ten care givers provide unpaid assistance averaging 4 hours a day, 7 days a week. Many care givers are financially disadvantaged and one in three is in rel-

atively poor health. Care giving frequently competes with the demands of employment and requires care givers to reduce work hours, take time off without pay, or quit their jobs.

The table also reveals that Medicare plays a relatively small role in financing long-term care services. Medicare, the Federal health insurance program for the elderly and disabled, is focused primarily on coverage of acute health care costs and was never envisioned as providing protection for long-term care. Coverage of nursing home care, for instance, is limited to short-term stays in certain kinds of nursing homes, referred to as skilled nursing facilities, and only for those people who demonstrate a need for daily skilled nursing care following a hospitalization. Many people who require long-term nursing home care do not need daily skilled nursing care, and, therefore, do not qualify for Medicare's benefit. As a result of this restriction, Medicare paid for 9 percent of the elderly's nursing home spending in 1993.

For similar reasons, Medicare pays for only limited—albeit growing—amounts of community-based long-term care services, through the program's home health benefit. To qualify for home health services, the person must be in need of skilled nursing care on an intermittent basis, or physical or speech therapy. Most chronically impaired people do not need skilled care to remain in their homes, but rather nonmedical supportive care and assistance with basic self-care functions and daily routines that do not require skilled personnel. When added together, Medicare's spending for nursing home and home health care for the elderly amounted to approximately 9 percent of total program spending in 1993.

Three other Federal programs—the Social Services Block Grant (SSBG), the Older Americans Act, and the Supplemental Security Income (SSI) Program—provide support for community-based long-term care services for impaired elderly people. The SSBG provides block grants to States for a variety of services for the elderly, as well as the disabled and children. The Older Americans Act also funds a broad range of in-home services for the elderly. Under the SSI Program, the federally administered income assistance program for aged, blind, and disabled people, many States provide supplemental payments to the basic SSI payment to support selected community-based long-term care services for certain eligible people, including the frail elderly. However, since the funding available for these three programs is limited, their ability to address the financing problems in long-term care is also limited. In addition to these Federal programs, a number of States devote significant State funds to home and community-based long-term care services.

As noted above, the Medicaid Program, a means-tested Federal-State health program for the poor, is the major source of public support for long-term care for the elderly. It funds a broad range of long-term care services needed by the elderly, including nursing home care, home health care, personal care, and various home and community-based services.

Long-term care spending, and especially nursing home spending, account for the great bulk of Medicaid's spending for the elderly. As shown in table B–12, below two-thirds of total Medicaid spending for the elderly, or $21.2 billion of $31.5 billion, was for nursing

home care in fiscal year 1993. Much smaller amounts were spent for various home care services—$2.4 billion, or 7.5 percent of total spending for the elderly, in fiscal year 1993. Together these two categories of long-term care spending amounted to three-quarters of total spending for the elderly.

TABLE B–12.—FEDERAL AND STATE MEDICAID PAYMENTS FOR THE AGED BY SERVICE CATEGORY, FISCAL YEAR 1993

[Payments in millions]

Service category	Payments	Percent of total
Nursing homes	$21,191	67.2
Home care services	2,370	7.5
Prescription drugs	2,441	7.7
Inpatient hospital	2,023	6.4
Inpatient mental health	1,006	3.2
Intermediate care facility	590	1.9
Physician services	487	1.5
Outpatient hospital	406	1.3
Clinic services	214	0.7
Other practitioner	76	0.2
Dental services	54	0.2
Lab & x-ray	60	0.2
Rural health clinics	6	0.0
Other services	642	2.0
Total	31,544	100.0

Source: Congressional Research Service.

Medicaid's spending for long-term care for the elderly is driven by its coverage of persons who need nursing home care and who are not poor by cash welfare standards, but who qualify under "spend-down" options that States may use for covering persons with higher levels of income. One of these is the medically needy option. Medically needy persons have incomes too high to qualify for cash welfare, but incur medical expenses that deplete their assets and incomes to levels that make them needy according to State-determined standards. States may also use a special income rule, referred to as the "300 percent rule," for extending Medicaid eligibility to persons needing nursing home care. Under this rule, States are allowed to cover persons needing nursing home care so long as their income does not exceed 300 percent of the basic Supplemental Security Income (SSI) cash welfare payment (in 1996, 300 percent of $470, or $1,410 a month).

These two groups of nonpoor elderly persons covered by Medicaid accounted for 91 percent of the total $21.2 billion spent by the program for nursing home care for the elderly in fiscal year 1993. Nursing home payments for these two groups are so large that they accounted for 61 percent of total program payments for all elderly beneficiaries. This spending largely explains the fact that elderly Medicaid beneficiaries over the years have accounted for a disproportionately large portion of Medicaid payments for services. In fiscal year 1993, elderly beneficiaries represented 11 percent of

total Medicaid beneficiaries, and their share of program payments amounted to 31 percent of total program payments. It should be noted that some observers point out that certain nonpoor elderly persons may gain Medicaid eligibility, not through depletion of their assets in nursing home expenses, but rather through transfer of assets to relatives.

Numerous studies have looked at Medicaid spend-down. A review of these studies by Adams, Meiners and Burwell (1992), found that the studies generally use two different measures of Medicaid asset spend-down. One method measures the percentage of persons originally admitted to nursing homes as private payers who eventually convert to Medicaid prior to final discharge. This method is a measure of the risk to individuals of spending down to Medicaid over the course of their lifetimes, given the probability they enter a nursing home as private payers.

A second method of measuring Medicaid spend-down examines the percentage of Medicaid residents of nursing homes who were not eligible for Medicaid when they were originally admitted. This method can be useful in capturing the proportion of State Medicaid expenditures for nursing home care that is accounted for by those who spend down.

The review of spend-down studies, which use several different national and State-level data bases, found widely varying estimates of spend-down as measured by these two methods. According to the review, the critical factor explaining differences among these studies is the length of time that persons are studied. The proportion of persons spending down during a single stay is much lower than the proportion of persons who spend down over their entire lifetime, since half or more of persons using nursing home care have multiple stays. In general, studies using national data tend to show lower estimates of spend-down than do State studies that tend to observe people over longer time intervals.

The review of spend-down studies found that between 20 and 25 percent of persons who originally enter nursing homes as private payers convert to Medicaid before final discharge. For this method of measuring spend-down, not enough State studies exist to determine the extent to which spend-down rates vary from State to State.

On the other hand, estimates of spend-down as measured by the percentage of Medicaid residents of nursing homes who were not eligible for Medicaid when they were originally admitted vary considerably across States, reflecting variations in Medicaid eligibility policies across the States as well as other factors. Studies measuring spend-down according to this method have found spend-down rates of 27 percent for Michigan, 31 percent for Wisconsin, and 39 to 45 percent for Connecticut.

Spend-down studies have also examined the length of time it takes for persons to spend down after nursing home admission. The results of these studies reveal that of those people who spend down, the majority spend down within a year of nursing home admission. This finding suggests that most people who spend down have limited assets when they first enter a nursing home.

Certain State studies also show that people who spend down to Medicaid spend more time on Medicaid after converting to Medic-

aid coverage than they spend as private payers prior to conversion. The studies show that Medicaid-paid days account for at least 65 to 75 percent of all nursing home days used by those who spend down. However, the research also shows that, once eligible for Medicaid, people who spend down pay a greater proportion of total nursing home costs through contributions of their income they are required to make before Medicaid makes its payment, than persons who are eligible for Medicaid at initial admission. As a result, people who spend down account for a somewhat lower percentage of total Medicaid expenditures than their percentage of Medicaid-covered nursing home days.

Private Long-Term Care Insurance

Private long-term care insurance is generally considered to be the most promising private sector option for providing the elderly additional protection for long-term care expenses. Long-term care insurance is a relatively new, but rapidly growing, market. In 1986, approximately 30 insurers were selling long-term care insurance policies of some type and an estimated 200,000 persons were covered by these policies. By 1987, a Department of Health and Human Services Task Force on Long-Term Health Care Policies (1987) found 73 companies writing long-term care insurance policies covering 423,000 persons. As of December 1992, the Health Insurance Association of America (Coronel & Caplan, 1996) found that more than 3.8 million policies had been sold, with 121 insurers offering coverage. (Note that this is a cumulative total of policies sold; fewer persons would be covered, due to failure to pay premiums because of death, a change in income, a decision not to continue coverage, etc.)

Although growth has been considerable in a short period of time, the private insurance industry has approached this potential market with caution. Insurers are concerned about the potential for adverse selection in long-term care insurance, where only those persons likely to need care actually buy insurance. In addition, they point to the problem of induced demand for services that can be expected to be generated by the availability of new long-term care insurance. With induced demand, sometimes also referred to as moral hazard, individuals decide to use more services than they otherwise would because they have insurance and/or will shift from nonpaid to paid providers for their care. In addition, insurers are concerned that, given the nature of many chronic conditions, persons who need long-term care will need it for the remainder of their lives, resulting in an open-ended liability for the insurance company.

As a result of these risks, insurers have designed policies that limit their liability for paying claims. Policies have been medically underwritten to exclude persons with certain conditions or illnesses. In addition, most plans provide indemnity benefits that pay only a fixed amount for each day of coverage service. If these amounts are not updated for inflation, the protection offered by the policy can be significantly eroded by the time a person actually needs care. Today payment amounts can generally be updated for inflation, but only with significant increases in premium costs.

These design features of long-term care insurance raise issues about the quality of coverage offered purchasers of policies. The insurance industry has responded to some of these concerns by offering new products that provide broadened coverage and fewer restrictions. One of the key issues outstanding in the debate on the role private insurance can play in financing long-term care is the affordability of coverage. The Health Insurance Association of America reports on the premium costs of policies representing 80 percent of all policies sold in the individual and group association markets in 1994. For policies paying $100 a day for nursing home care and $50 a day for home health care with lifetime 5 percent compounded inflation protection and a 20-day deductible period average annual premiums in December 1994 are $1,950 when purchased at the age of 65 and $6,314 when purchased at the age of 79. Many elderly persons cannot afford these premiums.

The insurance industry believes that affordability of premiums can be greatly enhanced if the pool of persons to whom policies are sold is expanded. The industry has argued that the greatest potential for expanding the pool of persons buying coverage and reducing premiums lies with employer-based group coverage. Premiums should be lower in employer-based group coverage because younger age groups with lower levels of risk of needing long-term care would be included, allowing insurance companies to build up reserves to cover future payments of benefits. In addition, group coverage has lower administrative expenses.

As of December 1994, 968 employers offered a long-term care insurance plan to their employees. These employer-based plans covered over 440,000 employees, their spouses, retirees, parents, and parents-in-law.

But just how broadly based employer interest is in a new long-term care benefit is unclear at the present. Many employers currently face large unfunded liabilities for retiree pension and health benefits. Also, many employers have recently experienced substantial increases in premiums for their current health benefits plans. Very few employers contribute to the cost of a long-term care plan. Most employers require that the employee pay the full premium cost of coverage. In contrast, the majority of medium and large sized employers pay the full premium cost of regular health care benefits for their employees.

One other suggestion has been offered for enhancing the affordability and appeal of long-term care insurance. Various States have been exploring an option for encouraging people to purchase insurance according to a level of assets they wish to protect, rather than according to some standard of comprehensive coverage. Under this approach, persons must decide, for example, that they wish to protect $50,000 of assets. A policy paying out $50,000 for incurred long-term care expenses would have a lower premium cost than a policy paying 4 years of nursing home care at $80 per day. As a result, more persons might be able to afford coverage. To encourage individuals to consider long-term care insurance as assets protection, States would extend to those persons buying qualified policies the protection of Medicaid without requiring them to deplete assets to levels normally required under law (generally, $2,000 for a single individual). These persons would be able to retain assets at the

level that corresponds to their private policies had ceased providing coverage.

Seven States (California, Connecticut, Illinois, Indiana, Iowa, Maryland, and New York) have received approval from the Department of Health and Human Services to operate programs linking Medicaid and private insurance. Most States have implemented programs that protect a dollar of assets for each dollar a qualified long-term care policy pays out.

What impact this approach will have on the marketability of private insurance for long-term care is unclear since operating experience at the present time is very limited. States, however, hope to reduce reliance of middle-income elderly on Medicaid for their long-term care needs, and believe they will save money by delaying that point when the elderly would have to turn to Medicaid for protection. The linkage might also discourage persons from sheltering assets because they would have insurance, both public and private, to protect assets from the catastrophic expenses of nursing home care. The actual cost/savings experience of these programs will not be known for many years because persons purchasing private insurance in the early years of retirement would not generally require services until they were 80 or older.

REFERENCES

Adams, E.K., Meiners, M., & Burwell, B. (1992, January). *A synthesis and critique of studies on Medicaid asset spenddown*. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services.

Angell, M. (1993). Privilege and health—What is the connection? *New England Journal of Medicine, 329*(2), pp. 126–7.

Chulis, G., Eppig, F.J., Hogan, M.O., Waldo, D.R., & Arneh, R.H. (1993). Health insurance and the elderly: Data from MCBS. *Health Care Financing Review, 14*(3), pp. 163–181.

Coronel, S., & Caplan, C. (1996, March). *Long-term care insurance in 1994.* Washington, DC: Health Insurance Association of America.

Hodes, R. (1996, April 26). Funding Request for FY 1997 for the National Institutes of Health: Hearing before the Subcommittee on Labor, Health and Human Services, and Education of the Committee on Appropriations, House of Representatives, 104th Cong., 2d Sess. Part 4.

Kolata, G. (1996, February 27). New era of robust elderly belies the fears of scientists. *New York Times*, A1.

National Center for Health Statistics. (1995a). *Health, United States: 1994*. Hyattsville, MD: Public Health Service.

National Center for Health Statistics. (1995b, April). Trends in the health of older Americans: United States, 1994. *Vital and Health Statistics* (Series 3, No. 30). Hyattsville, MD: Public Health Service.

National Center for Health Statistics. (1995c, December). Current estimates from the National Health Interview Survey, 1994. *Vital and Health Statistics* (Series 10, No. 193). Hyattsville, MD: Public Health Service.

National Center for Health Statistics (1996). Advance report of final mortality statistics. *Monthly Vital Statistics Report*, *44*(7S), p. 11.

National Institute on Aging. (1995, October). *Alzheimer's disease: Unraveling the mystery* (Publication No. 95–3782). Bethesda, MD: National Institutes of Health.

Price, R. (1996, March). *Long-term care for the elderly* (IB 95–039). Washington, DC: Congressional Research Service.

Smith, M., & Nuschler, D. (1996, April). *Health insurance coverage: Characteristics of the insured and uninsured populations in 1994* (95–1146 EPW). Washington, DC: Congressional Research Service.

Task Force on Long-Term Health Care Policies. (1987, September). *Report to Congress and the Secretary.*Washington, DC: U.S. Department of Health and Human Services.

U.S. General Accounting Office. (1994, November). *Long-term care: Diverse, growing population includes millions of Americans of all ages* (GAO/HEHS 95–26). Washington, DC: Author.